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Editors:
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Baku, 25-26 June, 2021

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OPTIMIZATION OF THE OPERATION PHASE OF THE ENGINEERING PRODUCTS

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ABSTRACT
A method for optimization of the operating of the engineering products in terms of minimizing costs for consumers is proposed. The issues of economic justification of the service life of the machine and the conditions for its replacement with a new product are considered. The principle of exploitation during an economically justified service period is caused by initial cost and current operating cost for obtaining the best value to minimize cost for consumers during the exploitation period of the product. The solution areas for replacement of the products with the same exploitation indicators but with different price ranges were identified. The mathematical method for determining the operating costs of the product is shown. A widely used indicator is the product life cycle (PLC), which includes the steps of creating a product, its operating, and its disposal. Thus, at first, the idea of a new product in the form of a general construction arises, which is embodied in a set of design documentation. In the design process, the first optimal design problem is solved with certain criteria and optimization goals, which should be based on the requirements for the production and operating the product. At the stage of product creation, material means are invested and labor resources are involved, as a result, the product is put into production with a certain production series. In this case, the second optimization problem is solved, which, as a rule, aims to reduce production costs. After the product is sold on the market, the stage of its operating begins. At the same time, the interests of the consumer determine the third optimization problem - minimization of the operating costs and establishing the optimal service life, at the end of which the product is to be disposed of. The formulated optimization problems of the life cycle are ambiguous and closely related. The fact is that in most cases of commodity-market interactions there exists the so-called consumer dictatorship since the consumer determines the feasibility of acquiring a particular product, based on its needs and financial capabilities. However, a producer dictates is also possible, especially in a monopoly economy, when the consumer has no choice in the market. With antitrust laws in force, this is rare. The third optimization problem (operation phase) is the main and determining one, the remaining tasks have a subordinate character.
Keywords: product performance, price, optimization, costs, service life, exploitation period, cost minimization

1. INTRODUCTION
Industrial products are divided into wares and products, which is due to their size: wares are measured in pieces, products in tons, cubic meters, liters, etc. In machine building, the ware refers not only to a part, assembly, or a separate machine, but also such aggregated units like ship, spacecraft, etc. A feature of the introduced separation is that the products are subordinate to the product, often being a semi-finished product for the manufacture of the latter. The product is consumed, and the ware is operated, moreover, if the process of consuming the ware is of a one-time nature, then the operation of the product occurs during a certain period determined by its service life [1,6].

2. RESEARCH

A widely used indicator is the product life cycle (PLC), which includes the steps of creating a product, its operating, and its disposal. Thus, at first, the idea of a new product in the form of a general construction arises, which is embodied in a set of design documentation. In the design process, the first optimal design problem is solved with certain criteria and optimization goals, which should be based on the requirements for the production and operating the product. At the stage of product creation, material means are invested and labor resources are involved, as a result, the product is put into production with a certain production series. In this case, the second optimization problem is solved, which, as a rule, aims to reduce the production costs [4,5]. After the product is sold on the market, the stage of its operating begins. At the same time, the interests of the consumer determine the third optimization problem - minimization of the operating costs and establishing the optimal service life, at the end of which the product is to be disposed of. The formulated optimization problems of the life cycle are ambiguous and closely related. The fact is that in most cases of commodity-market interactions there exists the so-called consumer dictatorship since the consumer determines the feasibility of acquiring a particular product, based on its needs and financial capabilities. However, a producer dictates is also possible, especially in a monopoly economy, when the consumer has no choice in the market. With antitrust laws in force, this is rare. The third optimization problem (operation phase) is the main and determining one, the remaining tasks have a subordinate character [3]. Between the consumer and the manufacturer stands, as a rule, a seller who has his margin from the act of sale. His role in the PSC was aptly described by Henry Ford, calling trade the most legitimate way of theft. However, for the consumer, the seller and the manufacturer act in the same person, which determines the price of the product on the market. Therefore, when solving the third optimization problem, they must be considered together. The consumer at the stage of operation of the product, on the one hand, benefits from its use, and on the other hand has operational costs, which are divided into initial and current [1]. Initial costs: to purchase the product; for its installation and commissioning. They play the same role as capital investments at the production stage. Current costs depend on the purpose and design of the product, which may include costs for electricity, fuel, maintenance, spare parts, etc. This is an analogue of the cost of the product in the manufacturing process. Thus, to determine the cost of operating the product, one can use the formula for the annual costs [2].

$$Z = C + EK, \text{ manat/year,} \qquad\qquad (1)$$

where C is the operating cost of the product, manat/year; K is the initial capital investment on the purchase of the product; E is the standard rate of return on capital investments($E \approx 0,12 \div 0,15$) [2].

We make two remarks regarding formula (1). Firstly, in economic calculations that do not require optimization of formula (1), the value of E refers to the share of initial capital investments spent on a certain period of operation of the product, as a rule, for a calendar year, so the coefficient E has a size of 1 / year. Secondly, at present, there is a wide range of constantly developed and improved products. Leaving aside design features and variety in the technical characteristics of products, we note the large differences in the terms of their operation and financial means spent on their purchase and routine maintenance [1]. Therefore, for the general case, we assume that the life of the product is measured in conditional units of time (c.u.t), and cash costs in conventional units of value (c.u.v.).

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Then, if the service life of the product is not known in advance, formula (1) can be written as

$$Z = C + K/(\tau + 1), \text{ c.u.v/c.u.t},\qquad\qquad(2)$$

where τ is the current operating period.

The denominator of the second term in expression (2) has a unit, so at the initial moment ($\tau = 0$), the operating costs incurred corresponding to the price of the product. Indicator C represents the unit cost of operating the product, which is spent on a conventional unit of time, which in the general case will depend on τ. The value C will be constant only if the product remains unchanged during operation, that is, eternal, which is unrealistic [5]. Let us suppose in the first approximation that the unit cost of operation of the product is directly proportional to the period of operation:

$$Z = C_p\, \tau, \text{ c.u.c./c.u.t.},\qquad\qquad(3)$$

where C_p is the proportionality coefficient in c.u.c./(c.u.t.)^2. Substituting the expression (3) in formula (2), we obtain:

$$Z = C_p\tau + K/(\tau + 1).\qquad\qquad(4)$$

Compared to formula (1), expression (4) determines not the absolute, but the relative (current) costs incurred for operating the product. Fig. 1 is shown the dependence of changes in costs (formula (4)) on the current operating time τ at the different K and constant-coefficient Cp= 200 c.u.v./(c.u.t.)^2. Figure 1 is seen that the costs incurred are at a minimum at a certain point in the operation of the product. Let us designate by $T_э$ the operating period - economically justified period of service (EJPS) [3], that is, the term of the operating of the product, after which the specific costs incurred are of minimum value [1].
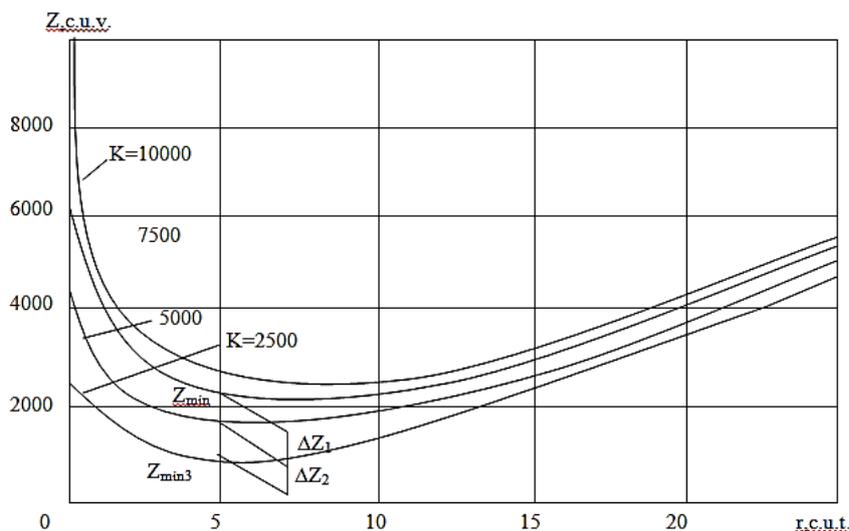
Figure 1: Dependences of the change in the specific costs C incurred on the operating period τ of the product at various initial costs K

When further operating of the product is unprofitable it is replaced, as a rule, with a more advanced product.

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The value of T_e can be obtained from expression (4), taking the derivative based on time and equating it to zero:

$$T_e = \sqrt{K/C_p}, \text{ c.u.t.} \tag{5}$$

The minimum specific costs for the operating of the product are found from the expression

$$C_{min} = C_p T_e + K/(T_e + 1), \text{ c.u.c./c.u.t.} \tag{6}$$

From expression (5), it follows that the EJPS does not depend on the absolute initial cost K for the purchase of the product and not on the specific current costs of the joint venture for operating, but on their ratio: as larger it is, as long the optimal term of its operation, and vice versa [2]. With a decrease in the price of a product, its EJPS decreases (see Fig. 1, dashed line) i.e. a cheaper product should have a shorter operating period (service life). But more importantly, there is a strict relationship between the price of the product and its EJPS (see formula (5), which occurs as follows: During known C_p and T_e the price to the product should not be administered to shuffling. In such a case, we have the so-called justice price. Consider this issue in more detail. For the main, we take the dependence of the unit cost C spent on the time τ for the operating of the product at the initial cost of the purchase of the product K = 5,000 c.u.c. The minimum value of Z_{min}= 1 833 c.u.c. at Te = 5 c.u.v. (see Fig. 1). Consider two options for arbitrary assignment of the price of the product: K = 7,500 c.u.c. and K = 2,500 c.u.c [3,4]. In the first case (K_1) a profit is observed in favor of the manufacturer and the seller of the product ΔC= 417 c.u.c., in the second case – in favor of the consumer ΔC= 416 c.u.c. i.e. in the first case, there is a dictate of the manufacturer, in the second, the dictate of the consumer. To the price to be fair (optimal), its value is calculated according to the formula

$$K_{op}=C_p, \text{ c.u.v.} \tag{7}$$

In Figure 2 the results of calculations by formula (4) for the various coefficients C_p at the constant product price K = 10000 c.u.c. are given. Here the indicator C_{min} corresponds to the optimal service life of the product. With a decrease in the specific current costs, EJPS increases (see Fig. 2, dashed line). Consider the curve for C_p= 200 c.u.c./(c.u.t.)^2 . At C_{min}= 2 653 (c.u.c.) we have T_e= 7,07 c.u.t. Let this dependence be the main (real) for some product. Suppose that C_p at the stage of designing the product is determined with an error due to a number of reasons. If the error Z_c> 0 (for our example, this is curve for C_p= 300 c.u.c./(c.u.t.)^2), then there is an excess of the planned indicator Z, i.e. Z_c=710 c.u.c. In this case, the selected price does not satisfy the interests of the manufacturer of the product and is beneficial to the consumer. When C_p= 100 c.u.c./(c.u.t.) the manufacturer wins [3]. In this way, the following principle of the optimal operation of any product can be formulated: to minimize consumer costs, the product must be operated for economically reasonable service life, the value of which is determined by the initial cost of its purchase and current operating costs.

Figure following on the next page
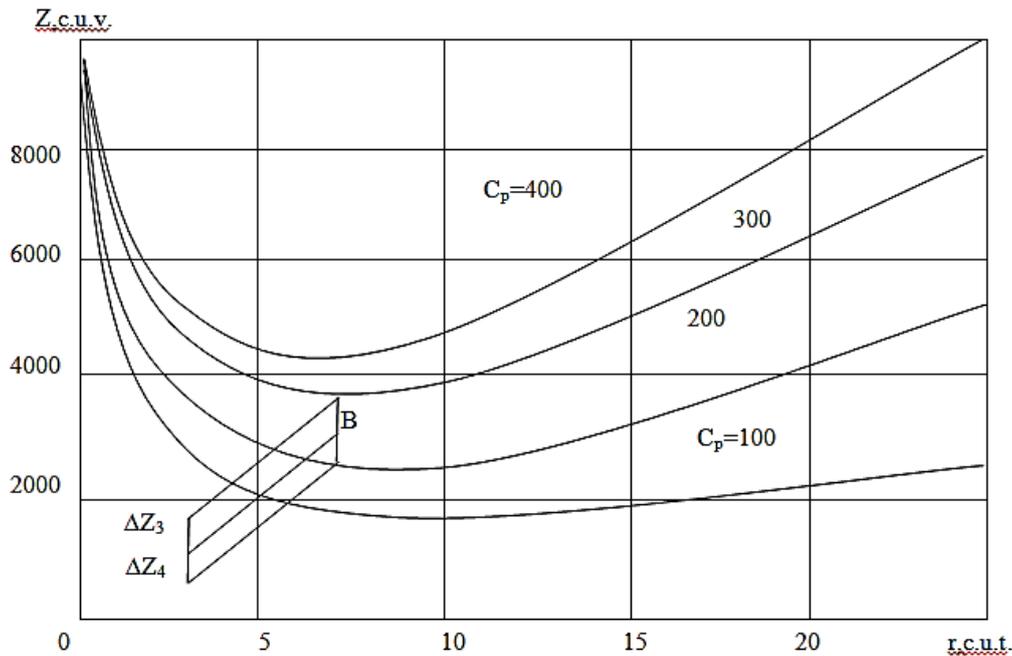
Figure 2: Dependences of the change in the specific costs incurred on the operating period τ of the product at various operating costs C_p

On the other hand, if the service life of the product is specified and specific operating costs are set, then to minimize the total costs of the manufacturer and the consumer, the price of the product should have a definite value that does not infringe on the interests of both the consumer and the manufacturer. It should be optimal (fair) both at the stage of manufacture and at the stage of operating, therefore, unlike the establishment of competition based on value, pricing according to the EJPS allows planning to be made [4]. Let us return to important expression (2) for the specific expenditure on the operating of the product and analyze the first term. So far, cases have been considered when the exponent C is directly proportional to the operating period based on the formula (3). Recall that the unit cost of operating of the machine always depends on the operating period. Indeed, if C = const, then the derivative of expression (2) will be equal to zero either for $T_e = \infty$ or for K = 0, which is absurd by engineering products. At the same time, $C(\tau)$ is determined by the processes that occur in the product during operating. It is known that the final breakdown of engineering products is due to wear (up to 80%), fatigue breakdowns (up to 15%), and improper operation. As a result of these factors during operation, the technical characteristics of the product deteriorate, i.e. its physical deterioration occurs. At the same time, they increase operating costs, consumption of consumables, electric power, and spare parts; labor costs for product maintenance, and repair. The table shows the formulas for indicators $C(\tau)$ and T_e. For the last two formulas, the exponent T_e is determined numerically by the method of successive approximations [1]. Let us discuss in detail the issue of replacing the old product with a new one to minimize operating costs. On Fig. 3, the dependences of the change in the specific costs incurred Z on the time τ of the operating for the old and new products are presented. Here, the moment of replacement coincides with the EJPS of the old product (T_{e1}). We assume that the old product is completely decommissioned and not sold. In connection with the acquisition of a new product, the unit cost per user increases sharply, which gradually decreases to a minimum: $\tau = T_{e2}$. After some time the specific costs incurred to operate the new product are compared with the costs of the old product if it were to continue to operate. From this moment, the user will benefit from the replacement [2,5].
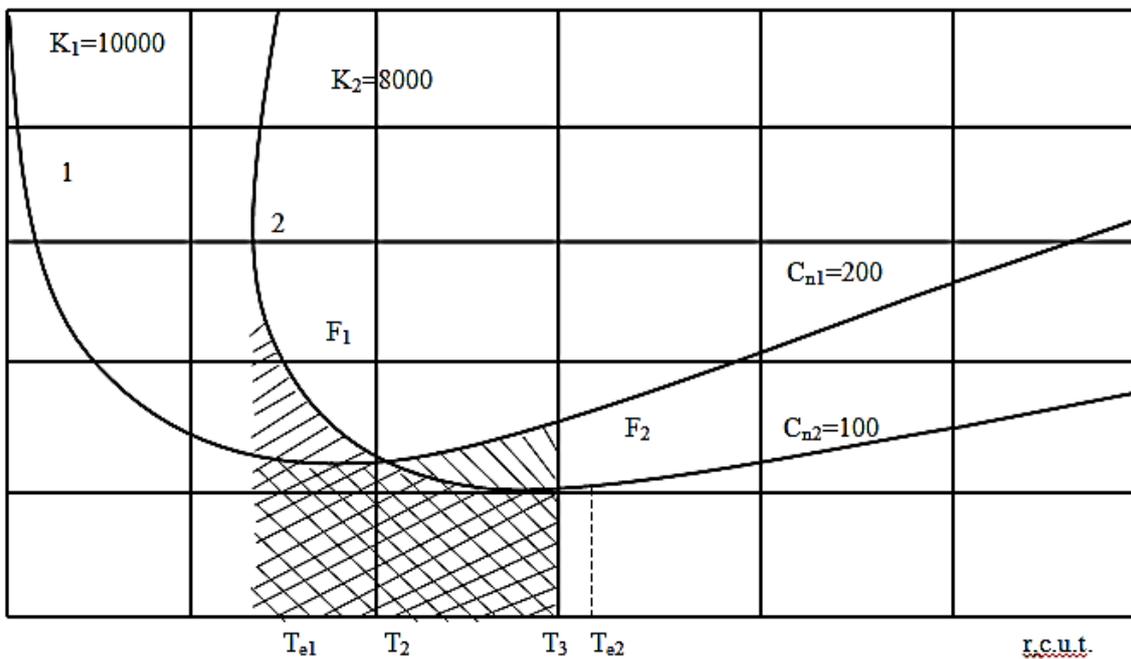
Figure 3: Dependences of the change in the specific costs incurred 3 on the operating period τ of the old (1) and new (2) products

Type of dependence $C(\tau)$	The formula for $C(\tau)$	The formula for T_i
Linear relationship	$C = C_{i\tau}$	$T_i = \sqrt{K/C_i}$
Power-law relationship	$C = C_{i\tau}{}^{\alpha}$	$T_i = (K/(\alpha C_i))^{1/(\alpha+1)}$
Exponent relationship	$C = C_i^{exp(\beta\tau)}$	$C_{i\beta}e^{\beta T}{}_i T^2{}_i = K$
Sum of two power-law relationships	$C = C_{i\tau}{}^{\alpha} + C_{i\tau}{}^{\beta}$	$\alpha C_1 T^{\alpha}{}_i{}^{+1} + \beta C_2 T^{\beta}{}_i{}^{+1} = K$

For the old product:

$$C = C_{p1}\tau + K_1/(\tau + 1); \qquad (8)$$

For the new product:

$$C = C_{p2}(\tau - T_{e1}) + K_2/(\tau - T_{e1} + 1), \qquad (9)$$

Where

$$T_{e1} = \sqrt{K_1/C_{p1}} \ . \qquad (10)$$

The time T_2, we define equaling expressions (8) and (9):

$$C_{p1}\tau + K_1/(\tau + 1) - C_{p2}(\tau - T_{e1}) + K_2/(\tau - T_{e1} + 1) = 0. \qquad (11)$$

To take into account all possible options, we see that the new product differs from the old one both in price and in current operating costs:

$$\text{К} = n\text{К}_1; \qquad\qquad\qquad\qquad (12)$$

$$C_{p2} = mC_{p1} \qquad\qquad\qquad\qquad (13)$$

Substituting expressions (12) and (13) into formula (11) and transforming the last expression taking into account formula (10), we obtain:

$$(\tau + 1)(\tau - T_{e1} + 1)[\tau - m(\tau - T_{e1})] + T_{e1}^{2} + [\tau - T_{e1} + 1 - n(\tau + 1)] = 0. \ (14)$$

Solving equation (14) for the different values of m, n, and T_{e1}, we determine the time T_2. Obviously, as closer T_2 to T_{e1} (see Fig. 3), as faster the consumer will benefit from the replacement. On the other hand, for a certain combination of current costs and the price of a new product compared with the old one, an option is possible, in which case the consumer will incur losses during the entire service life of the new machine [3,6]. Consider the case when the new product in its performance and design is no different from the previous one but significantly different in price. This corresponds to the condition:

$$C_{p2} = C_{p1}; \ \text{К}_2 \neq \text{К}_1,$$

According to expressions (12) and (13), $m = l; \ n \neq 1$. Then equation (14) takes the form

$$(\tau + 1)(\tau - T_{e1} + 1) + T_{e1}[\tau - T_{e1} + 1 - n(\tau + 1)] = 0. \qquad (15)$$

Solving equation (15) we get

$$T_2 = 0{,}5T_{e1}(n + \sqrt{n^2 + 4}) - 1. \qquad\qquad\qquad (16)$$

On Fig. 4, the results of calculations by formula (16) are presented for the different n. For $n = 1$ the old product will be replaced with an equivalent product $\text{К}_2 = \text{К}_1$, for $n < 1$ they will purchase a cheaper product, for $n > 1$ - more expensive. The resulting solution field has two boundaries [4].

Figure following on the next page
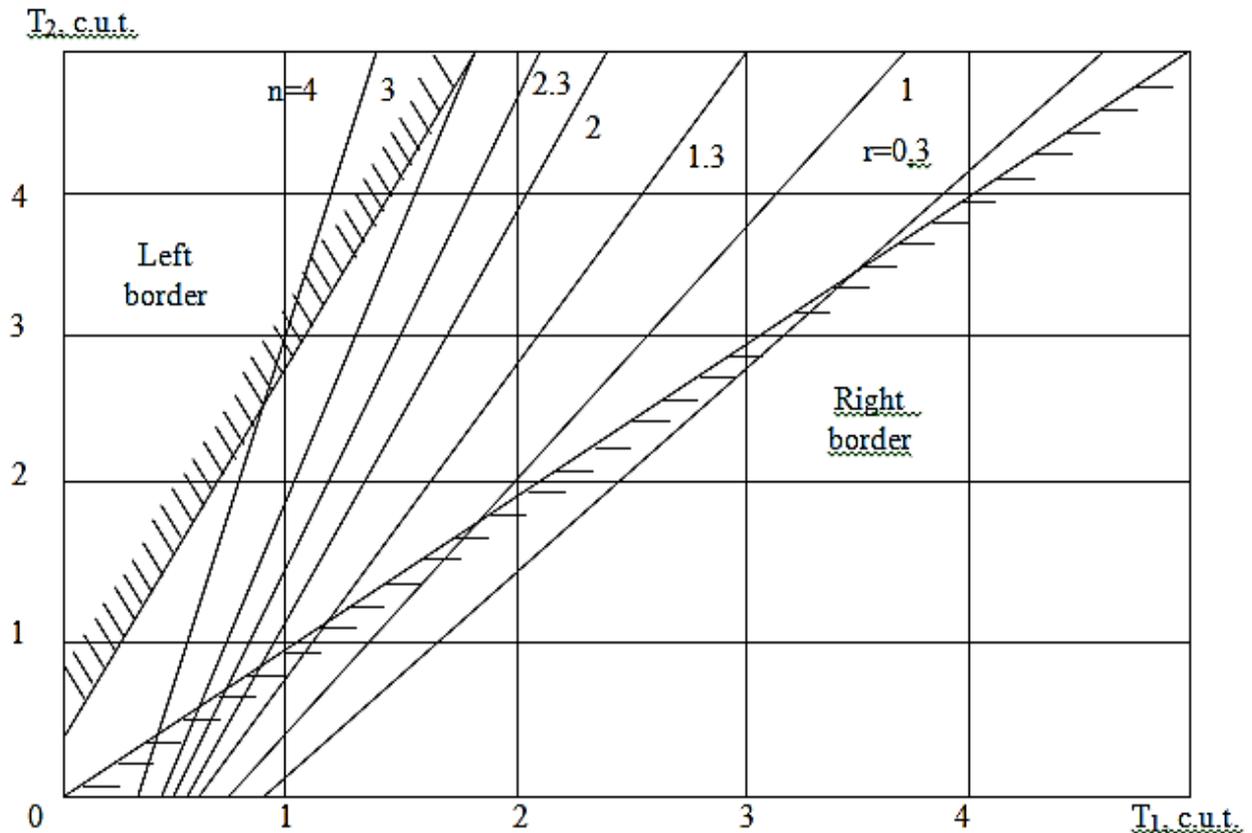
Figure 4: Dependences of the change in the time T_2 on the indicator T_{e1} for the different values of n

The right boundary corresponds to $T_2 = T_{e1}$ i.e. from the time of replacement until the end of the operating the new product, the user has benefit. This is the case when the price of the new product is equal to the current operating costs of operating the old one at the time of replacement of products, i.e. $K_2 = C_{1min}$, where C_{1min} is determined by expression (6). The left boundary of the solution field is obtained from the condition that the consumer will receive the benefit only at the end of the operation of the new product, i.e.

$$T_2 = T_{e1} + T_{e2},$$

where $T_{e2} = T_{e1}\sqrt{n}$. Then

$$T_2 = T_{e1}(1 + \sqrt{n}). \qquad (17)$$

Equaling expressions (16) and (17) we obtain

$$T_{e1} = [0{,}5(n + \sqrt{n^2 + 4}) - \sqrt{n} - 1]^{-1} \qquad (18)$$

Substituting the current value $n = K_2/K_1$ into formulas (17) and (18) we obtain the coordinates of the left boundary. Thus, the solution field has been defined for the replacement of products with the same performance indicators, but different prices. Obviously, as the closer the time when the products are replaced to the right boundary, as faster the consumer will begin to benefit from the operating of the new product. Consider the case when the price of a new product is equal to the price of an old one, but performance indicators have changed.

This case meets the conditions:

$$K_2 = K_1 C_{p2} \neq C_{p1}; \text{ or } n = 1, m.$$

Then from formula (14), we obtain:

$$(\tau + 1)(\tau - T_{e1} + 1)[\tau - m(\tau - T_{e1})] - = 0. \tag{19}$$

The solution of equation (19) for different values of m gives a field of optimal values with boundaries corresponding to T_{e1} and T_2. The field of optimal solutions is much narrower, i.e. a change in operational indicators has a lesser effect on the possible economic gain of the consumer [5]. In addition to the current benefits of the replacement, the consumer can also receive absolute benefits, to determine the size of which one should compare the area under the curves 1 and 2 in Fig. 3. Area F_1 from the start of operation of the new product (T_{e1}) to point T_c, characterizes the total costs of the consumer for operating the new machine, area F_2 - the virtual costs of operating the old machine for the same period. Taking the integrals in the range $T_{e1} \div T_c$ from expressions (8) and (9), we obtain the desired areas:

$$F_1 = 0{,}5 C p_1 (T_e^2 - T_{e1}^2) + K_1 ln \left| \frac{T_c+1}{T_{e1}+1} \right|; \tag{20}$$

$$F_2 = 0{,}5 C p_2 (T_c^2 - T_{e1}^2) - C \Pi_2 T_{e1} (T_c - T_{e1}) + K_2 ln |T_c - T_{e1} + 1|. \tag{21}$$

If $F_1 = F_2$, then T_c will determine the time moment, starting from which the consumer will receive the absolute benefit of replacing the old product with a new one:

$$0{,}5 C p_2 (T_c^2 - T_{e1}^2) - C p_2 T_{e1} (T_c - T_{e1}) +$$
$$+ K_1 ln \left| \frac{T_c+1}{T_{e1}+1} \right| - K_2 ln |T_c - T_{e1} + 1| = 0. \tag{22}$$

Taking into account expressions (12) and (13) and introducing the dimensionless quantity $l = T_c / T_{e1}$ expression (22) takes the form:

$$0{,}5(1 - m)(l^2 - 1) + m(l - 1) +$$
$$+ ln \left| \frac{l T_{e1}+1}{(T_{e1}+1)(l T_{e1} - T_{e1}+1)^n} \right| = 0. \tag{23}$$

When replacing the old machine with an equivalent one with the same performance indicators, i.e., under the conditions $m = n = 1$ expression (23) takes the form:

$$\frac{l T_{e1}+1}{(T_{e1}+1)(l T_{e1} - T_{e1}+1)} = e^1 - l. \tag{24}$$

The range of values of l for which the consumer can receive the unconditional economic benefit from replacing products is $1 < l < 2$. For $l = 1$ expression (23) and (2) are satisfied identically. For $l = 2$ expressions (24) gives the upper limit $T_{e1} = 3{,}88$, and from expression (23) we obtain the formula for the upper limit T_{e1} upper which the consumer will never benefit from the new product:

$$1{,}5 - 0{,}5m + ln \left| \frac{2 T_{e1}+1}{(T_{e1}+1)^{n+1}} \right| = 0.$$

3. CONCLUSION

Thus, the proposed method of optimizing the operation of the machine allows us not only to determine the optimal service life but also to develop an effective strategy for replacing the old machine with a new product with a minimal financial loss. The results obtained can be the source data for the optimization of the design and manufacture of engineering products [6].

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QUALITY ASSURANCE IN AZERBAIJAN HIGHER EDUCATION

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ABSTRACT

Nowadays, higher education is considered as a sphere of public policy with its economic and public dimensions rather than being merely an education topic. The role of non-state participants in the higher education field is more and more enlarging within the new policy contexts exceeding national borderlines. Plenty of participants at diverse levels, from transnational organizations to students as persons are included in the policy procedure. That is why the field of higher education policy represents a complex process where policy-making processes are intertwined with different participants and turbid borders. Quality assurance is one of the policy areas that best symbolize this complication with many stakeholders on the global, public and institutional grade. Globalization and international rivalry carry the quality issue to the position of prominence in many high education systems. For the Quality assurance system to proceed regularly and without interruption, higher education institutions are included in both internal and external evaluation processes. Education Quality Assurance Agency, the institution in charge of the external evaluation of the universities in Azerbaijan, plays a guiding role by providing feedback to the institutions which have completed the process. In the Azerbaijan higher education system, as in other countries, quality assurance has become an essential agenda item in recent years. The new higher education system approach of the Azerbaijan Republic Ministry of Education has been defined as mission differentiation and diversity, flexibility, and institutional autonomy which require a significant transformation in the current system. In this study, quality assurance in Azerbaijan higher education is explored following the conceptual framework of the policy process.
Keywords: Azerbaijan higher education, Education Quality Assurance Agency, quality assurance, university

1. INTRODUCTION

In recent years, the attitude towards the development of methodological foundations of issues related to quality assurance in the process of teaching and learning in the higher education system, in general, has become more relevant, and the effectiveness of both basic and applied research in this field has increased significantly. Quality is generally a philosophical category that expresses the certainty of any process and is an objective and general characteristic that manifests itself in the totality of the properties of that process. In the field of education, quality is accepted as the main feature that determines the level of learners according to predetermined norms (standards) according to the results of the teaching-learning process and the state of the education system in general. The results of the training are not only the level of knowledge and skills acquired by the student who has completed a certain stage of education, but also personal qualities that reflect his/her attitude towards the world and the development of society. The quality of higher education is an essential feature of the education system, which determines the level of compliance of actual learning outcomes with the requirements of normative documents and expected results. Quality in higher education should be considered as a key category that determines the level of compliance of knowledge, abilities, and skills acquired with the relevant state standards and the needs of the society and serves development. Higher education policy could be regarded as a good example in terms of both complexity theory and policy transfer.

On the other hand, the role of universities, which have traditionally been the implementers of higher education policies, is being transformed. Universities participate in the formation of higher education policies as both decision-makers and practitioners. University is one of the few institutions that have kept alive until now from the Middle Ages. In the XXI century, universities once more reconstitute their identifications and redefine their assignment with the paradigm alteration in higher education. The United Nations has declared the 21st century a "century of education" because of the undeniable role of higher education in the formation of highly intelligent human capital and the building of a strong economy that creates the basis for sustainable development. Higher education is considered as a sphere of public policy with its economic and public dimensions rather than being merely an education topic. The role of non-state participants in the higher education field is more and more enlarging within the new policy contexts exceeding national borderlines. The progress of society has always depended on the development of education and the correct assessment of its importance, and the current demand has accelerated the development of education. Scientific and technological advances have posed more complex challenges to the education system. Students, governments, national organizations, professional organizations, financiers, employers, different social sectors emerge as the actors of quality, stakeholder participation is highlighted and the role of stakeholders in the management of universities is increasing. Quality Assurance is one of the policy areas that best symbolize this complication with many stakeholders on the global, public and institutional grade. Thus, quality assurance in higher education is regarded as a multi-level and multi-actor structure. This transformation is manifested in Azerbaijan higher education, as well. In the current state of Azerbaijan higher education, qualified growth, and internationalization are considered as the most important agenda items. In this context, a new road map is drawn which focuses on diversity, flexibility, and quality assurance. To this end, a conceptual framework is presented in the first place and then the quality policy in Azerbaijan higher education is examined within the framework of the process approach. Azerbaijan's participation in the Bologna Process, the implementation of accreditation in higher education institutions, and the dissemination of the implementation of new democratic quality management models in the education system form the basis of successful quality assurance in higher education.

2. QUALITY ASSURANCE IN HIGHER EDUCATION

Quality assurance (QA) is one of the most intense fields of policy transfer among the Bologna reforms since it is considered as the basis for the creation of The European Higher Education Area (EHEA). It is one of the creator columns of the Bologna Process and contemplates the promotion of European cooperation in the field of QA in order to evolve comparable criteria and methodologies. The EHEA is an unprecedented global partnership in higher education, the consequence of the diplomatic volition of 49 countries with diverse academic, cultural and political traditions. The path to integration into the European Higher Education Area is through quality assurance. The British, French, and American models of quality assurance have attracted the most attention in the world educational practice. While the English model mainly provides for internal academic performance evaluation, the French model provides non-university evaluation. The American model includes the evaluation of educational institutions and programs by independent accreditation bodies. Along with all these models, we think that the creation of a quality management system in education is the application of new management technologies. The main focus is on the application of a quality management system as a technological process, and the goal is to create a mechanism that provides quality education in the main business processes of the university. Quality assurance is applied through common institutional settings and norms operating throughout the EHEA. On the other hand, European Association for Quality Assurance in Higher Education (ENQA) is a membership association that represents its associates at the European level and internationally.

ENQA members are quality assurance organizations from the European Higher Education Area (EHEA) that operate in the area of higher education. According to the information published on its official website, ENQA will pay special attention to the following fields of work in 2021, in line with its 2021-2025 strategic plan: [4]

1) Development of quality assurance within the EHEA/Bologna Process;
2) Analysis of quality assurance approaches in Europe;
3) Professionalisation of QA and staff at QA agencies;
4) Quality assurance capacity building beyond Europe.

The Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) were developed in 2005 as a key component of Quality Assurance. Revised by ministers of education from different countries in 2015, ESG has been accepted as a methodological norm for Quality Assurance in these countries. Overall, according to the ESG, the cornerstone of quality assurance in higher education is internal evaluation. External evaluation is considered a condition for the reliability of internal evaluation results, and external evaluators are responsible for the quality of their activities. Therefore, ESG sets general principles for both internal and external quality assurance practices to be applied across the EHEA. At the European level, the adoption of the ESG was seen as a significant achievement of the Bologna Process as a sign of unanimity between key stakeholders.

2.1. Internal quality assurance IQA

IQA is any procedure to confirm or evolve the quality of higher education by the university itself. The European Higher Education Area Quality Assurance Standards and Guidelines state that "Institutions should have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes while involving external stakeholders" [5]. To execute their liability higher education institutions must have their internal quality assurance system operating well. This structure specifies how and at what time terms HEİ self-analysis is to be performed, which shows the superiorities and disadvantages of the activities that are being carried out, predicts the methods to accomplish deficiencies. IQA discusses how the samples of top practice utensils and compares the successes across other close organizations in the country and out. A higher school should be made ready to demonstrate for detached assessors the efficiency of quality assurance performances. These goals of internal quality assurance are implemented through the internal quality assurance system to be applied at the university:

- To supply students, employers, and other stakeholders with confident and comprehensive data about the learning quality, academic accomplishments, management of the higher school;
- To provide that the fields of performance the quality of which is unsatisfactory are specified, and urgent preventives are undertaken to develop the quality;
- To aid jointly with different means in intensifying the high quality of services and unique norms;
- To warrant the accountability of the university for the allocated governmental financial (monetary) sources.

IQA system must surround all the actors (educators, researchers, executives, students, public partners, graduates, and etc.) of the study and investigation procedure actively. Higher education institutions make a serious self-evaluation with the participation of their staff, teachers, scientists, administrators, and students and take a critical look at all areas of their activities.

The university then tries to identify its strengths and weaknesses, main goals, threats, compare itself with its main competitors, set a plan to overcome shortcomings and development paths.

2.2. External quality assurance EQA

EQA is any procedure to confirm or evolve the quality of higher education from outside the university. The European Higher Education Area Quality Assurance Standards and Guidelines state that "EQA should be defined and designed specifically to ensure its fitness to achieve the aims and objectives set for it while taking into account relevant regulations. Stakeholders should be involved in its design and continuous improvement" [5]. The intent of EQA is to verify the reliability and influence of the process of an İQA system without duplicating and misrepresenting them. The external quality assessment occurs through self-analysis, specialist group creation, the formulation of evaluation outcomes, and the notification of assessment consequences. Self-analysis is not only the initial of external assessment however it is a constituent component of the IQA system. It is very significant that the students take an active part in the process of self-analysis. Generally, self-analysis has a drawback in that it is prepared for external assessors (experts), not for themselves, internal utilization. Normally an expert group occurs three to six experts. While evaluating the main field of activity, subgroups of 3-6 experts can be formed. The content of the evaluation results depends on the object being evaluated, namely the educational programs, the level of scientific research, or the performance of the university. Evaluation consequences finish with generalized program assessment declarations, proposals for a university, and recommendations belong to program accreditation. The evaluation results are announced avowedly, are placed on the website, interpreted in press meetings, and discussed in the media. The official registration platform of external quality assurance agencies is The European Quality Assurance Register for Higher Education (EQAR) which lists these agencies in accordance with a prevalent framework agreed upon to provide the quality of higher education organizations and educational programs. In 2018, EQAR commenced the Database External Quality Assurance Results (DEQAR) to provide entrance to reports and decisions of agencies registered on the EQAR platform. DEQAR is a database of external quality assurance consequences for the activities carried out by these agencies. The inclusion of higher education institutions in internal and external assessment procedures means a continuous and uninterrupted quality assurance system.

2.3. Quality assurance agencies QAA

Quality assurance and accreditation in HE is determined as systematical administration and evaluation of processes adopted by HE organizations or systems to monitor achievement and to maintain accomplishment of quality development. Accreditation mentions a procedure of evaluation and review that enables higher education institutions to be identified or confirmed as meeting convenient standards. The purpose of accreditation is to provide that education ensured by higher education organizations meets the relevant quality standards. If Higher Education Institutions demand Quality Assurance Agency's assessment they meet the agency's criteria firstly then are accredited by that agency. Quality Assurance Agencies at the national level focus on the endeavors of internationalizing education through evaluating the solemnity of aim, the scope of the efforts taken so far at the policy and execution level. The Higher Education Accreditation Council (CHEA) is an association of colleges and universities in the United States that acknowledges institutional and program accreditation institutions. According to CHEA's official website, "CHEA is the only national organization focused exclusively on higher education accreditation and quality assurance" [6]. The Quality Assurance Agency for Higher Education is an independent organization that verifies standards and quality in UK higher education.

Missions of the Agency are "to safeguard standards and improve the quality of UK higher education wherever it is delivered around the world; to check that students working towards a UK qualification get the higher education they are entitled to expect." [9].

Agency has four strategic aims that as follows:
- deal with the needs of students;
- maintain standards;
- control developments;
- evolve comprehension of the community regarding UK higher education.

Agency examines how HEİ and alternative providers of UK higher education safeguard their academic standards and quality. Agency also ensures advice to the Privy Council of the United Kingdom, on institutions' demands for degree-awarding abilities and the right to be called a university. According to Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) QAA should have clear and explicit goals and objectives that are part of its publicly available mission statement. These should translate into the daily work of the agency. QAA should ensure the involvement of stakeholders in their governance and work [5].

3. QUALITY ASSURANCE IN AZERBAIJAN HIGHER EDUCATION

Successful socio-economic and political achievements, national and multicultural values give confidence that the power of the Azerbaijan Republic, which is the intersection point of the East and the West, will increase even more. The Azerbaijani state has chosen to develop a socially-oriented market economy to further increase the welfare of the country's population. Although the oil sector is one of the foundations of socio-economic development in Azerbaijan, the non-oil sector is becoming the center of development. In the Azerbaijan higher education system, as in other countries, quality assurance has become an essential agenda item in recent years. The new higher education system approach of the Azerbaijan Republic Ministry of Education has been defined as mission differentiation and diversity, flexibility, and institutional autonomy which require a significant transformation in the current system. Recently, Azerbaijan has taken strategic steps to integrate into the European Higher Education Area. These include extensive interaction with the European Union, accession to the Bologna Agreement in spring 2005, and other steps. Massification and internationalization are the two sides of the coin that create the demanding agenda for quality assurance in Azerbaijan high education. The higher education system in Azerbaijan testified a noteworthy massification tendency in the last twenty years, in terms of the number of students. The priority of each country is to create a highly competitive human capital in order to be ready for the increasing competition in the world in the coming years. The main condition for this is fertile conditions that encourage modern education and innovation. The training of graduates and specialists who meet modern requirements at various levels in higher education institutions operating in the structure of the Azerbaijani education system, it is considered expedient to use the existing opportunities to effectively organize the educational process and solve problems related to quality assurance.

3.1. Quality assurance in accordance with the requirements of the XXI century

The long-term development of Azerbaijan's economy relies on modern and strong education to keep up with the growing competition in the world. It is through education that the share of human capital in national wealth is constantly increasing, and in a strategic period, "lifelong learning" based on the harmonious development of competencies, social skills, and abilities is of particular importance.

Quality assurance in the higher education system of the Republic of Azerbaijan in accordance with the requirements of the XXI century is regulated as follows:

- Modernization of the education system is being continued to strengthen higher education, which is the guarantor of the development of society, and integrative teaching practices are being developed by deepening content reforms;
- The education system focuses on instilling digital skills from school age, as well as instilling new skills, specialties, and professions that are fundamentally different from today to prepare the young generation for the future of digital technology;
- People's access to high-quality education is expanded, experts in accordance with international certificates are trained as part of the measures to develop the vocational education system in line with the requirements of the labor market;
- Essential measures are taken to ensure the competitiveness of higher education institutions at the international level in order to create highly professional human capital through strong education;
- The Ministry of Education of the Republic of Azerbaijan, regardless of the form of ownership and commitment, ensures that the state document on education given to graduates by educational institutions is received in the form of an electronic document from the "Central Education Information System".

3.2. The Education Quality Assurance Agency

There are at least three candidates for quality measurement in higher education - the institution that has the authority to make decisions about quality, the government and accreditation agencies, as well as international and regional accreditation bodies. In order to ensure the sustainable development of the education system in the Republic of Azerbaijan in accordance with modern conditions, The Education Quality Assurance Agency has been established under the status of a public legal entity within the Ministry of Education of the Republic of Azerbaijan. Education Quality Assurance Agency, the institution in charge of the external evaluation of the universities in Azerbaijan, plays a guiding role by providing feedback to the institutions which have completed the process. The purpose of the agency's activity is to organize an effective quality assurance system in the Republic of Azerbaijan, to create a world-leading education system in terms of quality results and scope, to support the access of knowledgeable competitive professionals to the labor market, skills, abilities, and experience.

The agency's activities are as follows:

- to carry out the accreditation of educational institutions;
- to recognize the qualifications of foreign countries related to higher education;
- preparing proposals and organizing training for the implementation of the accreditation of educational institutions;
- organizing consultancy and methodological support services regarding the establishment and development of internal quality assurance systems in educational institutions;
- to promote the sustainable development of the education system and state standards in this field and to increase the prestige and education quality of educational institutions;
- Participating in giving opinions for the licensing of educational activities;
- To examine and apply advanced international experiences in the relevant field.

Accreditation assessment is carried out by a Commission of experts established by the Agency. On the basis of the Final Report prepared as a result of the evaluation, the Accreditation Board of the Ministry of Education decides the accreditation of educational institutions for the next five years. Accreditation certificates are issued to the educational institution according to the relevant decision.

4. CONCLUSION AND SUGGESTIONS

Consequently, in my opinion, when talking about quality assurance in higher education, it is necessary to highlight four main factors:
1) amount of investment in higher education
2) the competence of the teaching staff
3) the level of applicants and graduates
4) content of the curriculum

Undoubtedly, generalized recommendations on these four elements will play an essential role in establishing a successful quality assurance system in higher education. While establishing quality assurance systems in education systems, higher education institutions must map out a route in consideration of the PDCA (Plan. Do. Check. Act) Cycle, and update their education policies and processes, academic programs, and teaching and assessing methods. At the same time, program designs must be continuously monitored and updated, programs must be aligned with student-centered teaching and learning, and students must be equipped with the required knowledge and skills. Students are required to acquire core competencies both in their fields of study and other fields with applied education models that focus on students and learning. Also, the advising system must be revised and improved while the success of students and learning outcomes must be continuously monitored. To that end, student satisfaction surveys, and evaluations of peers, instructors, graduates, and employers must be conducted. Other major requirements include enabling dynamism in the academic staff of higher education institutions, providing the physical conditions necessary for learning, increasing the quality and quantity of Research and Development outputs, and establishing digitalized agile management systems, whereas the most crucial step is to ensure continuous enhancement by closely monitoring the performances displayed throughout all these processes. In curriculum design, the primary considerations must be equipping students with a set of skills such as solving complex problems, critical thinking, creativity, and agile management. In all the programs they offer, higher education institutions must make sure that their students acquire core competencies in science, technology, engineering, and mathematics alongside the knowledge required for their field of study. Furthermore, new technological advancements and new media tools must be integrated into high education systems, while conventional teaching and learning methods must be replaced with digitalized field-specific learning methods in classes. Our primary goal is to establish a system that will guarantee that higher education institutions produce more qualified and versatile graduates. The process of fostering a quality culture in higher education institutions led to considerable changes. The main criteria needed for change include clarity, simplicity, focus, and accountability. Other important factors such as active student participation in the processes and formation of graduate tracking systems were designated as the main points open to improvement in higher education institutions. The most significant feature of the quality assurance system in higher education institutions is guaranteeing that the students enrolled in study programs could acquire the targeted competencies. So, higher education institutions must promote and disseminate program accreditation processes, which constitute a substantial instrument in education systems. It is also required to ensure active student participation in the processes and create a graduate tracking system. Creating integrated information systems is essential for the establishment of quality assurance systems in higher education. The university management system must encompass all the relevant processes and stakeholders and be designed in a way to enable data exchange. The management system must also be designed in line with the notion of accreditation and quality that represents the institutional identity, expressing that universities will be supported on the subject. In my opinion students, organizations, and government must be determined as the most effective stakeholders in higher education.

Recommendation on the participation of stakeholders:
- determine the profile and role of various stakeholders;
- influential methods for their involvement in external quality assurance activities;
- particular teaching outlines, according to the profile and role of various categories of stakeholders.

Quality management systems and marketing activities should be established at the level of modern requirements and world experience should be taken into account in order to obtain sufficient and reliable information about training qualified experts in higher education institutions.

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APPLICATION OF KEY PERFORMANCE INDICATORS (KPI) IN THE ASSESSMENT OF THE ACTIVITIES OF COMMERCIAL ENTERPRISE IN TURBULENT ENVIRONMENT AND THEIR ROLE IN INTERNAL AUDIT

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ABSTRACT

When using financial and non-financial indicators to evaluate the performance of commercial organizations, it is easy to analyze the share of net profit in sales. As a result, it is possible to assess the return on capital or observe the positive dynamics of net profit during the year. While many internal audit functions provide consistent value for organizations, the process of measuring and transmitting that value is not as one-size-fits-all. Thus, there is a need to ensure the perception of both reality and the consistent value provided. In this case, the internal audit should focus on its mission, as well as how they serve and communicate the results to various stakeholders. It should help identify details that reflect the relevant and consistent value of the internal audit, taking into account the needs of stakeholders. Emphasis is placed on strong internal audit policies and procedures, the capabilities of internal audit staff, and measures to address the company's key risks. In this case, a balanced approach is recommended where updates and related statistics are conducted and reported. If this is done, the value of the internal audit will undoubtedly be measured more accurately. Key Performance Indicators (KPIs) set pre-established long-term goals. These are the financial and non-financial indicators that organizations use to assess and strengthen their success. It is very important to choose the right indicators to be used for measurement. To measure the effectiveness and efficiency of such work, it is necessary to measure the level of performance of the system through the KPI. In a competitive global environment, process organization requires customer orientation and the necessary flexibility. This article provides an example of the organization of the process, the application of key performance indicators, its role in internal audit.
Keywords: KPI, internal audit, balanced scorcard, performance, Commercial Enterprise

1. INTRODUCTION

The new working environment, which is the most important source of information, introduces new approaches to the use of traditional financial and accounting indicators to assess the performance of organizations. One of the newest approaches is to measure the performance of organizations by KPIs. KPIs are financial and non-financial indicators used by organizations to measure how well they have achieved their long-term goals. It is very important to identify and standardize all processes within the organization in order to create an effective system for measuring efficiency. The process approach is based on strategic management, Balanced Scorecard (BSC), technical standardization and quality management system. In many cases, the internal audit function is required to do more work with less staff and use technology in all its activities. Most Auditors are unable to determine the number of scheduled and completed audits on a regular basis, the number of identified high risk issues, the actual audit hours compared to budget hours, and the actual costs compared to budget expenditures, and whether these measures exist.

To do this, first of all, the true meaning of the audit must be understood, after which the preparation of internal instructions, defining everyone's obligations and goals, and defining key performance indicators. Internal audit implements its principle under the motto "Success is very close if everyone performs his duties properly." As many studies in recent years have shown, audit committees and senior management are struggling to consistently add "value" to their internal audit functions. It is important to understand the true mission of the internal audit and to adapt the results of the internal audit activity to that mission. In this regard, it is important to define the role of "assurance" and advice in internal audit. In today's environment, the guarantee function of internal audit is still important and will always continue.

2. APPLICATION OF KPI IN COMMERCIAL ENTERPRISES

As mentioned earlier, the process is the constitution of the organization. Such an expression can also be found in the literature: "Enterprises are not the center for the delivery of products or services, but mainly because they consist of processes, the work process is the basis of the organization's activities. In other words, the business management of some organizations means process management "(Skrinjar et al., 2007; Stefanovic et al., 2010). In the twentieth century, Walter A. Shewharts said that a high-level product could only be achieved by process management. It is very important. Traditional organizations are very strict about changes in working conditions. The process approach allows organizations to focus on the main task of creating values that will satisfy their customers. Advantages of organizations with a process approach (Heleta, 1998):

1) Putting clients' opinions first in the work of internal audits,
2) Establishment of interactive management,
3) Identify the process manager,
4) Logical implementation of activities,
5) Employees only do what they have to do,
6) Organization of internal communication suppliers.

It is possible to control the efficiency and effectiveness of work through KPIs. In such an organization, all processes are defined and standardized. The hierarchical level of the identified processes is defined as follows:

1) The customer-oriented process plays an important role in building the perfect situation.
2) Elements of operational activities are defined as people, objects and internal procedures.
3) The after-sales activity management and performance measurement system pays due attention to the operation management.

The process described earlier is a necessary basis for identifying an organization with a KPI. Such standard activities allow system performance to be measured as needed. The importance of measurement is great. Sustainability measurement is one of the most important management principles for the continuous improvement of organizational performance (Besic & Djordjevic, 2007). There is a proverb about this in the literature:

"If you want to improve something, you have to measure it" (Radovic & Karapandzic, 2005). An effective organization knows that they cannot control this part if they do not have enough information about the process, product, or service. Commercial organizations have many values measured in the business process. Lord Kelvin said, "When you can measure something you are talking about, you will know something about it."

In order to stay competitive, the organization must be managed by employees, processes, planned activities, time cuts, supplier relationships, and other parts of the business.

An effective performance measurement system is used to understand, adjust, and improve performance in all departments of the organization (Summers, 2005). Measuring the performance of an organization means expressing some results qualitatively and quantitatively with selected indicators. Performance measurement allows effective organizations to quantify their success. Selecting the appropriate indicators to be used to measure and evaluate performance is a very important activity. From all the information that can be obtained, you need to choose a criterion that best represents the whole case. In addition to the control function indicators, there are two other functions:

- Development and guidance function - because it provides a basis for the formation and implementation of the organization's strategy;
- Motivation function - motivates management to achieve goals and all stakeholders to achieve these goals at a higher level (Pesalj, 2006; Stamatović & Zakić, 2010).

In all organizations, every employee should know that there are activities that are very important for the management team. At the same time, key performance indicators emerge that reflect the success of some business concepts. Key performance indicators (KPIs) are the financial and non-financial indicators used by an organization to confirm how successful it has been in achieving its long-term goals. KPIs are fixed indicators that make more sense when comparing data. They help to divert emotions in the work process and focus on what is truly meaningful and profitable. In commercial organizations, one of the most effective approaches in defining KPIs is to divide the whole work into relevant sections that represent different parts. For example, we can calculate the indicators used to measure performance in the sales department of a car dealership as follows:

$$Gross\ profit\ from\ the\ sale\ of\ the\ vehicle\ =\ (Invoice\ price\ of\ the\ vehicle\ -\ the\ cost\ of\ the\ vehicle)$$

Gross profit is defined as the portion of sales revenue that exceeds the cost of those sales.

$$Gross\ profit\ (\%)\ =\ \frac{(Sale\ price\ of\ vehicles\ -\ cost\ of\ vehicles)}{(Sale\ price\ of\ vehicles)}x100$$

The effects of the current economic crisis have the greatest impact on car dealers. They often struggle to keep their business with a positive overall profit. A slowdown in the market can also affect sales with losses. The salesperson's annual sales (Annual unit sales / Number of salespeople) consists of the annual sales of the KPI and measures the average number of units sold by the salesperson in 1 year. These statistics are used to accurately assess the performance of the average sales team and the strengths and weaknesses of each team member. The total standard for a car dealer is 150 units per year for a newcomer, and a well-established dealer must sell 200 units per year. New car sales decline during the crisis. To get a good result, it is important to maintain the total profit in transport and sales of new cars. In addition, vehicle turnover is very important in the KPI, as it provides easy monitoring of stocks. The turnover of vehicles is calculated as follows:

$$Vehicle\ turnover = \frac{(Annual\ unit\ sales)}{(Units\ in\ stock)}$$

Vehicle turnover provides information on the number of vehicle turnover per year. If vehicle turnover is low, management should invest in sales specialist training and marketing advertising. Comparative data on the plan and sales of new cars are prepared within a year. This efficiency is not so easy to achieve.

However, it is important to make an effort to manage this criterion. If you have trouble getting a good result, it is a good idea to suggest a few countermeasures:
1) First of all, it is very important for sellers to have an accurate measurement system for this indicator,
2) management should organize an assessment of the level of technical skills and, if not appropriate, organize technical trainings;
3) Management should monitor the condition of equipment and tools to increase total capital and offer new equipment that can increase efficiency;
4) management should consider the application of a bonus system in order to reward the personal achievements of technical staff. This award must first identify productive employees.

The following indicator shows how productive productive workers are during working hours:

$$Labor\ productivity = \frac{(actual\ working\ hours)}{(budgeted\ working\ hours)} * 100\%$$

The criterion for this indicator is from 85% to 95%. If this indicator is low, then management should suggest countermeasures:
1) raising the professional level of hired employees;
2) introduction of a bonus system for employees.

Total Productivity OP (%)

$$Labor\ efficiency = \frac{(standard\ working\ hours)}{(actual\ hours\ worked)} * 100\%$$

This indicator is also known as productivity or performance efficiency. Demonstrates the ability to complete work within the schedule of goods allocated to technicians. The norm for this KPI is between 110 and 125%. In Europe, the figure is 104% on average.

3. THE ROLE OF KEY PERFORMANCE INDICATORS IN INTERNAL AUDIT
The first step to achieving significant dimensions is to gain an idea of the true "mission" of internal audit. This mission is defined in the International Standard as follows:
"Internal audit improves the organization's performance by adding value to the organization as an independent, objective assurance and consulting activity. At the same time, it helps bring a systematic, systematic approach to assessing and improving the effectiveness of the organization's risk management, control and management processes."

Internal audit adds value to the organization by assessing and making recommendations:
• Efficiency of operation and quality
• Trade risks
• Work and / or process controls
• Process and work efficiency
• Opportunities to reduce costs and expenses
• Effective corporate governance

Once the true mission of internal audit is understood, it is important to know the functions of internal audit in order to adapt its performance to that mission.

Some functions of internal audit can be noted as follows:
- Internal audit does not like surprises, so it reduces the use of unfounded information;
- Internal audit sets accountability within the organization;
- Internal audit should reduce the share of external audit and provide assurance;
- The main value provided by the internal audit is to ensure that the issues identified by them and the management take appropriate measures to address these issues.
- Internal audit not only guarantees inspections, but also helps and contributes to the achievement of the organization's goal and overall strategy.
- The internal audit team must consist of successful internal auditors. Successful internal auditors are people who perform their functions properly, have audit skills, are business partners with management, and identify and address risks.

Although there are different directions and appropriate priorities for different parties, the overall measure for the value of an internal audit is as follows:
- Strong internal audit policies and procedures governing internal audit activities
- Skills and attitudes of internal audit staff
- Evidence that the internal auditor's attention and audit results are consistent with the entity's key risks.

It is important to complete written standards policies and procedures, including internal quality control procedures and an External Quality Assessment Review, in order to have a true "Balanced Evaluation Card" that performs internal audit activities covering these areas and is used to transmit results. One point that many auditors, senior management, and the audit committee consider is the number of audit issues resolved before the final report. When this is done, the true partnership of internal audit with management is proven. There is a growing focus on providing methods and tools that the organization can reuse to move forward independently. Generally, in these cases, internal audit risks are identified using automated tools and / or a developed program. Some other key dimensions include:
- Reports issued on the 20th day of field work (eg 45 days)
- Actual annual audit plan hours compared to budget hours
- Number of completed audits and scheduled inspections
- Consistent use of inquiries at the end of each audit to obtain the opinion of the management of the audit organization and to report

In addition, it is the development of relationships between company employees and company management that adds value to organizations. This increases the internal audit staff's understanding of the business and their ability to add value. Management's measurement of the official opinion on each auditor is scheduled annually. An excellent measure of the value of internal audit is the number of employees transferred from internal audit to other positions in the organization. The fact that internal audit serves as a talent incubator for the organization as a whole is a consistent positive for many organizations. It also gains speed. One of the key outcomes that contributes to this process is internal audit, risk management, compliance, formal harmonization of external audit risks and coverage. Some companies complete this with an official document that is updated regularly. This document details the organizational risks, as well as the processes involved to eliminate the risks. Linking each internal audit report to the organization's key risk areas is a clear indication of the value received. This connection may include an emphasis on the risk effect of the audit issue and the audit result as a whole. This includes identifying the risks to achieving the organization's strategic goals.

Because internal audit is accustomed to understanding an organization's risks, it is important to look directly at the organization's risk management process or information technology risks (cybersecurity, etc.).

4. CONCLUSION

Continuous measurement of organizational performance through key performance indicators is a new concept used in companies today. Indicators are mainly used to measure how successful KPIs are. One of the prerequisites for an effective and efficient system for measuring performance is the interconnected organization of previously standardized processes. This process is shown in relation to the same KPI used in car dealers. Graphic examples of measured KPIs in car sales are also shown. The figures show the simplicity of the measurements and the explanation of the results, which is the most important advantage of using such indicators. As can be seen from these formulas, the measured values are always compared with some planned value. It is the direct management that manages to accomplish the task under consideration. In addition, the analysis conducted over several years shows that the organization is constantly improving its work. As a result, the importance of measuring KPI performance can be summarized as follows:

"I say KPIs are where performance is in the past, where it is now, and perhaps more useful in the future" (Smith, 2001).

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ROLE OF ECOLOGICAL FEATURES OF LANDSCAPES IN THE ESTABLISHMENT OF NATURAL AND ECONOMIC BASE OF LIVESTOCK ACROSS THE GREATER CAUCASUS PART OF AZERBAIJAN

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ABSTRACT

The article explores the landscapes of summer and winter pasture of high livestock importance, including the areas suitable for forage supply in the Greater Caucasus territory. Though among cultural landscapes, the pasture and hayfield complexes present in this territory have been formed much earlier compared to others, the natural structure of it has been retained well in contrast to other transformed landscapes. Unfortunately, the pasture and hayfield landscapes that were subject to long-term agricultural use have been transformed due to related severe anthropogenic impacts. The essence of this study is the development of livestock areas in the Greater Caucasus not only based on seasonal grazing but also through creating loop livestock farms. Thus, the cultivation of forages in compliance with an effective agro technical approach may ensure the preservation of the landscapes' ecological properties in the study area. The establishment of closed farms in the field of research is also economically efficient and promising. In addition to the ecological changes in the landscape in nomadic livestock, animals' productivity in the direction of meat and dairy products is also low. Thus, closed farming is a more efficient area for increasing the fodder base and generating more economic income. Certainly, in the development of closed farms, our country can benefit from European countries' experience that has had their say in this area for many years. One of the most critical factors in establishing such farms is the training of qualified specialists, and our country has already taken significant steps in this direction. The article also compares the work done to increase the fodder base over the years and shows agricultural crops' sown areas.
Keywords: Greater Caucasus, forage supply, natural forage base, mountain landscapes, livestock, pasture and hayfield complexes

1. INTRODUCTION

To achieve a high level of development of livestock, first its forage base must be strengthened. The seasonal forage base of livestock is summer and winter pastures, while the forage crops are annual and perennial grasses, forage beet and corn. In the territory of the Republic of Azerbaijan, summer pastures include subalpine and alpine meadows of the Greater and Lesser Caucasus, the Zangazur Mountains, the winter pastures of the Kur-Aras lowland, the lowland Caspian coasts, Jeyranchol plateau and Ajinohur area. Pasture livestock is a form of extensive land use, and is one of the most ancient areas of human activity. Pasture complexes are mainly seasonal and are divided into both summer and winter pastures. Both types are characteristics of this study area, and these complexes have been formed since ancient times. Pasture and hayfield complexes are mainly seasonal, and include summer and winter pastures. Both types are peculiar for this study area. These complexes have been formed since ancient times.

Pasture complexes are older compared to others in the system of anthropogenic landscapes. Unlike other anthropogenic complexes, they have retained their natural structure since ancient times. Through long historical period the area under hayfields has been modified due to the impact of intensive land use which has added new traces to them.

2. HISTORY OF LIVESTOCK DEVELOPMENT IN THE REGION

Pasture livestock has been the leading economic activity in Azerbaijan over centuries. Long before the formation of vegetation and horticulture, mountain slopes, alpine and subalpine meadows, as well as humid mountain steppes within their upper and lower boundaries have served as pastures and hayfield areas for population. Certain types of settlements have emerged in the study area associated with the use of grasslands for livestock purposes. Specific forms of land use on pastures and hayfields were typical for the study area in earlier centuries of BC; nomadic, semi-nomadic and sedentary cattle breeding have been practiced. The lifestyle in the area was largely related to the productivity of available pastures. Herdsmen were leaving this area behind if pastures had poor fertility, but later returning back after its restoration over time. Although grazing has been practiced in unregulated manner since ancient times, land use in this area got improved over time. Leaving land out of use temporarily as a way for increasing land fertility remains an important feature of pastoralism in modern times.

2.1. The role of landscape types in livestock development

The subalpine and alpine meadows used as summer pastures and hayfields in the territory of the country are characterized by irregular economic effects. These landscape units are typically subjected to anthropogenic loading at highest degree during the summer months, and accordingly the most considerable modification is observed during this season [4]. During the winter months, due to extreme climatic conditions, anthropogenic impact on natural landscapes is mitigated. During the summer months, most subalpine meadows are used as both hayfields and pasture, while alpine meadows are used only as pasture. Land privatization, emergence of new forms of ownership, as well as intensive land use intensified the human-related transformation of landscapes occupying mountain and foothill regions where river inflow cones, river valleys, shrubs, eroded slopes. Landscapes affected by irregular farming have been formed on mountain slopes, foothills, lower arid and denudation mountain areas and lowlands with complex structure. In the high mountain meadows, semi-deserts plains and dry steppes, anthropogenic impacts are seasonal, and therefore soil degradation occurs more intensively [10]. Arid pastures are one of those landscapes spread in the country's territory that have undergone a drastic change and desertification. Especially in recent years, as a result of unregulated and excessive character of land use, biological potential and ecological conditions of dry steppes and semi-deserts have deteriorate more [8]. The bigger impact on this process had the distribution of land in Azerbaijan during farm privatization without taking into account the areas of forage cultivation, pastures and hayfields, and the number of domestic animals. The availability of natural pastures and hayfields as well as subalpine and alpine meadows in the Greater Caucasus part of Azerbaijan, and also historically formed habits among the local population makes feasible the development of livestock in the area. This condition makes necessary the creation of up-to-date food and light industries with the complex processing output, since the production of agricultural products can allow meet the needs of the population for food products not only at regional but also country scale [7]. Since ancient times pastures in Azerbaijan have been suitable for manage cattle-breeding all year round, an evidence that that the country's population has a wide experience in the field of animal husbandry. Before the 20es of the twentieth century no sector of the economy in Azerbaijan has experienced such extensive development way as it was typical for livestock. Relatively large-scale measures on improving of the quality of livestock began during the early Soviet period.

Thus, local cattle, sheep and pig species have been replaced by new, more productive and profitable species. In order to take highest advantage of fine-wool rams, selection and artificial insemination have been improved. In a short period of time, the creation of new breeds of sheep with longer wool and more efficient wool fiber has been conducted. Compared to native species, the new merino sheep with more profitable shearing opportunity were much more valuable also due to their durability toward migration in long distance, as well as in terms of efficient using opportunities in regard to both high-altitude summer pastures and semi-desert winter pastures [9].

3. THE ROLE OF LIVESTOCK IN THE MATERIAL SUPPORT OF THE POPULATION

Significant increase in livestock production is necessary to raise the welfare of the country's population as well as to address the food problem successfully [6]. This is because the increase in livestock production is achievable if growth in forage crop production is provided first of all. Close relationship of animal husbandry and planting is explained by the fact that the latter allow develop livestock, whereas the development of animal husbandry, in turn, plays a supporting role in the effective territorial organization of crop production. Non-consumable crop products are used in livestock and are converted into livestock food. In addition, livestock provides crop production with organic fertilizers.

3.1. Directions for expanding the food base in livestock development

Under natural and economic conditions, the development of agricultural production and the specialization in subfields of planting serve as the basis for the formation of certain sectoral components. In the former Soviet period, large and small cattle farming were developing mainly on natural pastures. This had not a significant impact on the economic development of livestock. Instead, ways to develop the forage base were considered the following:
- extending of the areas under forage crops;
- increasing of the productivity in the areas of natural forage;
- complementing to the content of mixed forage, etc.

Also, during the years of Soviet period, plantations of forage crops in Azerbaijan have expanded rapidly. Plantations of forage crops were the second largest behind grain fields in area. Thus, in 1962 alone, 175.7 thousand hectares of forage crops were planted. Nowadays, plantations of forage crops in the country tend to expand more, making up 396.4 thousand hectares, of which, only 8.9% falls to the share of Greater Caucasus part of Azerbaijan. However, the current output of forage production yet is not enough to meet the growing needs of livestock. Low productivity of forage crops leads to a significant increase in the production cost. Moreover, low productivity challenges using of arable lands, labor and financial resources efficiently. This in turn leads to a decrease in livestock productivity.

Figure following on the next page

Figure 1: Area of forage crops in hectare
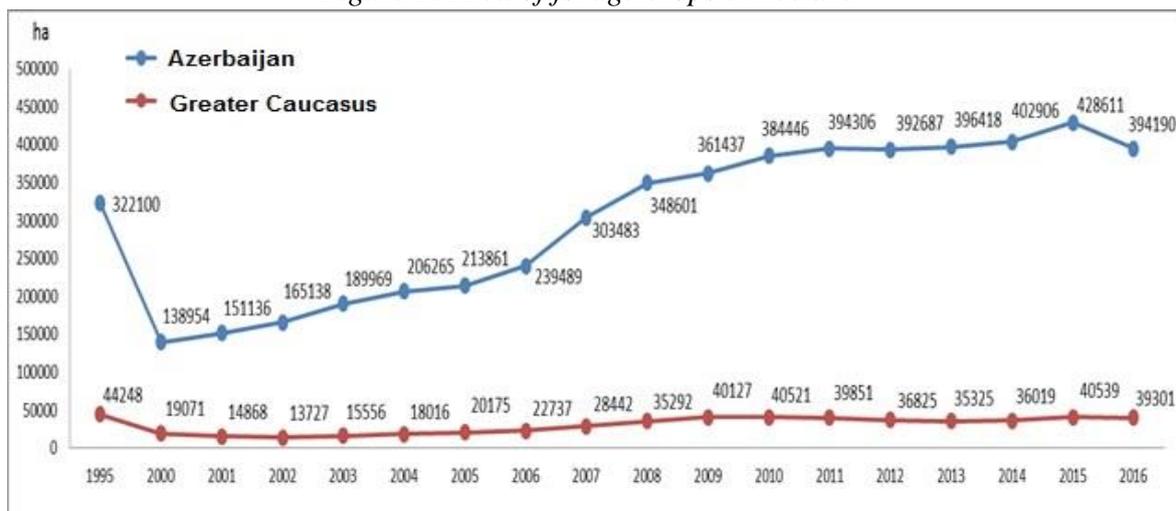
Source: Agriculture of Azerbaijan. 2016. State Statistical Committee [2]

In Azerbaijan, after 2000s, decrease in forage crops was recorded in 2012 and 2016 years only. In the Greater Caucasus region, decrease was recorded in 2001, 2002, 2011, 2012, 2013 and 2016. In 2011-2016, total area of forage plantations in the region was extended as much as 550 ha, including 25161 by Sheki-Zagatala economic region, and 144 hectares by Absheron economic region, whereas decrease at 1173 hectares and 447 hectares was observed in Guba-Khachmaz and Upland Shirvan regions respectively. The development of livestock and the strengthening of the forage base depend not only on natural sources of forage, but also on succulent forage crops. Thus, the green mass of succulent forage plants, dry grass, straw and silage are of high quality and are highly valued as they contains albumen, protein, fat, various vitamins and minerals. Beside with this, not only root crops, but also surface masses of succulent forage plants, as well as dry grasses have a high nutritional value [7]. This factor is one of the main factors in the development of livestock farming, and plays an important role in forage supply. Expanding of the area succulent vegetation could contribute to the solution of existing problem considerably in the future.

Table 1: Sown area, production and productivity of forage crops in Azerbaijan

Year	Corn for silage and green forage			Root crops		
	Sown area, thous. Ha	Production, min ton	Productivity, sent/ha	Sown area, thous. ha	Production, min ton	Productivity, sent/ha
1990	98,5	943,9	96	12,9	172,1	133
1995	36,9	182,3	47	5,2	26,4	51
2000	2,2	4,8	63	0,1	2,4	157
2005	0,9	16,5	43	0,1	1,7	173
2010	0,8	13,2	142	0,2	3,6	210
2011	0,8	8,7	106	0,1	3,1	240
2012	1,2	12,0	98	0,5	3,7	79
2013	1,5	17,8	117	0,2	3,6	192
2014	1,4	15,3	107	0,2	4,4	219
2015	1,8	35,3	162	0,1	2,6	262
2016	1,6	70,1	160	0,2	3,2	195

Source: Agriculture of Azerbaijan, 2016. State Statistical Committee [2]

In general, land used for cultivation of forage is considered beneficial in agronomic term as well as economically efficient. Areas under straw crop are used both to maintain the quality of forage and keep soil fertility. Each geographical region is characterized by the presence of species of fauna and flora specific to that area only. Living of humans and economic activities is affected by an environment. Therefore introduction of new flora and fauna in the formed biogeocenosis may lead to violation of the existing ecological balance [9]. An analysis of the level of forage production and forage supply in the Greater Caucasus region shows that the degree of using of hayfields in livestock varies by regions. In most regions, the share of hayfield forage among total forage is high. To develop livestock, first of all, it is important to create a high-quality forage base, protect natural forage plantations as well as maintain fertility of sown areas under forage plants. Natural forage areas consist of summer and winter pastures, hayfields and year-round grasslands used during the grazing season [1]. Natural pastures and pastures, which make up 20-25% of the forage base of livestock, are of great importance. The area of grasslands of grazing importance and pastures make 3,583,000 hectares in the country, of which 1,740,000 hectares falls to winter pastures and 597,000 hectares to summer pastures. As studies show, pastures are not used efficiently at present. Excessive grazing degrades grassland and steppe vegetation, has a negative impact on soil cover, leads to reduction in fauna species, while the productivity of lands becomes affected over years as well. This happens because hydrological regime of lands is affected by overgrazing, the growth of grass on a hardened soil is considerably weakened, as a result of which the dried, trampled and highly degraded soil becomes deprived of vegetation [8]. Development of livestock typically is followed by transformation of natural landscapes of pastures and hayfields in mountain meadows and grasslands, but also with transformation of forest landscapes, or shrubbery and forest landscape complexes. The increase in number of domestic animals in the mentioned complexes of the study area has led to gradual large-scale and long-term transformations on the places of local transformations. This feature is primarily associated with changes that happen in natural upper and lower boundaries of forests due to grazing. Summer and winter pastures of livestock importance, as well as forest lands, have an area 2 million 846 thousand ha hectares in total, or 75% of all state-owned lands available in the country. In the Greater Caucasus, our study area, is favorable region in terms of opportunities for the development of planting, vegetable growing and horticulture that have a special role in strengthening of the forage base. Agricultural crops in the region are grown in private backyards and farms. The land reforms implemented in the country have opened large opportunities for the involvement of more lands in plant growing and horticulture in compliancy with their natural and biological conditions, and for achieving abundant and high-quality crops. Fostering forage production allowed increase productivity in livestock and also the share of various grasses in plant growing, which led to a significant increase in the number of domestic animals and their species diversity. Employment of the population living in the highlands of the Greater Caucasus is related mainly to animal husbandry. Grazing of domestic animals in the region is observed mainly on lands of state fund, rural pastures, as well as on uncontrolled parts of forest lands and pastures [6]. In Azerbaijan, lack of highly nutritious elements in the composition of soil of arable lands, including pastures and hayfields, as well as of forage used in livestock leads to overloading of natural areas of forage value and also to erosion and salinization of soils conditioned by weakly controlled land use. Such impact leads to serious damage subjected to the forest fund, water resources and whole environment. To eliminate the problem, the State Program on Summer/Winter Pastures, Effective Use of Meadows and Desertification Prevention for the period 2004-2010, was adopted in 2004 [3]. The State Program was aimed at bringing the structure of forage crops in compliancy with the identified standards, as well as implementing of necessary measures on prevention of excessive grazing on pastures and hayfields in order ensure the development of livestock.

For a long time herds of domestic animals were kept on summer and winter pastures only, thus being apart from crop production. However, then, livestock began to develop based on the relation of vegetation farming and forage production to create a reserve forage base in addition to those pastures. Besides, today, domestic animals are fed in closed condition with using high technology [9]. To strengthen the forage base in the country, the government emphasizes expanding of areas under forage crops. As a result, the increase in productivity, as well as the increase in number of all domestic animals in livestock led to significant growth of livestock production.

Table 2: Sown area of agricultural plants in the Greater Caucasus, in ha

	2000	2005	2010	2015	2016
Absheron	3677	5084	4039	3379	4901
Sheki-Zagatala	126950	155496	200806	186099	193992
Guba-Khachmaz	57804	105812	107427	114161	115933
Upland Şirvan	84671	90750	112076	115250	120634
Greater Caucasus	273102	357142	424348	418889	435460
Republic of Azerbaijan	1041542	1327922	1583874	1585389	1628306

Source: Agriculture of Azerbaijan. 2016. The yearly bulletin of State Statistical Committee of the Azerbaijan Republic [2]

Development of livestock is of great economic and social importance to meet daily needs of population. In the study area, like in other regions of the country, the forage base of livestock is not based only on natural hayfields and pastures but also on remnants of vegetables and horticulture crops.

3.2. The economic nature of the food prepared on the basis of new technology
In general, to ensure the efficient use of pastures and hayfields in the Greater Caucasus region, to prevent soil erosion on mountain slopes, salinization in foothills and plains, to develop the structure and storage conditions of livestock in accordance with modern requirements, as well as to ensure sustainable development in the region, the followings are necessary: protection of lands, owned by state and municipalities; prevention of overloading of pastures and hayfields; conservation of biological diversity against the background of development of livestock; breeding of high-productive species in livestock with considering of local natural conditions. It is extremely important to implement agro-technical measures to improve the conditions of summer and winter pastures. For this purpose, implementation of such measures as removal of various poisonous weeds and harmful plants, clearing of lands from stones and bushes, destroying of sources of pests and diseases, and sowing of seeds of specific grasses to enrich the grasslands, etc. are very important. The mentioned measures of agro-technical allow significantly increase productivity of summer pastures [5]. One of the main factors responsible for the intensive erosion and degradation on summer pastures is the premature taking of herds to pastures and also arising of paths on mountain slopes as a result of movement of livestock. When domestic animals are taken out to much wet pastures prematurely, sheep's claws easily break the valuable soil layer easily. Eventually, during next rainfalls, furrows on the place of these soil layers appear, and this gradually weakens the formation of useful grass cover on slopes. Such erosion processes are evident on the paths formed on the mountain slopes. Moreover, when it rains heavily, the piles of water that fill those paths may combine and originate flood. Another factor facilitating the processes of erosion and degradation on summer pastures is the improper creation of sheepfolds. Since ancient times it has been customary to build permanent sheepfolds to keep domestic animals in the natural condition. The sheepfolds often were made of stone structures.

It was defined that a long-term trampling and movements around the sheepfolds destroys grass cover and leads to loss of vegetation of forage importance. On the contrary, the creation of sheepfolds may favor the growth of poisonous and harmful vegetation without forage importance, thus, may have a negative impact on the health of livestock and their productivity. Creation of temporary sheepfolds instead of permanent ones is very important in terms of solving this problem. This way is of particular importance in both intermittent grazing and prevention of degradation. It was observed also that the restoration of pastures, heavily trampled by cattle, should be left for a while to allow soil cover be more fertile. In this case, productivity of grasslands rises as 20-25% as much in the first year, and 100% in subsequent years. It can be concluded that improper use of summer pastures lowers productivity on summer pastures, whereas intermittent and gradual grazing allows improve the quality of pastures and prevent erosion [8].

4. CONCLUSION
In view of the above, it is recommended to implement the following system of basic measures to increase the productivity of forage crops, hayfields and pastures, as well as to preserve the ecological characteristics of pasture and grassland landscapes:
- efficient use of natural areas of forage importance, additional sowing of grass seeds on pastures and hayfields, and creation of intensive forage areas on winter pastures should be conducted;
- effective crop rotation should be organized through proper land use;
- forage crops such as soybeans, sorghum, corn, sunflowers and beets playing an important role in the intensive growth of livestock production should be expanded;
- lands under sorts of secondary crop should be expanded in area, and the agro-climatic resources should be benefited more effectively.

There are sufficient land resources of livestock assignment in the Greater Caucasus region. It is feasible to increase the number of livestock in farms at the expense of strengthening of the forage base and expanding of pastures, and supply livestock farms with local natural resources. The transition to closed farming could improve the ecological condition of the pasture landscapes.

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AHALYSIS OF THE ELASTICITY THEORY PROBLEM FOR THE RADIAL INHOMOGENEOUS TRANSVERSAL-ISOTROPIC CYLINDER OF SMALL THICKNESS WITH A FIXED LATERAL SURFACE

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ABSTRACT

The axisymmetric problem of the theory of elasticity for the radially inhomogeneous transversely isotropic cylinder of small thickness is studied by the method of asymptotic integrating the equations of the theory of elasticity is used to study. It is assumed that the elastic moduli are arbitrary positive continuous functions of the cylinder radius. The lateral part of the cylinder is taken fixed, and the stresses are set at the ends of the cylinder, leaving the cylinder in equilibrium. Homogeneous solutions are constructed. The asymptotic behavior of the solution is studied as the thickness parameter tends to zero. The nature of the stress-strain state is explained. It was found that the stress-strain state is composed only of a solution having the character of a boundary layer, equivalent to the Saint-Venant edge effect of the theory of inhomogeneous transversely isotropic plates.
Keywords: *axisymmetric problem, radially inhomogeneous cylinder, boundary layer, boundary Saint-Venant effect, variational Lagrange principle*

1. INTRODUCTION

One of the properties of materials that affect the stress-strain state of the elastic bodies is their inhomogeneity. Various materials are being developed and created, the characteristics of which, in particular, the elastic moduli, can change continuously along certain directions. An important place in the theory of plates and shells is occupied by studies of the inhomogeneous thin-walled structures. The complexity of the phenomena arising from the deformation of the inhomogeneous plates and shells, and the variety of inhomogeneous structures have led to the creation of various applied theories, each of which is based on a certain system of hypotheses. The areas of applicability of the applied theories of inhomogeneous plates and shells have been little studied. The fact of the existence of various applied theories for the inhomogeneous structures poses the problem of their critical analysis based on a serious mathematical approach, i.e. from the perspective of three-dimensional equations of the theory of elasticity. In addition, a number of issues related to the study of the stress-strain state for the inhomogeneous structures can be correctly solved only within the framework of the theory of elasticity. Analysis of the stress-strain state of inhomogeneous shells on the basis of three-dimensional equations of the theory of elasticity is associated with significant mathematical difficulties. The solutions obtained on the basis of three-dimensional equations of the theory of elasticity can serve as a standard for verifying the accuracy of various applied theories of shells.

2. STATEMENT OF THE BOUNDARY VALUE PROBLEMS

Let us consider the axisymmetric elasticity problem for the radially inhomogeneous transversely isotropic hollow cylinder of small thickness the volume

$$\Gamma = \{r \in [r_1; r_2],\ \varphi \in [0; 2\pi],\ z \in [-L; L]\}.$$

The system of equilibrium equations in the absence of mass forces in a cylindrical coordinate system r, φ, z has the form [7]

$$\begin{cases} \dfrac{\partial \sigma_{rr}}{\partial r} + \dfrac{\partial \sigma_{rz}}{\partial z} + \dfrac{\sigma_{rr} - \sigma_{\phi\phi}}{r} = 0 \\[3mm] \dfrac{\partial \sigma_{rz}}{\partial r} + \dfrac{\partial \sigma_{zz}}{\partial z} + \dfrac{\sigma_{rz}}{r} = 0. \end{cases} \tag{1}$$

Here $\sigma_{rr}, \sigma_{rz}, \sigma_{zz}, \sigma_{\phi\phi}$ are the components of the stress tensor, which are expressed in terms of the displacement vectors $u_r = u_r(r, z),\ u_\varphi = u_\varphi(r, z)$ as follows [6]

$$\sigma_{rr} = A_{11} \frac{\partial u_r}{\partial r} + A_{12} \frac{u_r}{r} + A_{13} \frac{\partial u_z}{\partial z},\ \sigma_{rz} = A_{44}\left(\frac{\partial u_r}{\partial z} + \frac{\partial u_z}{\partial r} \right),$$

$$\sigma_{zz} = A_{13}\left(\frac{\partial u_r}{\partial r} + \frac{u_r}{r} \right) + A_{33} \frac{\partial u_z}{\partial z},\ \sigma_{\phi\phi} = A_{12} \frac{\partial u_r}{\partial r} + A_{11} \frac{u_r}{r} + A_{13} \frac{\partial u_z}{\partial z}. \tag{2}$$

Substituting (2) into (1) we obtain the equilibrium equation in displacements

$$\left(L_0 + \partial_1 L_1 + \partial_1^2 L_2 \right) \overline{u} = \overline{0} \tag{3}$$

Here L_k are matrix differential operators of the form

$$L_0 = \left\| \begin{matrix} \partial\left(e^{-\varepsilon\rho}\left(b_{11}\partial + \varepsilon b_{12}\right)\right) + \varepsilon\left(b_{11} - b_{12}\right)e^{-\varepsilon\rho}\left(\partial - \varepsilon\right) & 0 \\ 0 & \partial\left(e^{-\varepsilon\rho}b_{44}\partial\right) + \varepsilon b_{44}e^{-\varepsilon\rho}\partial \end{matrix} \right\|,$$

$$L_1 = \left\| \begin{matrix} 0 & \varepsilon\left(\partial(b_{13}) + b_{44}\partial\right) \\ \varepsilon b_{13}\partial + \varepsilon^2\left(b_{13} + b_{44}\right) + \varepsilon\partial(b_{44}) & 0 \end{matrix} \right\|,$$

$$L_2 = \left\| \begin{matrix} \varepsilon^2 b_{44}e^{\varepsilon\rho} & 0 \\ 0 & \varepsilon^2 b_{33}e^{\varepsilon\rho} \end{matrix} \right\|,$$

$\partial_1 = \dfrac{\partial}{\partial\xi};\ \partial_1^2 = \dfrac{\partial^2}{\partial\xi^2};\ \partial = \dfrac{\partial}{\partial\rho};\ \overline{u} = \left(u_\rho; u_\xi\right)^T;\ u_\rho(\rho, \xi),\ u_\xi(\rho, \xi)$ are components of the

displacement vector; $\rho = \dfrac{1}{\varepsilon}\ln\left(\dfrac{r}{r_0}\right),\ \xi = \dfrac{z}{r_0}$ are new dimensionless variables; $\varepsilon = \dfrac{1}{2}\ln\left(\dfrac{r_2}{r_1}\right)$ is

a small parameter characterizing the thickness of the cylinder; $r_0 = \sqrt{r_1 r_2}$, $\rho \in [-1;1]$, $\xi \in [-l;l]$ $\left(l = \dfrac{L}{r_0} \right)$; $b_{ij} = b_{ij}(\rho)$ are the elasticity characteristics considered as an arbitrary piecewise continuous function of the variable ρ; $b_{ij} = \dfrac{A_{ij}}{G_*}$, G_* is some characteristic moduli as for example $G_* = \max A_{ij}(\rho)$.

Let us assume that the lateral surface of the cylinder is fixed, i.e.

$$u_\rho = 0;\ u_\xi = 0 \text{ at } \rho = \pm 1, \tag{4}$$

and at the ends of the cylinder the stresses are set

$$\sigma_{\rho\xi}\big|_{\xi=\pm l} = f_{1s}(\rho),\quad \sigma_{\xi\xi}\big|_{\xi=\pm l} = f_{2s}(\rho). \tag{5}$$

Here $f_{1s}(\rho)$, $f_{2s}(\rho)$ $(s=1,2)$ are smooth enough functions satidfying equilibruim conditions.

3. CONSTRUCTION OF THE SOLUTION

We seek solution for (3), (4) in the form

$$u_\rho(\rho,\xi) = u(\rho)e^{\alpha\xi};\ u_\xi(\rho,\xi) = w(\rho)e^{\alpha\xi}. \tag{6}$$

Substituting (6) into (3), (4) we have

$$\begin{cases} \left(L_0 + \alpha_1 L_1 + \alpha^2 L_2 \right)\bar{g} = \bar{0} \\ \bar{g}\big|_{\rho=\pm 1} = \bar{0}. \end{cases} \tag{7}$$

where $\bar{g}(\rho) = (u(\rho); w(\rho))^T$.

To solve (7), we use the asymptotic method based on three iterative processes [1-5]. The first iteration process has trivial solutions. There are no solutions with the character of the edge effect corresponding to the second asymptotic process. According to the third asymptotic process, solution of (7) is sought in the form:

$$u^{(3)} = \varepsilon\left(u_0 + \varepsilon u_1 + ... \right),$$
$$w^{(3)} = \varepsilon\left(w_0 + \varepsilon w_1 + ... \right), \tag{8}$$
$$\alpha = \varepsilon^{-1}\left(\beta_0 + \varepsilon\beta_1 + ... \right).$$

Substituting (8) into (7) for the first terms of the expansion we obtain

$$B(\beta_0)\bar{f}_0 = \bar{0}, \tag{9}$$

where

$$B(\beta_0)\bar{f}_0 = \left\{ t(\beta_0)\bar{f}_0, \bar{f}_0 \big|_{\rho=\pm1} = \bar{0} \right\}, \quad t(\beta_0)\bar{f}_0 = \left(B_0 + \beta_0 B_1 + \beta_0^2 B_2 \right)\bar{f}_0,$$

$$B_0 = \left\| \begin{matrix} \partial(b_{11}\partial) & 0 \\ 0 & \partial(b_{44}\partial) \end{matrix} \right\|, \quad B_2 = \left\| \begin{matrix} b_{44} & 0 \\ 0 & b_{33} \end{matrix} \right\|,$$

$$B_1 = \left\| \begin{matrix} 0 & \partial(b_{13}) + b_{44}\partial \\ \partial(b_{44}) + b_{13}\partial & 0 \end{matrix} \right\|, \quad \bar{f}_0 = (u_0; w_0)^T.$$

Spectral problem (9) describes the potential solution of the transversely isotropic plate inhomogeneous in thickness. In contrast to the isotropic case [8], for the transversely isotropic plate of inhomogeneous thickness, β_{0k} can take purely imaginary values.

By replacing

$$u_0 = -\beta_0^{-3}\left(p_0\psi''\right)' + \beta_0^{-1}p_2\psi' + \beta_0^{-1}\left(p_1\psi\right)', \quad w_0 = \beta_0^{-2}p_0\psi'' - p_1\psi$$

spectral problem (9) is reduced to the following one

$$\begin{cases} \left(p_0\psi''\right)'' - \beta_0^2\left[\left(p_1\psi\right)'' + p_1\psi'' + \left(p_2\psi'\right)'\right] + \beta_0^4 p_3\psi = 0 \\ \left(-\beta_0^{-3}\left(p_0\psi''\right)' + \beta_0^{-1}p_2\psi' + \beta_0^{-1}\left(p_1\psi\right)'\right)\Big|_{\rho=\pm1} = 0 \\ \left(\beta_0^{-2}p_0\psi'' - p_1\psi\right)\Big|_{\rho=\pm1} = 0 \end{cases} \tag{10}$$

where $p_0 = b_{11}\theta, \; p_1 = b_{13}\theta, \; p_2 = b_{44}^{-1}, \; p_3 = b_{33}\theta, \; \theta = \left(b_{13}^2 - b_{11}b_{33}\right)^{-1}.$

System (10) is a generalization of the spectral problem of P.F. Papkovich [8] for the inhomogeneous transversally isotropic case.

At the next stage for determining $\bar{f}_1 = (u_1, w_1)^T$ and β_1 we obtain a boundary value problem

$$\begin{cases} t(\beta_0)\bar{f}_1 = \left(M_1 + \beta_0 M_2 + \beta_0^2 M_3 - 2\beta_0\beta_1 B_2 + \beta_1 M_4\right)\bar{f}_0 \\ \bar{f}_1\big|_{\rho=\pm1} = \bar{0} \end{cases} \tag{11}$$

where

$$M_1 = \left\| \begin{matrix} (b_{12} - b_{11})\partial - \partial(b_{12}) + \partial(\rho b_{11}\partial) & 0 \\ 0 & -b_{44}\partial + \partial(\rho b_{44}\partial) \end{matrix} \right\|,$$

$$M_2 = \left\| \begin{matrix} 0 & 0 \\ -(b_{13} + b_{44}) & 0 \end{matrix} \right\|, \quad M_3 = \left\| \begin{matrix} -\rho b_{44} & 0 \\ 0 & -\rho b_{33} \end{matrix} \right\|,$$

$$M_4 = \left\| \begin{matrix} 0 & -\partial(b_{13}) - b_{44}\partial \\ -b_{13}\partial - \partial(b_{44}) & 0 \end{matrix} \right\|.$$

The condition for solvability of (11) is the orthogonality of the right-hand side of the solution to the adjoint problem

$$B^*(\beta_0)\bar{f}_0^* = B(-\bar{\beta}_0)\bar{f}_0 = \bar{0},$$

where $\bar{f}_0^* = \left(u_0^*; w_0^*\right)^T$.

From the solvability condition for β_1 we obtain

$$\beta_1 = \frac{E_2}{E_1},$$

where

$$E_1 = \int_{-1}^{1}\left[2\beta_0\left(b_{44}u_0\bar{u}_0^* + b_{33}w_0\bar{w}_0^*\right) + b_{44}\left(\bar{u}_0^* w_0' - u_0\left(\bar{w}_0^*\right)'\right) + b_{13}\left(\bar{w}_0^* u_0' - w_0\left(\bar{u}_0^*\right)'\right)\right]d\rho,$$

$$E_2 = \int_{-1}^{1}\left[\beta_0^2\rho\left(b_{33}w_0\bar{w}_0^* - b_{44}u_0\bar{u}_0^*\right) - \beta_0\left(b_{13} + b_{44}\right)u_0\bar{w}_0^* + \left(b_{12} - b_{11}\right)\bar{u}_0^* u_0' - b_{44}\bar{w}_0^* w_0' -\right.$$

$$\left.- \rho\left(b_{44}w_0'\left(\bar{w}_0^*\right)' + b_{11}u_0'\left(\bar{u}_0^*\right)'\right) + b_{12}u_0\left(\bar{u}_0^*\right)'\right]d\rho.$$

4. ANALYSIS OF THE STRESS-STRAIN STATE
The solutions corresponding to the third iteration process have the form:

$$u_\rho(\rho,\xi) = \varepsilon\sum_{k=1}^{\infty}F_k\left[-\beta_{0k}^{-3}\left(p_0\psi_k''\right)' + \beta_{0k}^{-1}p_1\psi_k' + \beta_{0k}^{-1}\left(p_2\psi_k\right)' + O(\varepsilon)\right]\times$$

$$\times\exp\left(\varepsilon^{-1}(\beta_{0k} + \varepsilon\beta_{1k} + ...)\xi\right)$$

$$u_\xi(\rho,\xi) = \varepsilon\sum_{k=1}^{\infty}F_k\left[\beta_{0k}^{-2}p_0\psi_k'' - p_2\psi_k + O(\varepsilon)\right]\exp\left(\varepsilon^{-1}(\beta_{0k} + \varepsilon\beta_{1k} + ...)\xi\right) \qquad (12)$$

$$\sigma_{\rho\rho}(\rho,\xi) = \sum_{k=1}^{\infty}F_k\left(-\beta_{0k}\psi_k + O(\varepsilon)\right)\exp\left(\varepsilon^{-1}(\beta_{0k} + \varepsilon\beta_{1k} + ...)\xi\right)$$

$$\sigma_{\rho\xi}(\rho,\xi) = \sum_{k=1}^{\infty}F_k\left(\psi_k' + O(\varepsilon)\right)\exp\left(\varepsilon^{-1}(\beta_{0k} + \varepsilon\beta_{1k} + ...)\xi\right)$$

$$\sigma_{\xi\xi}(\rho,\xi) = \sum_{k=1}^{\infty}F_k\left(-\beta_{0k}^{-1}\psi_k'' + O(\varepsilon)\right)\exp\left(\varepsilon^{-1}(\beta_{0k} + \varepsilon\beta_{1k} + ...)\xi\right)$$

$$\sigma_{\phi\phi}(\rho,\xi) = \sum_{k=1}^{\infty}F_k\left(b_{13}\left(b_{11} - b_{12}\right)\beta_{0k}^{-1}\psi_k'' + \left(b_{33}b_{12} - b_{13}^2\right)\beta_{0k}\psi_k + O(\varepsilon)\right)\theta\times$$

$$\times\exp\left(\varepsilon^{-1}(\beta_{0k} + \varepsilon\beta_{1k} + ...)\xi\right).$$

The stress state corresponding to the third group of solutions is self-balanced in each section $\xi = const$. The stress state corresponding to solution (11) has the character of a boundary layer and is localized at the ends of the cylinder.

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The first terms (11) are equivalent to the Saint-Venant edge effect of an inhomogeneous transversely isotropic plate. For purely imaginary β_{0k} the Saint-Venant boundary layer attenuates very weakly. In this case, the stress-strain state of the transversely isotropic and isotropic cylinders is qualitatively different. When β_{0k} is not purely imaginary, the general form of the stress-strain state is qualitatively similar to the corresponding case for the isotropic radially inhomogeneous cylinders. In quantitative terms, they differ in the decay rate of the Saint-Venant boundary layers. To determine the constants F_k as in [1-4,9], we use the Lagrange variational principle. Since homogeneous solutions satisfy the equilibrium equation and boundary conditions on the lateral surface, the variational principle takes the following form

$$\sum_{s=1}^{2}\int_{-1}^{1}\left[\left(\sigma_{\rho\xi}-f_{1s}\right)\delta u_{\rho}+\left(\sigma_{\xi\xi}-f_{2s}\right)\delta u_{\xi}\right]\Big|_{\xi=\pm l}\cdot e^{2\varepsilon\rho}d\rho=0. \qquad (12)$$

Substituting (11) into (12) and considering δF_k as independent variations, we obtain the following infinite system of linear algebraic equations

$$\sum_{j=1}^{\infty}M_{nj}F_{j0}=\tau_n \qquad (n=1,2,....). \qquad (13)$$

Here

$$M_{nj}=\int_{-1}^{1}\left\{\psi_n'\left[-\beta_{0j}^{-3}\left(p_0\psi_j''\right)+\beta_{0j}^{-1}p_1\psi_j'+\beta_{0j}^{-1}\left(p_2\psi_j\right)'\right]+\beta_{0n}^{-1}\psi_n''\left[p_2\psi_j-\beta_{0j}^{-2}p_0\psi_j''\right]\right\}d\rho\times$$

$$\times\left[\exp\left(-\frac{\left(\beta_{0n}+\beta_{0j}\right)l}{\varepsilon}\right)+\exp\left(\frac{\left(\beta_{0n}+\beta_{0j}\right)l}{\varepsilon}\right)\right];$$

$$\tau_n=\int_{-1}^{1}\left\{f_{11}\left[-\beta_{0n}^{-3}\left(p_0\psi_n''\right)'+\beta_{0n}^{-1}p_1\psi_n'+\beta_{0n}^{-1}\left(p_2\psi_n\right)'\right]+f_{21}\left[\beta_{0n}^{-2}p_0\psi_n''-p_2\psi_n\right]\right\}d\rho\times$$

$$\times\exp\left(-\frac{\beta_{0n}l}{\varepsilon}\right)+\int_{-1}^{1}\left\{f_{12}\left[-\beta_{0n}^{-3}\left(p_0\psi_n''\right)'+\beta_{0n}^{-1}p_1\psi_n'+\beta_{0n}^{-1}\left(p_2\psi_n\right)'\right]+\right.$$

$$\left.+f_{22}\left[\beta_{0n}^{-2}p_0\psi_n''-p_2\psi_n\right]\right\}d\rho\exp\left(\frac{\beta_{0n}l}{\varepsilon}\right);$$

$$F_k=F_{k0}+\varepsilon F_{k1}+....$$

The determination of F_{kp} $(p=1,2,...)$ is definitely reduced to use of the same matrices, which coincide with the matrices of system (13) [1-4,9]. In [10], the solvability and convergence of the reduction method for system (13) was proved.

5. CONCLUSION
1) The stress-strain state of a radially inhomogeneous transversely isotropic cylinder of small thickness with a fixed lateral surface has been studied. It is shown that the stress-strain state is composed only of a solution having the character of a boundary layer.

2) Asymptotic formulas for displacements and stresses have been obtained that make it possible to calculate the three-dimensional stress-strain state of a radially inhomogeneous cylinder of small thickness under various boundary conditions at the ends of the cylinder.

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EDUCATION POLICY AND FINANCE

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ABSTRACT

The young generation that emigrates from their homeland to receive foreign education may decide to continue their life overseas, which hinders a country's future advancement. The phenomenon of student outflow urges the government to employ policies to prevent such a process. If the government does nothing to bind its young citizens to their motherland, they can emigrate themselves without any state support. And those who left their motherland under the pretext of studying may decide to stay there, which means losing potentially high-skilled workforce. The following research argues that merit-based financial aid and the enclosure of official contracts between state and students can serve as tools to stem the process of emigration of gifted youth. Though the work is based on qualitative research methods, some numerical information is also collected and analyzed in addition to the face-to-face interviews. This paper aims to spread awareness about the negative consequences of student emigration, demonstrate to general society and the government the effectiveness of merit-based financial aid as a tool to alleviate the drain-away and promote such a solution.
Keywords: student emigration, educational policy, economic advancement

1. INTRODUCTION

Due to several factors that relieve the obstacles to student migration in the twenty-first century, particularly fewer political barriers between states and increasing self-governance of institutions (Morphew, 2006), students from all over the world can choose the location of their studying and not restrict themselves only by their motherland. While some adolescents may leave the country via the studying abroad program funded by the government, other emigrating students most frequently defray their studying abroad at their own expense. And while the former group has to return to their Homeland after graduating abroad by official contract, the latter has no obligation to re-emigrate. Nevertheless, outflows of both human capital and foreign currency constitute a drain on economic resources which restricts economic advancement (China & World Economy, 2003). Hence, because of brain drain, the developing countries lose their own and so rare valuable cadres which consequently prevents their infrastructure from developing. My observations demonstrate that the youth outflow issue is critical in Azerbaijan as well because many students are willing to or already studying abroad. Despite the significance of the student emigration problem, few studies were made about the ways of suppressing the issue and specifically addressing the question: How can financial aid based on merit mitigate the emigration of capable students in Azerbaijan? Primarily, the determinants of brain drain should be defined to analyze how state merit support projects influence students' choices regarding the country of study. The majority of out-migrating undergraduates are influenced by tuition prices (Tuckman, 1970). Nevertheless, Mixon and Hsing (1994) claimed that college cost is not a substantial determinant, and instead the multicultural and high-performing faculty stimulates the brain gain of the young generation (Zhang and Ness, 2010). In any way, the emigration of "the brightest" youth means losing precious cadres to governments, and such a process can be partially prevented by creating incentives and opportunities, such as scholarships.

2. HOW TO PREVENT BRAIN DRAIN?

In order to mitigate the drain- away the stipends based on merit can be utilized, firstly, to stimulate the students not to permanently outflow, as Presidential Stipend in Azerbaijan, or, secondly, to "tether" the youth (Redden, 2007), as Talentenprogramma in Holland (2015). The financial incentives have an immediate impact on engaging skilled adolescents or slowing the rate of their outflow (McColl, 2008). Thus, by contrasting the possible expenses of studying abroad and the opportunity to study locally for free or for fewer costs, students can be persuaded to get their tertiary education within the borders of their country. The other way of alleviating the emigration of "the brightest" youth is the "tethering" which implies governmental funding of students' undergraduate or graduate education across the border by official contract, provided that the latter returns to the motherland after finishing the university and works there for a certain period, thereby, contributes to local economic development. Talentenprogramma is a stipend scheme funded by the Dutch administration which allows one year of study in a foreign state after graduating and such an award is given to approximately 40 students annually. Nearly 40% of all Dutch students have experience of studying in a foreign university, and, as a result of that course, the Netherlands' education system is ahead of most other countries that signed the Bologna agreement (Oosterbeek and Webbink, 2011). Besides, Azerbaijan was among the countries that practiced such a system in 2007-2015. The returning graduates who start the business in their homeland help the country's economy by sharing their advanced knowledge; therefore, it becomes worth investing in studying abroad (China & World Economy, 2003). So, by sending the students abroad with contracts the government can ensure that after the arrival of such youngsters, it will be able to benefit from their knowledge, perspectives, and outlook. Nevertheless, the need for state stipend policies is manifested in the fact that those who cannot receive merit-based scholarships due to limited positions available may defray their studying abroad with their savings. Therefore, they will not need any contracts and will not have the incentive to return after graduating. Despite the advantages of international mobility for those students, their emigration without returning harms their motherland's future advancement. Studying abroad and the amount of time spent studying there increase the chances of staying abroad and, in other words, induces brain drain (Oosterbeek and Webbink, 2011). Thus, if ministers do not regulate the process of student emigration by enclosing official contracts with students and do not expand scholarship programs, more adolescents may leave the country without the desire to return.

2.1. Survey results

The survey was held to discover the percentage of Azerbaijani students who would like to study abroad and the number of those who would change their idea if they were offered a merit-based scholarship. The result of the mini-survey demonstrates that 5% of all respondents answered "No" to the question of "Do/Did you consider the variant of studying abroad?". The second question of the survey was "Would you give up the idea of studying abroad if you were offered free education or discount in studying in Azerbaijan?" and 21% of overall participant number admitted that they would change their mind and choose to continue their tertiary education in their home country. The other 15% answered that they already study for free so they cannot be taken into account; the remaining 64 % insisted on their desire of studying abroad notwithstanding any possible financial incentives in Azerbaijan. Therefore, the number of those respondents who would not study abroad increased from 5% to at least 21%.

2.1.1. Interview results

Similarly, the interviews were conducted with college students. The questions and the responses to them were as following:
1) "What are the possible reasons that would motivate you to study abroad?"

Better education quality, broader opportunities abroad, the scholarship opportunities in foreign countries were listed among the factors. In order to prevent the process of student outflow, governments are recommended to improve the education quality in students' home countries. The respondents named ADA, Qafqaz, and police and military academies, among the universities with more or less high-grade education levels. Hence, it seems that the youth in Azerbaijan still believe that the education level can satisfy the students' needs.

2) "How would receiving the full merit-based scholarship influence your decision to study abroad, if your country provides more or less quality education?"
The Azerbaijani students who study at ADA and receive a full scholarship, told that they are satisfied with studying in Azerbaijan and "do not want to leave" because "if I get the full-merit-based scholarship, why should I decide to study abroad?". Two American respondents answered that "scholarship would make a difference and alter their decision" if studying abroad is more expensive, but the local university they choose because of scholarship opportunity "should provide world-standard education and have world-recognized diploma". Only one student from Moldova and another one who moved from Azerbaijan to the UK for educational purposes announced that they would not return to their home countries because, in their opinion, their faculties, Economics, and Biomedical science respectively, are not developed in their own countries. In addition, they doubt they will receive quality knowledge in their specialization and get the opportunities and independence in their home countries that they have currently.

3) "What are the possible ramifications of expanding the financial aid program?"
Such a measure will lead to the reduction of budget resources, but from a macroeconomic perspective, investment, especially in education is always beneficial for future economic development. Also, the merit-based scholarship can ensure that the students that receive the scholarship truly deserve it and the quality of students will further enrich the university community. Besides the aforementioned factors, applying merit-based scholarships, especially international ones, would attract student inflow from other countries, and, in other words, induce brain gain. A merit-based scholarship makes a big difference, especially in attracting the best students. Even knowing that Azerbaijan has a full scholarship, they look up to Azerbaijan in general. Regarding the consequences of contracts with students, such policy can improve the local literacy level and the economy because the educated and high-skilled students return to their mother countries

3. DISCUSSION
So, the main purpose of my study was first to determine the fundamental factors that induce "the best and brightest" students to study abroad, and then to propose the merit-based scholarship policy expansion as an effective measure to prevent student emigration. Primarily, by conducting the survey I aimed to check whether the solution to student outflow problems offered by this research is a useful tool to persuade students not to leave their country by creating incentives. The fact that 95% of answers to the first question were "Yes, I do/did consider studying abroad" emphasizes the criticalness of the student outflow issue and underlines the drawbacks in governmental educational policies. Nevertheless, according to the analysis of the second question, the presence of merit-based scholarship increases the number of "No" responses. The increment of at least 16% in the number of those who would not study abroad shows that applying merit-based scholarship is quite a successful policy and the correct path to follow in this research. Consequently, it was predicted that students seek better education opportunities when considering studying in a foreign country. So, the government should improve education quality to prevent the student emigration issue.

Increasing the level of education implies attracting new professional instructors, purchasing new books and equipment, renewing the university's library sources, building and repairing the university campuses (Big Ideas for Better Schools: Ten Ways to Improve Education, 2005). Nonetheless, such a solution to youth outflow may require years and decades to yield results; and a quicker measure is required. My paper suggests that applying more merit-based scholarships can serve as a helpful solution that can be implemented in a shorter time. The fact that scholarship opportunities in foreign countries were mentioned among the causes of student outflow confirms that the research has the right direction since if financial incentives abroad attract Azerbaijani students, it can also work in Azerbaijan the same way. Because the topic of my research concerns the student emigration problem in Azerbaijan, the fact that Azerbaijani respondents refused to choose another country for their tertiary education as long as they receive full merit-based financial aid reaffirms that the described scholarship policies "can make a difference". In fact, one American intern in Azerbaijan considers continuing his education in one of the European universities because of too expensive tuition in America. So, the responses of impartial parties and students receiving scholarships demonstrate that financial support given for academic excellence indeed slows the student outflow. Only two students expressed their unwillingness to return to home country: first, due to poorer opportunities for her faculty in the home country, and, second due to receiving the full scholarship abroad; however, the latter respondent's situation leads to the consequences of merit-based scholarships in terms of attracting foreign students, so her answer supports the purpose my research. If the Azerbaijani universities have a scholarship for people from a certain country or region, they can become a very attractive option for foreign students and, even if they decide not to go for a merit-based scholarship, it can attract people in general. ADA University and UNEC in Azerbaijan offer grants for foreign citizens which proves the role of Azerbaijan's scholarship policy for foreigners in the area of "young brain attraction". There may be negative ramifications of merit-based scholarship policy expansion on the government budget, but the positive consequences, in the long run, should not be neglected. It has to be iterated, "the contribution and knowledge of people who return to their home country after studying in a foreign country significantly surpass the investments nested into their studying or working abroad" (China & World Economy, 2003). In other words, if for one student to study abroad, say in the UK, the annual investment at the rate of $30.000 is required and if the government defrays the tuition costs of 100 students for one year with the condition of the youngsters to return after their term expires, this implies the investment of $3 million to the country's future advancement. Investment plays an important role in influencing economic and income growth. Simultaneously, a robust correlation exists between the average share of investment and average growth rates (Blomstrom, et al., 2017). Therefore, the $3 million will cause the economy to advance; and the experience and knowledge of the students enrolled in the governmental program will far exceed this enclosure in the long run. At last, such a "tethering" policy will mitigate student emigration, as it binds the youngsters by official document and allows to punish one party in case of the contract breach.

4. CONCLUSION

In conclusion, when smart students leave their Homeland, they may decide to find their future careers and continue their life abroad, especially if they have no obligation to return. As a result, their country will lose its precious intellectual force. By interviewing the "best and brightest" students with various studying grounds and circumstances, it was deduced that merit-based scholarships can restrain student emigration by creating an inducement or binding them to stay within the borders of their home country and study in a local educational institution. Despite the time limitation, the research was able to collect and study the answers from different aspects.

It is expected to spread awareness about the negative consequences of student emigration via my paper, prove to general society, and even to the government the effectiveness of merit-based financial aid as a tool to alleviate the drain-away and to promote such a solution. It is also acceptable that the conducted work may persuade the ministers to expand the financing of stipends to stem the emigration of the smartest youngsters.

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PROBLEMS OF INNOVATIVE DEVELOPMENT OF ENTREPRENEURSHIP IN THE CONTEXT OF CLUSTERING OF THE ECONOMY

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ABSTRACT

The article examines the role of the cluster concept in the innovative development of entrepreneurship, property relations in innovative companies and cluster policy as the main organizer of the state's economic policy. Although the effects of cluster programs are sometimes contradictory, the popularity of cluster policies has not decreased, and in most developed market economies, the process of clustering the economy continues at a rapid pace, and ways and means to improve the effectiveness of cluster programs are being sought. The article presents the concept of innovative development of entrepreneurship, which includes the essence of the state mechanism of innovative development, subjects of management and their balance. The cluster approach will ensure the growth of commodity production and strengthen the competitive position of industries and their regions. As a result of the changing situation in world markets, sharp fluctuations in prices for exported natural resources and products containing natural resources in production occur, which, in turn, leads to higher inflation. In order to neutralize the impact of inflation, it is proposed to create an investment fund to promote innovative development and allocate to this fund surpluses in comparison with the optimal amount of actual income from the export of natural resources, and in return provide them with benefits for the payment of aggregate tax, including value added tax, profit tax, excise tax and mineral extraction tax.
Keywords: entrepreneurship, innovative development, cluster policy, public administration mechanism, investment fund, tax incentives

1. INTRODUCTION

Clustering is one of the priorities for the development of a modern market economy based on globalization, integration, diversification and innovative development.The cluster and the cluster approach, which is a new institutional form of interaction between the state and economic entities, are a mechanism for the successful implementation of industrial policy. In countries with developed market economies, clusters as a mechanism of interaction have become a traditional form of organization of the business community, targeted cluster policy is being implemented in these countries, they have risen to leading positions in the rating of the competitiveness of the economy. The economic policy of the state, based on the cluster approach, includes a system for supporting the creation and development of clusters in certain regions of the country, increasing the efficiency of industries, enterprises, regions and the national economy as a whole. The role and importance of innovation is growing in the context of the clustering of the economy, since scientific and technological progress, high technologies create a solid foundation for sustainable, spiritual, intellectual and socio-economic development of the country.

From this point of view, the problems associated with the innovative development of business, which is a key component of the market economy and its leading direction, are especially relevant, and there is a great need for their scientific research.

2. CLUSTER AS AN INTERACTION MECHANISM

The term "cluster" was first introduced into the economic literature in 1990 by the American economist Michael Porter. In his opinion, a cluster is a geographically concentrated group of interconnected companies, specialized suppliers, firms in certain industries, as well as entities connected by their activities in their respective fields, competing, but at the same time working together [1]. In recent years, the process of clusterization of the economy has been accelerating all over the world, including in the Republic of Azerbaijan. Successful foreign experience has been accumulated in the application of the most effective forms of creation and development of industrial-innovative clusters and new management mechanisms.Thus, in a number of Asian countries, especially in Japan and South Korea, great success has been achieved in the formation of industrial and innovative clusters and in the innovative development of entrepreneurship as a mutual mechanism of industrial companies, scientific and educational institutions, as well as the commercialization of innovations. In Japan, large groups of combined industrial companies, narrow industrial specializations and modular conglomerates are the central link ofthe industrial and innovative cluster.Japanese clusters are also characterized by a high level of implementation of interconnected technologies,a special system of financing the organization of research and development (R&D) and the active participation of company employees in innovative activities.Conglomerates are less dependent on the financial market, which allows them to independently finance long-term R & D, encourage employees to innovate, and reward inventors and innovators.South Korea, based on the system of organizing R & D and innovation in Japan, with the exception of their investment policy, added methods for coordinating the activities of industrial and innovation cluster entities, new management tools for interaction, and also made sufficient use of the experience of foreign research centers and foreign investment.As a result, South Korea has not only reached, but also surpassed Japan, as well as the countries of Southeast Asia in terms of success in the creation and development of industrial and innovative clusters. According to experts, the level of clustering of the economies of the leading countries of the world is 50 percent.About half of US businesses operate in clusters and generate 60 percent of the country's gross domestic product.In European countries, 38% of the employed population work in more than 2,000 clusters.In China, there are 60 clusters that unite 30,000 companies, employing 3.5 million people and producing and selling products worth 200 billion dollars a year [2, p.5]. The cluster is created in three stages:

1) At the first stage, the foundations, goals and objectives of the cluster are determined. The strategic goal of the cluster is to increase the profitability of production, to form a high-tech complex of localized and interconnected companies for the production of certain products.
2) At the second stage, a decision is made on full-scale work on the project, the structure of the cluster is formed, a mechanism for the interaction of employees is developed and economic efficiency is determined, the tools for implementing the cluster initiative are determined.
3) At the third stage, a cluster management mechanism is formed, an action plan for the implementation of the clustering initiative is developed and control over its implementation is organized.

The cluster management mechanism is determined by the cluster coordinating council.The Coordinating Council coordinates the strategic, investment and technical partnership of the cluster, as well as oversees the activities of logistics, service and other companies within the cluster.

The Cluster Coordinating Council includes representatives from industry, science and education, innovation organizations and local governments.The main function of the Coordinating Council is the implementation of strategic planning, making appropriate adjustments to the activities of the cluster, depending on the degree of adaptation of the cluster to economic conditions and results of work.In addition, the Coordination Council forms a partnership that plans and regularly monitors the cluster's activities.

3. MODERN STATE POLICY IN THE FIELD OF CLUSTER SUPPORT

In recent years, developed countries, states and regions have begun to focus their economic development policies on the formation of clusters to increase the competitiveness and innovative potential of industries and regions, as well as to ensure sustainable economic development.We are not talking about individual large companies, universities and laboratories, but about a complex group of companies located in a certain territory, belonging to any area (interconnected areas), which characterizes sustainable interaction.

Supporting the commercialization of research results and co-financing R&D projects has become a priority. The economic advantages resulting from the activity of clusters include: [3, p. 696]:

- increasing competitiveness due to the high level of labor productivity;
- transfer of knowledge, especially new knowledge;
- the creation of new high-level enterprises and the development of entrepreneurship;
- creation of public goods, social capital and reputation;
- competition with local competitors that have a strong stimulating effect on business (entrepreneurship);
- development of complementarity between the activities (products) of the cluster participants;
- reduce transaction costs by creating a sustainable environment based on trust.

Clusters create a favorable environment for innovation by:

- Proximity as a result of concentration of companies, consumers, shippers and other organizations constantly stimulates innovation;
- the pressure of competition due to the presence of companies in adjacent territories leads to the development of innovative activities of individual firms;
- a favorable cluster environment for obtaining very important innovations for the development of innovation and commercial development;
- creating opportunities for a wide range of options in order to share the risks associated with innovation and use the results of investments in innovation activities;
- establishing close interaction between companies and research institutions to develop new knowledge and innovative technologies, given that the development and exchange of new knowledge is more active at the local level.

Clustering of the economy leads to the emergence of a new form of innovation - "aggregated innovative product". Joining a cluster does not lead to complete synchronization of diverse scientific and technical inventions, but to the creation of a sustainable system of dissemination of new knowledge and technology. It is the formation of a network of stable connections between all the participants of the cluster that acts as a catalyst for the transformation of inventions into innovations, leading to a competitive advantage with innovations. A group of economists believes that the world is moving towards a cluster network: "Adapting to the conditions of globalization and the rapidly growing dynamism of the environment, the world is moving to a new network order - a functional market system, the world economy and its entire subsystem are stratified into a cluster-network structure" [4].

Currently, there are programs for the development of clusters in more than 100 countries and regions of the world. Despite the fact that most successful clusters are created naturally, government support for the development of clusters is important. Studies show that the natural development of clusters does not always proceed optimally. Government support for clusters is called cluster policy. Cluster policy is related to other types of economic policy. Thus, the cluster policy takes a technological direction from industrial policy, a network direction from a territorial development policy, small business development from a policy of supporting small and medium-sized enterprises, research funding from a scientific and technical policy.

Modern state policy in support of clusters has many national characteristics. So it can be different and act as follows:
- a specific policy with a clearly defined strategy and allocated budget, which covers a number of industrial sectors and various aspects of cluster development;
- the policy formed on some aspects of cluster development: networking between the business environment or business and research organizations;
- policy as an element of other economic development strategies.

In general, cluster policy is a set of goals, objectives, priorities, principles, measures taken by public authorities at various levels and aimed at identifying, creating, mobilizing and strengthening clusters. It is necessary to reveal the concept of cluster policy in a narrow and broad sense. In a narrow sense, cluster policy means a set of government measures aimed at strengthening existing clusters or creating conditions for the formation of new clusters. In a broader sense, cluster policy includes the following types of government measures: measures aimed at creating a favorable innovation climate that directly affects the development of clusters; traditional measures of economic policy (support for small and medium enterprises, industrial, regional and other policies); special cluster policy to create and strengthen clusters.

4. CONCEPT AND STRATEGY FOR INNOVATIVE DEVELOPMENT OF ENTREPRENEURSHIP

A concept is a specific way of understanding any object, manifestation or process.In other words, the concept is a focused, concrete and targeted document for sustainable development, containing key messages, higher ideas and directions for action. The concept of innovative development of entrepreneurship is based on the creation of an organizational mechanism that allows you to combine different types of potential of economic entities.The goal is to create the necessary conditions for joint efforts to achieve the development of entrepreneurship, diversification of the economy, sustainable socio-economic development of regions and the country as a whole [5, p.43]. The creation of an effective organizational mechanism for regulating innovation, taking into account the interests of both the enterprise and the state in innovative development and the growth of gross domestic product, should be based on the balance of interests of participants in innovation process. Namely:
- an enterprise implementing innovative projects;
- an enterprise that generates innovative projects;
- investors;
- business entities and the state.

Achieving a balance of interests of all business entities requires the state to form a system that ensures clear interaction between business entities, science and education. And this is possible with the use of effective mechanisms and tools for innovative development based on the cluster approach.

The foundation of the national innovation system in the Republic of Azerbaijan was laid in the State programs for the socio-economic development of regions in 2005 and it was planned to develop in the Strategic roadmap for the development of the national economy in 2017. These documents define the main tasks and objectives of modernization and diversification of the economy:

- stimulating the demand for innovation in the business sector;
- technological equipment of enterprises;
- organization of production and export of new high-tech products;
- creation of new high-tech companies;
- creation of clusters based on market principles - a national cluster system, the purpose of which is to achieve a competitive advantage.

Participants of national innovation clusters can be:

- an enterprise (organization) that develops innovative projects;
- an enterprise engaged in the implementation of innovative projects;
- venture investors;
- entities in which the participants are registered.

According to the Decree of the President of the Republic of Azerbaijan No. 148 dated June 26, 2018 "On ensuring the activities of the Agency for the Development of Small and Medium Business of the Republic of Azerbaijan", enterprises of the small and medium-sized business (SME) cluster are created as commercial legal entities. The SME cluster project provides for the conclusion of business transactions with at least 10 interdependent micro, small and medium-sized enterprises and the supply of 50% of the cost of raw materials and other resources produced in the cluster from local producers who are members of the cluster. Areas of activity an SME cluster company must comply with one of the following areas:

1) Creation of new competitive products that were not previously produced in the Republic of Azerbaijan;
2) Production of products, more than 50 percent of consumption of which is paid for by imports;
3) Provision of hospitality and accommodation services (hotel, motel, camping, etc.)

The minimum investment in the project implemented by the Small and Medium Business Cluster Company is determined in the following amounts: Baku - 5 million manat; Settlements around Baku and Absheron region - 3 million manat; Sumgayit and Ganja cities - 2.5 million manat; other cities and regions - 1.5 million manat; Nakhchivan Autonomous Republic - 0.5 million manat. Companies in the SME cluster are exempt from paying value added tax, income tax, land tax and property tax for a period of 7 years from the date of their inclusion in the state register. The current wage system is characterized as follows:

- with the minimum wage level established by law;
- with a low purchasing power of the average wage;
- with a shadow and often non-monetary form of remuneration.

The negative nature of the consequences of an unsatisfactory wage system is manifested in the inability to perform the main functions of remuneration (reproductive, stimulating, social, and accounting and production) in a market economy [6]. It is clear that with an unsatisfactory level of wages, most of the population is unable to pay for vital services (housing and communal services, medical, educational, etc). This creates a problem of social inequality.

Low wages negatively affect the efficiency of the use of labor resources and the purchasing power of the population, which leads to the collapse of the consumer market, a decrease in production and employment in industries with advanced technologies and highly qualified personnel.Cheap labor hinders the introduction of new technology, as the low cost of human capital financially confirms the low technological level of production. Thus, low wages, on the one hand, reduce the competitiveness of industrial enterprises, and on the other hand, prevent the effective use of the innovative potential of the enterprise and increase the technological level of production.

5. PROPERTY RELATIONS IN INNOVATIVE COMPANIES

The list of owners of innovative companies must include employees who are innovators.In this case, let us clarify the concept of an innovative company. It is known that, in a general sense, an innovative company is a company that implements innovative projects. However, in this case, it is very difficult to distinguish the innovators in the companies and, accordingly, to divide the ownership status of the innovator-employee. In addition, as we noted earlier, it is not in the interests of the current owners of innovative companies.Therefore, the state should intervene in the innovation process in order to create favorable conditions for enhancing innovation. Thus, the key to the effectiveness of the national innovation cluster system is the balance of interests of all company owners - developers of innovative projects, owners of enterprises engaged in the implementation of innovative projects, venture investors, national innovation clusters and temporary innovator employees. In the process of building an effective mechanism for national innovative companies, it is important to identify the sources of their investment.Within the framework of this concept, a financial and investment mechanism is proposed for attracting investment in innovative activities with the participation of the state and private companies exporting natural resources. As you know, today the economy of Azerbaijan directly depends on the export of natural resources. Changes in the situation on world markets, first of all, lead to sharp fluctuations in prices for exported natural resources, which, in turn, leads to an increase in inflation in the country.The inflationary process begins to develop, prices for products that use exported natural resources begin to rise.This ultimately leads to an increase in the interest rate on the loan and a decrease in the availability of loans, as well as undermines the financial stability of all organizations and reduces their economic efficiency.The interrelated negative consequences increase the risk of investing in innovative projects, reduce the investment attractiveness of long-term innovative projects, and at the same time slow down the inflow of foreign capital into the innovation sector and restrict the inflow of local capital. All this undermines the socio-economic stability of the state and reduces its competitiveness. In order to neutralize these negative consequences and direct the excess revenues of the state and private companies from the export of natural resources in the innovation sector, it is proposed to create an investment fund to promote innovative development. Entities that export natural resources must necessarily transfer to this fund the surplus of actual income relative to the optimal amount. In exchange for the allocated funds, these entities should be granted a benefit for the payment of total tax, including value added tax, income tax, excise tax and mineral extraction tax. In this case, the exporting company remains in a situation of a tax labyrinth, in which the discount on the total amount of the tax payment is not applied if the contributions to the investment fund for promoting innovative development are not paid. The funds accumulated in the investment fund to promote innovative development by transferring excess income from the export of natural resources determine the high profitability of these entities.

6. CONCLUSION

1) Despite the contradictory consequences of cluster policy, its popularity has not diminished, and many developed countries continue to successfully use the cluster approach and are looking for ways to improve the effectiveness of cluster programs.The cluster approach has become an important organizer of the state's economic policy.

2) Interaction of enterprises of various industries within the cluster has become one of the priority areas for improving the competitiveness of the regions.The synergistic effect of the cluster formation will lead to an increase in the economic efficiency of enterprises, as well as to the mutual strengthening of the competitive positions of the regions where they are located.

3) The concept of innovative development of entrepreneurship is proposed, which includes the essence of the mechanism of state management of innovative development, the balance of management subjects and their interests.

4) Value indicators that allow us to assess the increase in the value of innovative enterprises should be considered as the main regulatory tools. At the same time, the emphasis should be placed on the fundamental value of the enterprise, on the basis of which it is possible to make objective management decisions.

5) As a result of changes in the situation on world markets, sharp fluctuations in prices for exported natural resources and products containing natural resources in production lead to inflation. To neutralize the impact of inflation, it is proposed to create an investment fund that promotes innovative development. Economic entities engaged in the export of natural resources must send to this fund an amount that exceeds the optimal actual profit from the export of natural resources. In turn, they should be exempted from aggregate tax payments, including value added tax, income tax, excise tax and mineral extraction tax.

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METHODS OF FORMING THE EFFECTIVENESS OF STRATEGIC MANAGEMENT

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ABSTRACT
The article addresses the company's approach as a whole, moving from the company's overall objectives and planned outcomes to the goals and results of each group, each person, and vice versa - from individual performance to the company's overall outcome. Any business operates with a specific strategy that is required to build the company's activities in accordance with long-term general plans, with a specific current scenario and specific performance results. The success of the current campaign is greatly influenced by the team's clear policies. For example, one of the consultancy firms developed a strategy of not collaborating with businesses interested with alcohol and cigarettes, reducing the circle of possible clients and eliminating very lucrative customers. This, of course, decreased the firm's current economic performance, but improved the social efficiency that the firm prioritizes over immediate outcomes, improving the firm's reputation. Politicians don't only restrict and guide the organization's operations; they also minimize potential options to activities that can be monitored, analyzed, and chosen as the most efficient.
Keywords: *financial stability, strategic management, efficiency, goal setting*

1. INTRODUCTION

Strategic management is now rooted in our society. In addition, "new ways of management," such as system management, tactical management, and so on. This is, in practice, the same type of strategic planning. It is well established that the company's plan is a single structure that begins with the company's overall objectives and planned outcomes and progresses to the goals and results of each group, each employee, and vice versa - from individual performance to the company's overall performance. Any business operates in a rapidly evolving setting, and a strategy is only required to build the company's operations in compliance with long-term general plans and current specific plans, with a specific current scenario, with specific private outcomes obtained at lower levels, and strategy adjustment based on the specific results and situation. There would be no need for a plan if the internal and external environments were both stagnant and consistent. The challenges of evaluating concrete outcomes of operation as well as the internal and external climate are especially relevant in strategic management. Without it, no management, particularly strategic management, is feasible, with planning horizons of three to five years or even longer at the highest levels. However, up to 90% (Mintzberg, Alstrand B, and Lampel, 2000, p.336) of the time, plans exist just on paper, and actual activity follows its own course. Several methods that lead to such a condition can be identified here. To begin with, the technique is formulated at the highest levels and merely serves as a slogan. Secondly, the policy is formulated according to particular strategies, but it is applied poorly, failing to take into consideration the capacities of units and failing to communicate with them. Thirdly, the policy is formulated in collaboration with the lower classes, but it is not changed over time as the social and internal environment evolves, and the strategy quickly loses its importance. Another entirely incorrect solution is to correct the words almost immediately (for "objective" reasons) if intermediate alternatives are not met.

As a result, the organization's "strategy" is merely a representation of the present "company," rather than any strategy. The plan should encourage the team to work together to accomplish their objectives. Consider the factors that influence the strategic management system's efficacy. Yet, first and foremost, what exactly is strategic management?

2. STRATEGIC MANAGEMENT AND ACHIEVEMENT OF THE SET GOAL.

Strategic management is described as the management of achieving an objective, which includes the creation of policies that direct and restrict operations, as well as the creation and execution of programs to achieve the goal that do not go beyond the policies that have been implemented. From this and the preceding, the following key points that assess the strategic management system's effectiveness can be established.

1) Set a high but attainable goal - if the goal is too low, the results will be negligible.
2) The company's priorities (owner and manager), its structural divisions (unit managers), and ordinary staff are all aligned. And with such cooperation, harmony of priorities, can the whole team's efforts be directed at both setting the company's maximum objective (p. 1) and meeting the defined goal (all other points).
3) Creating a tree of priorities and plans that runs across the company's entire hierarchy, all the way down to the lowest-level workers - the strategy's execution is dependent on them (Zhemchugov A.M., Zhemchugov M.K, 2013).
4) Clear policies, the most important of which is the company's goal, or its social mission. She is the one who decides the key course of action and does not stray to the sides in order to produce short-term success at the expense of the long-term goal.
5) A consistent structure of disciplinary procedures in the event that obtained private outcomes differ from those predicted. A well-defined management accounting structure, with strategies and outcomes at all levels. The lack of such a method, or its unreliable operation, simply results in the plan remaining on paper.
6) A well-defined set of mitigation measures in the event of internal and external environmental deviations. The predictive predictor method. Without such a method, we can only hear of improvements once they have already had an effect on the outcomes, which will be exceedingly difficult, if not impossible, to fix.

As experience has shown, determining the highest attainable target is a difficult task (Zhemchugov A.M., Zhemchugov M.K, 2013). In most situations, the majority works "on what has been accomplished" - no examination of the company's future capabilities, no analysis of the external world, no new targets that are similar to potential are set. They actually set new financial goals that are 5-10% higher than previously set goals, but no special approach is required; instead, private cosmetic changes are made. Setting a high target entails first and foremost a view of the end product, a vision of when and how a high economic outcome can be accomplished. At least three types of targets are often present: goals for and production, goals for producing new, more efficient goods, and goals for developing a business in terms of resource, technological, and organizational development, in order to enhance its competitiveness and performance. The most effective topics at this point of growth include strengthening activity coordination and developing strategies and processes for effective management (currently, the unresolved nature of these issues gives up to 80 percent of the lag of our country in labor productivity from developed countries, and this is a lag of three to four times). Those key priorities include not only the development and creation of new goods, but also the development and implementation of efficient management and labor organization methods and practices, as well as goals that achieve the most impact without needing substantial investment but requiring major organizational changes. Any systemic reform, on the other hand, causes collective anxiety, which isn't just someone's apprehension - it's a major issue.

Particularly when proposed organizational changes do not have any harmful effects, people are fearful that these changes will impact them in any way, as shown by theory and experience (Ansoff I, 1999 358 p). If the changes are linked to reputation, role, influence, or reward, these changes are met with intense opposition (a whole "resistance group"), both overt and secret. And you will overcome this problem by inspiring the team to work against the organization's objectives, since setting and achieving high expectations would benefit both the corporation and each management and employee (but, in practice, this is far from always possible, and there will be resistance, and it must be predicted and taken into account). But it's much more successful if the corporation's and workers' interests are aligned, when they don't conflict, when there's unity and the company operates on self-organization rules (however, resistance of individual individuals is also possible here) (Zhemchugov A.M., 2014). The second argument is that good strategy is difficult without mission unity, even in serious situations, without the "right incentive.". This explains why, to date, only about 10% of the formulated techniques have been applied in practice by organizations (Mintzberg G., Alstrand B. and Lampel J, 2000, p.336). It is important that the external targets set for management and ordinary workers become internal conscious goals for them. The success of the current plan is highly affected by the team's consistent policies. For example, one of the consultancy firms developed a strategy of not collaborating with businesses interested with alcohol and cigarettes, reducing the circle of possible clients and eliminating very lucrative customers. This, of course, decreased the firm's current economic performance, but improved the social efficiency that the firm prioritizes over immediate outcomes, improving the firm's reputation. Politicians don't only restrict and guide the organization's operations; they also minimize potential options to activities that can be monitored, analyzed, and chosen as the most efficient. "When acts were dictated solely by external incentives and penalties, citizens would behave like a weather vane, always rotating in various directions", if we didn't have politicians (Bandura A and In R. Vasta (Ed.), 1989). It's important to remember that every company's key strategy is its goal, or the company's role in society. Other regulations govern and restrict the company's financial, technological, staff, and other operations. No management scheme will operate in theory without a consistent management accounting system and a clear system of disciplinary action. We must create programs to meet our objectives - programs and preparations for our operations - at all levels of the company's hierarchy - all divisions and staff - and at all levels of the company's hierarchy, including the outcomes needed at each point, timelines, and available resources. Often, at all layers of the hierarchy, maintain a physical log of the attainment of expected outcomes. Create and enforce the appropriate corrective steps if the predicted outcomes vary from the real ones. If, for example, we compare expected and real intermediate outcomes and find that we will not be able to reach a given end goal in a timely fashion, we must restructure our activities to ensure that the work is done on schedule. However, the adjustment should only begin where there has already been some delay and when there is a risk of failing to finish the job on schedule. A well-defined scheme of preventative steps: in the absence of full clarity about possible developments in both the internal and external climate, initiatives and strategies are created. As a consequence, in the case of changes in the internal and external environment that differ from the forecast, an effective adjustment of the policy and the execution of protective measures are needed - measures that ensure that changes in the internal and external environment have no detrimental effects on the company's performance. The biggest distinction between preventive and corrective acts is that corrective actions are only carried out when a divergence from a given outcome has already happened, they are carried out with a delay, and it is often too late to carry them out. Preventive steps are made only after the risk (or a potential opportunity) is identified, and the corporation operates ahead of time to ensure that the company's results do not suffer as a consequence of the detected danger, or rise as a result of the new opportunity. The aim of preventive measures is to avoid identified threats from affecting activity results (or mitigating

their impact), and to make the most of new opportunities found - to boost activity results. In reality, a mixture of corrective and preventive steps is expected for optimal efficiency, with monitoring of not only the obtained intermediate and final outcomes, but also the internal and external environment.

3. DEVELOPMENT AND IMPLEMENTATION OF FORWARD-LOOKING PERFORMANCE MANAGEMENT

The need for the production and execution of long-term maintenance of the enterprise's effectiveness is becoming exceedingly important at this time. Strategic management is a systematic system for assessing and executing an organization's strategic priorities, which is focused on predicting the global economic situation and devising plans to respond to the changes. The organization as a whole, as well as its individual divisions, are the focus of the management plan. Managers who perform administrative roles in an organization are the targets of management techniques. In the absence of an optimally defined approach for managing the enterprise's productivity, which is adaptable to future shifts in the external world, management decisions of particular institutional units of the enterprise become multidirectional in nature, inconsistencies emerge, and administrative operation as a whole becomes less efficient. The technique of enterprise performance management is an instrument for the prospective management of enterprise output in the face of changing developments in macroeconomic indicators, the structure of state control of business processes, and market conditions. This approach is a master plan of action, a system of management processes and methods aimed at determining the best ways to ensure the enterprise's long-term performance. Setting targets for the execution of the enterprise's financial and economic operations, deciding its focus areas and forms, maximizing the arrangement of investment capital formed, their allocation and usage, and establishing a management agenda for the most relevant financial and economic areas are all steps in the development of a management strategy. The key aim of the industrial business success improvement approach is to ensure the enterprise's long-term economic growth and development, which can, in turn, ensure the enterprise's market value as a property complex grows to its full potential. The main tasks of strategic management of enterprise performance are established in accordance with the goal, such as the formation of organizational support for the industrial enterprise's strategic management system; ensuring the optimal use of material, labor, financial, and investment resources; and developing an effective investment policy, as one of the components of the strategic management system; ensuring the long-term minimization of production, commercial, financial, and investment risks in the enterprise; investigating the state of the strategic management system and trends in the development of the efficient operation of an industrial enterprise, ensuring its solvency and financial stability, as well as the high turnover of its assets and capital; ensuring the quality of the strategic management system and trends in the development of the efficient operation of an industrial enterprise, ensuring the quality of the strategic management system and trends in the development of the efficient operation of. In order to effectively accomplish the key purpose of company management, it is important to execute these activities in their interconnection and interdependence during the development of an efficient enterprise activity management structure (Makarova V.I., Bobreneva E.A., Zelenkina M.E.,V.N. Tatishcheva, 2006.- 253 p.). For the enterprise activity management scheme, the corporate success management strategy is a general company growth plan that is applied by practical strategies, such as a marketing strategy, project development strategy, innovation strategy, financial strategy, procurement strategy, and organizational support strategy. The structure of certain priorities and aims that the business management sets itself determines the option of practical methods in the organization. The analysis of market dynamics, as well as the strengths and disadvantages of rivals, characterizes marketing strategies.

Market research and review of market data are needed for making managerial decisions aimed at achieving the output strategy's goals and objectives. The production development strategy is a series of interconnected steps for the establishment of a product portfolio, infrastructure, and production organization that allows the company to achieve long-term economic growth. An innovative strategy can be defined as a method of designing and applying strategic, operational, and organizational technologies in the enterprise's key areas of financial and economic operation in order to ensure long-term productivity and growth. The financial plan aims to develop the requisite financial tools, as well as the enterprise's optimum capital structure based on the effective ratio of own and borrowed funds. Equity, or retained profits, are providers of the company's own assets. The key driver of development of the organization's equity is retained profits from the previous year and net benefit from the reporting year, which is developed, circulated, and used at the company after taking into account the revenue earned and the costs of manufacture and selling of goods. Long-term and short-term loans, credits, and other obligations are examples of borrowed money. As a result, the enterprise's successful financial capital management plan seeks to optimize net profit as the primary driver of equity growth while simultaneously maintaining the enterprise's long-term financial stability. Setting investment goals, determining priority areas and forms, optimizing the structure of investment resources, their formation and distribution, developing an investment policy on the most important aspects of investment activity, and creating new promising opportunities while taking into account changes in the external environment are all part of the process of developing an investment strategy. The operational support plan for the enterprise's operation management system is a multi-level transition system aimed at meeting long-term goals and priorities, which involves improvements to management's organizational structure, the creation of new horizontal and vertical management relations, operating processes, and organizational culture. The application of the core functions of controlling an economic organization is the basis for a systemic approach to managing the output of an industrial enterprise. A system study of an industrial enterprise's efficient management as a science is an analytical feature of a supervisor, is specifically manifested in management concepts and practices, and is an important part of the management process.. Organization, as a management function, entails establishing an organizational management system in which horizontal and vertical relationships emerge over the acceptance and execution of management decisions at various levels. An industrial enterprise's management organizational structure promotes coordination of all management activities, defines performer privileges and responsibilities, and decides staff professional activity and management style. Accounting, as a management activity, is responsible for forming, accumulating, classifying, and generalizing the requisite data, which should accurately and completely represent the processes happening in the enterprise's financial and economic operations during the reporting period. Accounting establishes a foundation for assessing the effectiveness of a corporate enterprise. The study offers a quantitative and qualitative evaluation of the company's financial position and financial performance. The study of cause-and-effect interactions on the dynamics and modifications in individual articles of land, as well as the origins of their formation, is used to conduct the research. A thorough examination of the organization's financial and economic practices enables you to recognize reserves as untapped assets, identify challenges, and establish key activities aimed at forming successful management decisions. The study is a method for objectively assessing the enterprise's current reporting and previous times, defining business unit issues, and formulating appropriate management decisions. Furthermore, the study is the first step in preparing and predicting the company's future operations. The preparation of the key metrics is carried out based on an analytical evaluation and review of the results from the monitoring cycle, as well as the established challenges of the organization, ensuring the creation of the management object to achieve the goal.

4. SYSTEM APPROACH TO PERFORMANCE MANAGEMENT

Planning is a method of designing strategies and planning standards aimed at effectively supplying the organization with appropriate tools and optimizing strategic decisions as a general management activity and as part of an integrated enterprise management framework for an industrial enterprise. The program, as a method for planning and the cornerstone of the company's long-term activities, guarantees continuity in the work of all departments and structures, as well as interconnection with business networks. The preparation process consists of many phases, including the development of general objectives, the identification of particular activities, the selection of the primary methods and means for achieving them, and the monitoring of their execution. Planning identifies and tracks the existing and future progress of the company based on real and regulatory evidence from the recent and previous periods. Three levels of financial preparation can be differentiated depending on the duration of the timeframe of which the established strategy pertains: structural, tactical, and organizational. Strategic preparation is undertaken over a long period of time and includes the development of qualitatively new priorities, strategies, scale, and areas of operation for the business. The transition of the enterprise to expected shifts in the global climate, the achievement of a secure business place, and maintaining financial flexibility and solvency of the enterprise in a competitive environment are all priorities of strategic planning. The development and practical implementation of a system of plans that determine the future state of the organization, as well as the ways, means, and means of achieving it; accurate and timely assessment of the potential consequences of changes occurring in the social, economic, and scientific-technical fields; forecasting negative situations and developing solutions are all tasks of strategic financial planning. The strategic planning method is a medium for justifying management actions in the field of the company's economic operation. At the tactical stage, financial preparation for ongoing operations is done, and monetary capital, or totally liquid assets required for the business for a certain time, are calculated. The aim of tactical preparation is to ensure that the established approach is applied in a coherent and phased manner. The aims of tactical preparation are to specify strategic goals in relation to a shorter time frame, to choose the most appropriate means to execute the policy, to ensure economic activity and performance, and to proportionally grow and maximize the company's capacity. Tactical preparation is accompanied by organizational planning. It operates for little longer than a year and includes the company's short-term expenses. Its mission is to ensure that all divisions of the enterprise work together on a regular basis to accomplish promising and existing objectives by making efficient use of resources. The nature of operational planning is the creation of scheduled activities in organizational units for brief periods of time based on tasks formed during tactical planning and taking into account an overview of the organization's actual performance over the previous year. An industrial enterprise's financial planning systems must be well-organized in order to ensure long-term sustainable growth and development. As a result, implementing organizational and logistical preparation as the primary feature of controlling the enterprise's productivity aims for a predictable, staggered rollout of the formulated strategy. The aim of an integrated control system is to validate and ensure the execution of all management decisions in the field of the organization's organizational, investment, and financial operations, which is an important part of the business performance management system. System regulation of an industrial enterprise's performance management is a monitoring system that guarantees the concentration of control actions in the enterprise's key fields, the prompt identification of deviations from the expected (planned) outcomes, and the implementation of effective organizational management decisions. Monitoring the execution of the major tasks of industrial and economic activity, evaluating deviations from current, expected, normative indicators, determining the causes of these deviations, developing organizational management decisions, and planning the operations of the organization are the main functions of system control.

The method of forming corrective control acts that get the control object into the desired state for the execution of the solution chosen during preparation is known as regulation as a general control mechanism. The orderly establishment of a hierarchical structure of mission allocation by responsibility centres, including the control of powers and obligations in their execution, is what coordination as a management mechanism is all about. The integration of the activities of the heads of departments and the company as a whole to accomplish the main purpose of the corporate unit, as articulated in long-term objectives, is the most important requirement for the enterprise's successful activity. As a result, the primary goal of teamwork is to ensure coherence in all aspects of the organization's function by creating logical connections between them. General management roles are intertwined and form a competitive organization when combined.

5. CONCLUSION

The most important management functions are business analysis and planning, which enable you to analyze, find challenges, and create solutions. The operations of an industrial company were disclosed in the work based on financial analysis for the previous duration (from 2003 to 2010), including:

- there is little equity in the company to finance inventories and expenses. The key explanation for this is that the corporation does not earn enough revenue from product sales, as well as a significant portion of the expense of the overall revenue system from inventory sales;
- the number of other investments much outweighs the company's other revenue. This is because the company's costs for selling and disposing of fixed assets, as well as fees, taxes, and forfeitures, outweigh other profits;
- In the filing era, residual profits were unfavorable, resulting in a poor net profit value and indicating the existence of the company's debts.

The key forms of cost optimization, including the cost of manufacturing, commercial, and operating expenditures, was recommended to maximize the enterprise's equity resources and reduce losing products in the work. There are two key choices for increasing revenue from product purchases: increasing the share of sales and increasing costs marginally without compromising product quality. Reserves for development of other profits and opportunities to reduce the value of other expenditures are considered during the planning phase. The long-term economic growth and prosperity of the business can be assured by the execution of a successful management plan. Evaluation of the efficacy of the developed general enterprise growth plan is one of the key tasks of strategic management of industrial enterprise output. Pricing is accomplished by a pricing policy, market research and analysis, the creation of a portfolio of orders with specific delivery dates, and the implementation of a distribution strategy. Expansion in current distribution channels and development of new markets are two ways to increase sales. Sales development is also aided by modernization, rehabilitation, product creativity, and competitive advantages. The cost of production is the most critical consideration in assessing the economic viability of management and expenditure decisions aimed at determining wholesale values and optimizing resource quality. The paper examines the most important cost-cutting practices. It is important to use science validated norms and guidelines for raw materials, materials, gasoline, and energy; to implement progressive labor standards that would maximize labor efficiency and reduce factory worker wage costs; to provide an efficient corporate management system, and to develop production infrastructure and technical processes. Fixed costs, like commercial costs, are a consideration in the benefit reversal action. Owing to reduced packaging, storage, shipping, advertisement, and other costs associated with retail purchases, a decrease in the share of commercial expenditures for the preparation period is likely.

For the projected period, optimizing overall cost of production and commodity sale would boost operating margin and profit from sales. In addition, it should be recognized that the key metrics of the enterprise's success have improved significantly as a result of the execution of corporate priorities and targets. Due to the rise in retained profits, the introduction of the financial planning mechanism and expected indicators would improve equity, ensuring the company's financial performance and profitability. Thus, the work considers both theoretical and operational facets of strategic management of industrial enterprise operation productivity, the execution of which would ensure long-term economic growth and development.

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ECONOMETRIC ANALYSIS AND ASSESSMENT OF THE LEVEL OF DIGITALIZATION OF THE ECONOMIES OF THE COUNTRIES OF THE WORLD

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ABSTRACT
Digitalization is the introduction of digital technologies in different areas of life to improve its quality and development economy. It helps to perform routine tasks and make decisions without human intervention. The essence of digitalization in process automation is the transition of information to a more accessible digital environment, where it is easier to analyze it, and then get an accurate solution autonomously. The challenge of digitalization is to make the process flexible. The digital economy is not a separate industry, in fact it is a way of life, a new basis for the development of the system of public administration, the economy, business, the social sphere, and the whole society. The formation of a digital economy is a matter of national security and independence of every country in the world, competition of domestic companies. The article examines the impact of the digitalization process on society and the economy of the modern world. The aim of the study is to conduct statistical research and assess the level of digitalization of the economy countries of the world. The focus is on assessing the level, dynamics and directions of information and communication technologies development in the economies of the countries of the world on the example of the international index of digital economy and society (I-DESI). The strongest and weakest countries were identified, and the impact of components (sub-indexes) of the I-DESI index on GDP was studied. To assess the level of development of the digital economy in domestic and foreign assessment systems, several approaches are used. A wide range of methodological approaches is due to the intertwining of various concepts and interpretations of the digital economy. For this study, the digital economy and society index, which is a composite measure that studies the digital indicators of Europe, developed by DG CONNECT (the European Commission) to provide an evidence-based contribution to the assessment of digital development in the EU as a whole, is considered as an assessment of the level of digitalization. Based on the sub-indexes of this index, a multidimensional classification of the countries of the world was carried out. The main components method identifies the main factors that were used to identify their impact on the level of GDP in various clusters. The Statistica package is used for information processing and analysis. This study examined the values of sub-indexes of the I-DESI index in five dimensions: communication, digital skills, citizens' use of the internet, integration of business technologies, and digital public services. According to the hierarchical classification based on these sub-indexes, 2 groups of countries were identified. Using the k-means method, the features of each cluster are identified. Comparisons of cluster analysis results by sub-indexes were made based on data from 2020 and 2019. Using the main components method, five main factors were identified out of twenty indicators characterizing the I-DESI index and their influence on the level of GDP in various clusters was revealed. The analysis of twenty indicators of the I-DESI 2020 index, applied in the method of main components, by the directions of the index itself, the

economy in the context of GDP and the social sphere (life of society) through the HDI (human development index) in various clusters was also carried out. According to the research, two groups of countries were identified by the level of digitalization. This cluster is mainly represented by developing countries, which still have a large share of production in GDP. The level of GDP in the first cluster countries with a high I-DESI index was mainly influenced by factors that characterize fixed broadband and digital public services. Two groups of factors also influenced the GDP level of the second cluster countries. One group of factors combined variables that characterize new technologies in business, the other group - the use of the Internet by the population. The study of the development of the digital economy has allowed us to conclude that in general, the trend of rapid spread of modern technologies is developing around the world. This suggests that society in the context of the state and the individual needs to be mobile and ready to adopt new technologies in advance.

Keywords: *digitalization, digital economy, the main components method, multidimensional classification, the digital economy and society index*

1. INTRODUCTION

Digitalization is one of the key trends in the global economy. Today, almost half of the world's population is connected to the Internet, fifty years since its invention and thirty since the creation of the World Wide Web. Digital technology has become ubiquitous and part of everyday life. The main goal of digitalization is to improve the use of the potential of information and communication technologies to promote innovation, support economic development and stimulate scientific and technological progress in general, and ultimately contribute to the formation of "smart", sustainable and inclusive economic growth in the region. A well-functioning digital market can make a good contribution to the development of the economy. However, like any dynamic process, digitalization creates certain conditions that require a number of skills from a person for high-quality coordination of interaction, for example, the ability to work with information and communication technologies, to use new possibilities of the digital space for professional and personal needs. In order to see which regions are developing faster, at what speed and how information technologies are spreading in them, it is necessary to find ways to reflect the readiness of the population to move to a new level of development. One of the most noticeable phenomena of the last decade is the transition to the next stage of globalization - digital transformation, which consists in a fundamental change in the structure of the world economy, its global virtualization due to the emergence of new forms of cross-border movement of virtual goods, capital, and labor. In this regard, measuring the impact of digitalization on economic development is becoming a major challenge for researchers. The article examines the impact of the digitalization process on economic development.

2. LITERATURE SUMMARY

In the scientific literature there is no unambiguous interpretation of the concept of "digital economy", despite the high practical significance of research in this area [Bucht R., Hicks R., 2018, Brennen S., Kreiss D., 2014]. Early interpretations defining the essence of the term "digital economy" considered Internet technologies as its dominant content element, paying attention to the interaction of people through network technologies [Tapscott D, 1996]), to the emerging information flows [Lane N. 1999] and areas critically dependent on digital technologies [Kling R., Lamb R. 2000]. In later periods, the attention of researchers began to be attracted by the transformation processes taking place in various sectors of the economy under the influence of the introduction of information technologies [Brynjolfsson E., Kahin B. 2000], as well as the structural components of the "digital economy" [Mesenbourg, T.L., 2001, Dahlman C., Mealy S., Wermelinger M., 2016].

The digital economy limits its functioning by the production of electronic goods, services and their distribution using e-commerce [Asanov R.K., 2016]. But in this case, the question remains unsolved - what place in this interpretation is given to intangible values. The digital economy of the main resources for the production of goods and services is information, knowledge and the use of digital technologies for storing, processing and transmitting information [Kutsman A.A.,2016]. The storage, processing and transmission of information through information technology together constitute only part of the functions performed by the digital economy. The challenges of the digital economy are as follows:

- changing the relationship with the consumer;
- undermining established partnerships;
- "necessary interdependence";
- creation of a new ecosystem of the digital economy [M. Wessel, E. Levy, R. Siegel.,2018]

The scientific literature focuses on the essence of digitalization, its sectoral aspects, as well as the factors and problems of the digital transformation of the economy digitalization as an accelerating expansion of the Internet as a communication tool, mobile Internet, social networks, as well as commercial platforms that have an important impact on the functioning of business, public institutions and individuals [Milosevic N., Dobrota M., Barjaktarovic Rakocevic S. 2018]. Digitalization is broader than the digital economy, since the process of introducing digital technologies takes place in all spheres of human activity, and not just in the economy. At the same time, digitalization is a particular manifestation of the broader phenomenon of informatization of society, i.e. digitalization is a modern stage in the development of informatization work [Plotnikov V.A., 2018]. The paper considers the communicative, infrastructural and sectoral aspects of the digital economy. Within the framework of the communicative approach, the issues of using information and computer technologies for economic and social interactions are considered. Ensuring effective communications between all subjects of the digital economy requires the availability of appropriate infrastructure [Nikolaev M.A, Makhotaeva M.Y. 2018]. Sectoral aspects of digitalization are also presented in [Akberdina V.V. 2018]. The stages of digital transformation of enterprises are considered in the work [Nikolaev M.A, Makhotaeva M.Y.,2019]. At the World Economic Forum in Davos in 2016, dedicated to the IV industrial revolution, it was noted that the fourth round of industrialization was launched by the introduction of automation and digitalization in the industry. The first three industrial revolutions were associated with mechanization, electrification and informatization. Now the digital economy is penetrating all areas of activity, and its growth is very sustainable. The development of the digital economy in the world is heterogeneous, in part due to different levels of economic development. Most of the studies on the impact of digitalization of the economy are devoted to its impact on economic growth. For example, Rosso studied the impact of digital transformation on GDP in the European Union, namely the impact of investment in the ICT sector on economic growth and its key indicators: GDP, productivity and employment. The positive influence of investments in the high-tech sector on the level of GDP of the countries of the European Union was revealed [Rosso L., 2016]. In other blocks of research, it was revealed that digitalization has a positive effect on GDP per capita, employment and employment growth [Chakravorti S., Chaturvedi R., 2017].

3. METHODOLOGY

Digitalization is one of the key areas of development of the world economy, which is currently considered as a significant factor in improving economic dynamics. Digitalization is currently seen as a leading factor in economic development. At the same time, the dynamic development of information infrastructure in the regions, the increase in the availability of broadband Internet

for the population and business are not accompanied by adequate changes in the indicators of economic growth. The scientific literature focuses on the essence of digitalization, its sectoral aspects, as well as the factors and problems of digital transformation of the economy. At the same time, much less attention is paid to the effectiveness of digitalization in terms of improving the dynamics of socio-economic processes. Most of the authors note the significant impact of digitalization on regional development, but the studies conducted have revealed the absence of a significant relationship between the level of digitalization and the dynamics of socio-economic development. The main idea of the study is to identify the impact of digitalization of the economy on the development of economic development by conducting econometric analysis and to prove the hypothesis of the existence of a high statistical relationship between the indicator of digitalization of the economy and indicators of economic growth. The study hypothesizes that digitalization within the framework of the structural approach has a positive effect on the development of the economy. The indicator of the development and competitiveness of the state is considered to be the level of GDP. In the modern era, digitalization is increasingly influencing it. To determine the relationship and assess the impact of factors characterizing digital development on the level of GDP per capita, a correlation and regression analysis was carried out. This analysis, carried out using the construction of regression models, will determine the main possibilities of the impact of digitalization on the development of the economy. Factors obtained in the course of principal component analysis were taken as independent variables.

4. ANALYSIS OF THE INFLUENCE OF DIGITALIZATION FACTORS ON ECONOMY DEVELOPMENT

In the research process, the study of the digital sphere is carried out directly, and the I-DESI index is taken for Y_1 according to the data of 2019. As independent variables, the main factors obtained by the principal component analysis were used from 20 indicators of the I-DESI-2019 index (indicators were selected from 24 indicators of the index, 4 were removed due to differences in normalization and inaccurate correspondence to determine the relationship between indicators). According to the results of the method of principal components (Varimax), five main factors turned out to be significant, the coefficients of information content of which satisfy certain conditions. According to the results of the regression analysis, 3 factors turned out to be significant, t-statistics, the p-level of which correspond to the normative values. The t-statistics, p-level values indicate a good significance of the factors in the model of influence on GDP.

Table 1: Regression totals for the dependent variable: Y_1

	Beta	Std.Error	B	t	Sig.
Constant			0,538765	123,5456	0,000000
f_3	0,433435	0,018632	0,022301	1,8076	0,020004
f_4	0,282304	0,018632	0,019709	2,2435	0,002654
f_5	0,690548	0,018632	0,044201	4,8623	0,000115

R: 0,92920, R Square: 0,86342, Adjusted R Square: 0,85889, F(3,18) 18,08932, p-0,00000, Std. Error: 0,003214

For countries with the most developed level of digitalization, the prospects for active interaction between the economy are of the greatest importance in the context of digital areas. The regression equation is:

$$Y_1 = 0.539 + 0.022 \cdot f_3 + 0.020 \cdot f_4 + 0.044 \cdot f_5$$

Where Y_1 is the I-DESI 2019, f_3, f_4, f_5 – are factors

From the regression models it can be seen that the strongest influence is exerted by f-factor 5 (f_5). With an increase in the level of use of modern services by 1 conv. units the I-DESI index will grow by 0.044 conv. units with unchanged values of other factors. The high value of the coefficient of determination characterizes the quality of the set of factors.

Table 2: Regression totals for the dependent variable: Y_2

	Beta	Std.Error	B	t	Sig.
Constant			32768,21	21,43567	0,000000
f_1	-0,222345	0,234087	-4622,09	-3,00023	0,032005
f_2	-0,180456	0,234087	-6432,11	-1,09765	0,002876

R: 0,6782, R Square: 0,4599, Adjusted R Square:0,3431, F(2,19) 5,3467, p-0,0021, Std. Error: 11459,23

$$Y_2 = 32768,21 - 4622,09 \cdot f_1 - 6432,11 \cdot f_2$$

where Y_2 is the I-DESI 2019, f_1, f_2 − are factors.

With the growth of digital public services by 1 conv. units the level of GDP falls by \$6432.11 with the remaining factors unchanged. The reason for the behavior of the constructed model is in the volume of expenses for the creation of services, training and retraining of human capital. The influence of digital technologies occurs to a large extent on the life of society, its quality of life. In order to analyze the impact of digital technologies on the quality of life, a regression analysis was carried out.

As Y_3 - the HDI for 2019.

Table 3: Regression totals for the dependent variable: Y_3

	Beta	Std.Error	B	t	Sig.
Constant			0,876594	204,5890	0,000000
f_1	-0,217653	0,124561	-0,020345	-3,1213	0,033345
f_4	0,547652	0,124561	0,0240987	0,0235	0,001456

R: 0,82738, R Square: 0,68455, Adjusted R Square: 0,38678, F(2,19) 9,03456, p- 0,00102, Std. Error: 0,002786

$$Y_3 = 0.877 - 0.020 \cdot f_1 + 0.024 \cdot f_4$$

where Y_3 - HDI, f_1, f_4 - factors

With an increase in the spread of digital skills by 1 conv. units the HDI level grows by 0.024 conv. units with unchanged values of other factors. This factor has a significant impact on the level of human development, namely on its components: life expectancy, the expected period of education. According to the results of the analysis of the impact of digitalization indicators on the I-DESI index, 4 factors out of 5 turned out to be significant.

Table following on the next page

Table 4: Regression totals for the dependent variable: Y_1

	Beta	Std.Error	B	t	Sig.
Constant			0,654701	101,32344	0,000000
f_1	0,213452	0,215326	0,016789	3,09863	0,002109
f_2	0,092165	0,215326	0,021321	5,12098	0,009111
f_3	0,210021	0,215326	0,019766	5,43298	0,003241
f_4	0,612091	0,215326	0,038609	2,08765	0,000013

R: 0,86724, R Square: 0,75211, Adjusted R Square: 0,68764, F(4,18) 12,43526, p-0,00022, Std. Error: 0,012219

Taken together, 4 factors represent 9 significant indicators characterizing the introduction of technologies into business and public services.
The regression equation is:

$$Y_1 = 0.655 + 0.017 \cdot f_1 + 0.021 \cdot f_2 + 0.020 \cdot f_3 + 0.039 \cdot f_4$$

where Y_1 is the I-DESI 2019 index, f_1, f_2, f_3, f_4 -are factors

The strongest influence is exerted by factor 4 (f_4).
With an increase in the coverage of online users by 1 conv. units the I-DESI index will grow by 0.039 conv. units with unchanged values of other factors. The high value of the coefficient of determination characterizes the quality of the set of factors. Further, the level of GDP was taken as the dependent variable. The results of the primary analysis show that business technology and coverage indicators have a significant impact on the GDP level.

Table 5: Regression totals for the dependent variable: Y_2

	Beta	Std.Error	B	t	Sig.
Constant			12346,09	14,89765	0,000000
f_1	0,340982	0,245806	4252,21	4,07765	0,002034
f_4	0,280976	0,245806	1235,22	1,347867	0,022109

R: 0,699, R Square: 0,489, Adjusted R Square: 0,456, F(2,20) 5,322, p- 0,006, Std. Error: 3009,201

$$Y_2 = 12346.09 + 4252,21 \cdot f_1 + 1235,22 \cdot f_4$$

where Y_2 is the level of GDP), f_1, f_4– are factors.

According to the outcome of the regression analysis, these factors turned out to be significant in the GDP model. This means the expansion of technology in business allows you to reduce losses, optimize the production process, reduce production time and unnecessary personnel. All this allows the business to become more active and start generating more income. With an increase in business technologies by 1 conv. units the level of GDP will grow by \$4252.21 with the remaining factors unchanged. With regard to the social sphere, the influence of factors on the HDI is shown in table 6.

Table following on the next page

Table 6: Regression totals for the dependent variable: Y_3

	Beta	Std.Error	B	t	Sig.
Constant			0,7600921	134,0092	0,000000
f_1	0,392087	0,221099	0,026221	6,1002	0,008765
f_4	0,288561	0,221099	0,011325	2,4539	0,039876

R: 0,607554, R Square: 0,369122, Adjusted R Square: 0,321234, F(2,20) 6,114908
p- 0,002221, Std. Error: 0,0214567

$$Y_3 = 0{,}760 + 0{,}026 \cdot f_3 + 0{,}011 \cdot f_4$$

where Y_3 - HDI, f_3, f_4 – factors.

Three indicators included in factor 3 (f_3) and 4 (f_4) show information transfer rate and coverage. In other words, with an increase in the percentage of the population covered by mobile speed by 1%, the HDI level increases by 0.026 conv. units with unchanged values of other factors.

5. DISCUSSION AND CONCLUSION

According to the results of the study, it is possible to identify some features of the impact of digitalization on the development of the economy. The main vectors of technology development can be considered the business direction, digital personal skills, communication expansion, and government digital services. Digitalization is one of the key trends in the global economy. The countries with the strongest economies in the world have included the digitalization program in their economic development strategy. The digitalization of the economy represents a certain stage in the modern development of scientific and technological progress, which is associated with the widespread introduction of Internet networks, computer and information technologies, e-commerce, cloud services in industrial, social, public and other spheres of activity. The results of the study indicate that the digitalization of the economy has a contradictory effect on economic growth: the introduction of product (competitive) innovations contributes to growth, and the use of process innovations based on the redistribution, expansion and dissemination of knowledge as non-competitive goods can slow down the development of the economy. The digitization of assets and their accounting in production and consumption causes a decrease in their value, as a result of which a relative decrease in the size of GDP may occur, which in turn may entail a slowdown and even a decrease in the growth rates determined on the basis of this indicator. Analysis of economic growth rates shows that the development of digitalization processes in various industries and sectors of the economy has not yet had a significant impact on the growth rates of the economy of both individual countries and the world as a whole. The development of a sharing business based on the redistribution of existing goods and the provision of services can also slow down economic growth. In this sense, the first hypothesis about the inconsistency of the influence of modern processes on economic growth has been confirmed, but how significant the impact of digitalization processes on growth and economic development is requires further research. Development of the theoretical foundations of analysis, modeling and measurement of economic development in the context of digitalization is required. It is necessary, based on a meaningful analysis of such indicators as labor productivity, capital efficiency, etc., to develop new indicators of their performance, taking into account the specifics of network and sharing companies and the peculiarities of creating their useful results. The development of a sharing economy through the redistribution of material goods or their joint use makes it possible to increase the level of individual well-being. At the same time, there is often no increase in production volumes and, therefore, social welfare does not increase. The digitalization of the economy contributes to the growth of monopolization of the computer or network business during the period of globalization, which requires either the

reform of existing ones, or the creation of fundamentally new national and global institutions to regulate economic development in modern conditions. Analysis of the problems and features of the development of digitalization of the economy allows us to conclude that it is necessary to develop new economic theories that will reflect modern realities, will allow to justify new indicators or characteristics of the network business in the conditions of a sharing economy and assess their useful results, as well as ensure the improvement of methods for managing economic objects in the evolving digitalization.

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CURRENT STATE AND POTENTIAL OPPORTUNITIES OF THE SECURITIES MARKET IN AZERBAIJAN

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ABSTRACT

In every society, the securities market plays an important role in broadening the field of financial relations. Facilitating economic entities' access to financial services and growing productivity in the diverse use of resources are two important aspects of the country's economic growth. In this regard, one of the key factors driving economic growth is the efficient use of capital resources in various sectors of the economy, and the securities market's position in obtaining these resources is undeniable. Therefore, the functioning of Azerbaijan's organized stock market is one of the most significant factors in the country's economic growth. This paper evaluates current state and potential opportunities for the securities market in Azerbaijan, and it shows that in contrast to other countries, Azerbaijan's securities market is very young. However, there has been a recovery and improvement in all segments of financial markets in the light of the country's accelerating economic growth and deepening structural reforms, and there is a solid potential for growth. Furthermore, it has to be given attention as a part of ongoing economic reforms in terms achieving economic diversification and stimulate non-oil sector growth. The President of the Republic of Azerbaijan has launched Securities Market Development Program in 2011 to further advance this sector. The advent of market makers to increase liquidity in the securities market, as well as the transparency of operations and the improvement of corporate standards, have all paved the way for this area's development. Some of the works achieved for the development of this sector in the recent years include increasing market awareness, explaining the benefits of the sector to the key plays, as well as introducing the Baku Stock Exchange's Listing Advisory program.
Keywords: Financial securities market, Azerbaijan, economic growth, economic reforms

1. INTRODUCTION

Oil and gas have played a major role in the growth of Azerbaijan's economy since the country's independence in 1991. Azerbaijan signed an oil deal with a multinational oil firm in 1994, allowing it to sell its oil and gas on foreign markets and gain big profits (Hoffman, 1999, p. 8). As a result, non-oil sector growth and economic diversification have become critical components of Azerbaijan's economic reform agenda (Babayev, 2020.). In particular, the global market's fluctuating oil prices, as well as evolving trends in international economics and politics, have made a comprehensive economic reform agenda an inevitable policy problem for Azerbaijan (Babayev, 2019, p.537). Furthermore, Azerbaijan is determined to reforms. It is worth noting that agriculture, information technology, foreign transportation corridors, and entrepreneurship have all become policy priorities in Azerbaijan's economic reforms (Ismailzade and Babayev, 2020, p. 79; Babayev, 2020, p.92). Azerbaijan's government is also establishing support structures to assist in the development of the aforementioned areas. This includes structural reforms as well as improvements to the country's innovation and financial structures. It is important to mention that the country's financial system plays an inevitable role in the country's economic development (Babayev and Hajiyev, 2019, p. 312-219). Duisenberg (2001, p. 1) mentions that in the financial system *that* includes financial markets, instruments and institutions "funds flow from those who have surplus funds to those who have a shortage of funds, either by direct, market-based financing or by indirect, bank-based finance".

The former British Prime Minister William Gladstone mentioned "finance is, as it were, the stomach of the country, from which all the other organs take their tone" (Duisenberg, 2001, p. 1). Securities markets are one form of financial market. Facilitating economic entities' access to financial services and growing productivity in the diverse use of resources are two important aspects of the country's economic growth. As a result, one of the key factors driving economic growth is the productive use of capital resources in various sectors of the economy, and the securities market's position in obtaining these resources is unavoidable. As a result, this industry which is essential for economic growth requires special attention in order to develop. It must be mentioned that the volume of the securities market, which is an integral part of the global financial markets, is growing day by day. The volume of securities currently traded in these markets is trillions of dollars. The total value of the US stock market alone is $ 30 trillion, and the total value of the bond market is $ 40 trillion. The question is, what are the main factors that attract investors and issuers (bond issuers) to these markets? (Babayev R, 2020). One of the main advantages of such markets for investors is liquid markets. That is, the capital you invest is invested in a security, not any property, and when an investor needs money, he can sell the security on the stock exchange as soon as possible. In addition, the security is not physically depreciated, and its maintenance does not require additional costs. On the other hand, you can use the security you have as collateral when taking a loan from a bank. The general advantages of issuing securities to companies are the recognition of companies in the national, regional or global financial markets, as well as increasing the efficiency of their activities. By developing financial markets, the state creates favourable conditions for the growth of the non-oil sector, as well as the development of entrepreneurial activity. When it comes to Azerbaijan's stock market, the government needs to advance this field in order to achieve economic diversification. Since it has been such a new and young sector, there are both potential opportunities and problems. As mentioned by Jeyhun Ibrahimov Chairman of Managing Board of Association of Azerbaijan Stock Market Participants during his interview in 2018, "securities market of Azerbaijan is using only a small part of its potential" (Azernews, 2018). He also mentioned in detail that with the necessary infrastructure, a modern trading system, potential buyers, and sufficient profitability, Azerbaijan's securities market has a lot of potential (Azernews, 2014). Kasumov has identified a number of potential issues in the field, including the lack of foreign investors, limited access for international investors to the local currency bond market, and limited liquidity of securities due to the absence of a secondary market, as well as the newness of the market for government and corporate securities, short maturity of government securities, inadequacy for the creation of a yield curve (no date). The current state and potential opportunities of the securities market in Azerbaijan will be addressed after the concept of the securities market is explained from a global point of view.

2. THE CONCEPT OF SECURITIES MARKET

A security is a financial commodity that can be sold. The term is used to describe any type of financial instrument, although the legal meaning varies depending on the jurisdiction (Bansal, 2017, p. 46). Bansal (2017, p. 48) writes that "securities market is a component of the wider financial market where securities can be bought and sold between subjects of the economy, on the basis of demand and supply. Securities markets encompasses equity markets, bond markets and derivatives markets where prices can be determined and participants both professional and non professionals can meet". Stock markets, bond markets, and derivatives markets are examples of security markets. Economic and legal changes, as well as the organization of market infrastructure, have made the securities market possible and unavoidable. As it comes to the forms of securities markets, primary and secondary markets are used to exchange securities. Primary securities markets are those where market participants, such as governments and businesses, issue new securities for trading.

Secondary securities markets, on the other hand, are those where previously issued securities are traded by market participants. In other words, secondary securities markets exist for the exchange of used securities (Glen and Madhavan, 1998, p. 2). Securities are sold for a variety of reasons, including attracting new capital through the issuance of new securities, converting real assets into financial assets, making short and long-term money investments, and insuring operations through the securities market as well as raising investment for new projects (Glen and Madhavan, 1998, p. 8). We live in a time when different people make different investments and savings, and the advent of a reliable mechanism for converting savings into investments is becoming a crucial topic. Securities along with the financial sector and the state budget are one of the most critical choices for funding the economy in international practice (Mammadov, 2008, p. 29-40). By increasing the interest in the mobilization of financial capital, financial securities market ensures the redistribution of financial resources between different sectors and branches of the economy in a promising (future-oriented) and profitable form, in favour of dynamically developed industries. It should be noted that solving the problem of mixed debt, as well as payments between businesses and organizations, is one of the key responsibilities of the current market system and the transition to a market economy, as well as in the CIS region. The emergence of the issue problems is a new age of issues. When the main business or company is unable to pay taxes, the consumers (customers) do not pay the tax debts on the products they have bought. This condition, in turn, is reflected in the state's difficulties in implementing the budget plan due to a lack of tax revenues, and there are delays in state assistance to certain parts of the economy, or in short, aid is cut off. All of this has an effect on the economy as a whole, and the state's influence in political, economic, and other spheres is waning. Appropriate steps have to be taken at the level of state enterprises and circles on potential solutions to these issues in our time. Therefore, financial securities markets are needed. To resolve these problems, Azerbaijan should develop securities turnover. As a result, the organisation of this sector has the potential to influence the resolution of these problems, which have a direct impact on the country's current economy, and allowing economic parties to be more engaged in economic activity and more actively involved in business. Despite the fact that SMEs' turnover is critical to the economy in the new age, and the government is implementing large-scale reforms in this sector, there is still a scarcity of knowledge on this in Azerbaijan.

3. ANALYSYS OF THE SECURITIES MARKET IN AZERBAIJAN

Oil and gas have been the leading sectors of the Azerbaijani economy since independence in 1991. However, over the past 10 years, Azerbaijan's main goal has been to diversify its economy and carry out reforms in various areas of the country. Of course, this includes the country's financial system and the securities market. A diverse range of state programs have been introduced in the last decade to support agriculture, institutional reform, regional transport corridors, and consolidate institutional arrangement for the development of entrepreneurship. In order to handle liquidity problem of the economy, one way is to strengthen securities market in Azerbaijan. The President of the Republic of Azerbaijan has launched the State Program on Securities Market Development Program in 2011 to further advance this area. The State Program "Development of the securities market in the Republic of Azerbaijan in 2011-2020" has been implemented and contributed to the development of securities market (E-qanun, 2011). According to the strategy document on the "Development of the securities market in the Republic of Azerbaijan in 2011-2020", "the securities market is a set of legal and economic relations between the subjects of issuance, issue, circulation, payment, ownership, storage, conclusion of transactions with them, conducting other operations" (E-qanun, 2011, p.1). Documents also shows that the securities market serves as an intermediary in the timely conversion of securities into capital, a process known as liquidity.

The securities market is a series of economic relationships among market participants that reflect the issuance and circulation of securities. Securities are the primary subject of the securities industry. In today's market economy, the securities market is one of the most relevant markets, the document describes (p.1-2). The strategic document is a key paper elaborated by the government of Azerbaijan explaining the definition of securities market in Azerbaijan. As it comes to legislative framework and current state of securities market in Azerbaijan, financial securities market in Azerbaijan is regulated by Azerbaijan law on financial securities. At present, it is possible to trade stocks, corporate and government bonds, as well as currency and commodity-based derivatives in Azerbaijan. In addition, there are REPO agreements between other banks, including the Central Bank. There are dealers in the market who make market-makers to trade some corporate bonds and all kinds of derivatives at any time, which is a factor that stimulates supply and demand. Annual yields on government bonds range from 1.5 to 4.25%, annual yields on corporate bonds between 8-13%, yields on equity valuation up to 60%, and yields on credit-backed securities more than 100% per annum. Simplification of documentation, further acceleration of account opening operations can be included in the list of steps taken to attract the attention of foreign investors. With the exception of some two-citizen countries and their citizens, the lack of any other restrictions has especially increased the interest of foreign investors in the market. With the support of the state program, the services provided by market participants are in the process of rapid electronicization. This is a well-thought-out step to increase the interest of foreign investors. Certain tax and transparency reforms in the field will be accelerated in the future. Furthermore, the government needs to conduct further awareness program in this sector to broaden awareness. The strategy document titled "Development of the Securities Market in the Republic of Azerbaijan in 2011-2020" envisages a number of key activities to advance this sector which includes mobilization of temporarily free financial resources for specific investments, formation of market infrastructure meeting world standards, development of the secondary securities market, transformation of property relations, improving the market mechanism and management system, ensuring real control over fund capital on the basis of state regulation, reduction of investment risk, formation of portfolio strategy, development of pricing, as well as forecasting perspective development directions (E-qanun, 2011, p-2-4). In general, the most traded investment instrument in the Azerbaijani securities market is identified as bonds of the State Oil Company of the Republic of Azerbaijan (SOCAR). These are SOCAR bonds issued by the State Oil Company of Azerbaijan (SOCAR) for the domestic market. SOCAR Bonds account for more than 76% of transactions in the Azerbaijani bond market (Banco.az, 2017). The important role of capital markets can be seen as a manifestation of the sustainable and sustainable economic policy pursued in Azerbaijan. Thus, the development of the securities market, which is an integral part of the financial policy pursued by the state, expands the scope of the non-oil sector by ensuring the diversity of financial instruments and the depth of financial markets. At present, the interest of companies operating in the public and private sectors in the securities market is growing day by day in Azerbaijan. For example, the placement of bond securities of the state-owned AzerGold (government owned gold company) Closed Joint-Stock Company by the initial public offering is a clear example of this. The bonds offered by AzerGold, one of the leaders in the non-oil industry in the field of precious metals, will serve to diversify the company's financial resources and direct resources to new projects, develop the country's securities market, as well as create profitable and reliable investment opportunities. This, in turn, will provide an opportunity to make low-risk, high-income profits against the background of the negative impact of the coronavirus pandemic on the world economy. In addition, citizens - individuals and legal entities will have a chance to contribute to the development of the national economy and the mining industry with AzerGold bonds. Both institutional (banks, insurance companies, investment companies) and individual investors (individuals) will earn 4% per annum by

purchasing AzerGold bonds from the initial public offering market. The bonds are expected to have a face value of $ 100, a maturity of 3 years and a volume of $ 20,000,000. The bonds will be sold at auction on the Baku Stock Exchange. Interest is paid to investors four times a year on a quarterly basis. These conditions are currently considered one of the most favourable offers for the country's financial market (Babayev, 2020). Some of the works achieved for the development of this sector in the recent years include increasing market awareness, explaining the benefits of the sector to the key plays, as well as introducing the Baku Stock Exchange's Listing Advisory program. However, awareness is needed to be increased about this sector.

4. CONCLUSIONS

The development of financial markets in the country leads to the efficient use of available economic resources. Financial intermediaries significantly reduce transaction costs through scale savings and specialization, and facilitate the attraction of small funds to the market. Formation of liquid financial instruments in the market through financial instruments by reducing transaction costs eliminates difficulties with the place and time of trade. The existence of liquid capital turnover allows stocks, bonds, etc., which can be easily sold to economic entities with free cash allows to invest (capital investment) in non-liquid production facilities by purchasing financial instruments. The development of financial security market provides a wide range of opportunities for companies to finance both large and private projects, as well as to attract borrowed funds. In this case, firms have the opportunity to choose the optimal ratio of borrowed funds in a particular way. Also, the value of securities is formed on the basis of information about the issuer of securities. In this case, it leads to a more efficient allocation of financial security market development resources and effective investment (capital investment) decisions. This factor determines the advantage of financial security market turnover over the banking sector. Thus, the need for companies to disclose information leads to the dissemination of this information and more effective investment (capital investment) decisions. Banks, on the other hand, receive the information themselves and make their own decisions based on this information. Financial securitities also reacts to the efficiency of companies and, in fact, exercises control over the management of companies. Evaluating the results, achieved in constructing the Azerbaijan's securities market, we can mention the following positive results: The necessary trading infrastructure has been constructed, that is now quite effective and developed even in comparison with the most mature markets. The professional intermediaries and their staff are sufficiently competitive and can effectively fulfil their functions. The legislation is detailed and up to the best international standards. However, more awareness job must be conducted on the participants of the market, and transparency of the sector should be increased in years ahead. The establishment of the Baku Stock Exchange, introduction of reform programs in the sector is promising. However, as mentioned before the financial securities market in Azerbaijan has not achieved its full potential despite the fact the most popular product is SOCAR bonds. While the former Financial Supervisory Authorities of the Republic of Azerbaijan established a training centre on financial markets, the centre could not reach its objectives in terms of raising awareness on financial markets specifically securities market, and eventually exposed to closure. This sector is needed to be brought to the government attention within current reform agenda.

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EVALUATION OF THE QUALITY LEVEL OF THE MACHINE INDUSTRY PRODUCTS BY THE INDEX QUALIMETRY METHODS

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ABSTRACT
Quality indices are used to assess the quality level of heterogeneous products. They make up an index of quality control. The article describes the methods for determining quality indices and defect indexes of professor A.V. Glichev and professor V.K. Fedyukin. The quality index depends on the relative quality index and the relative volume of a certain type of product. The defect index depends on the defectiveness factor of the n-th product and the weighting coefficient of a certain defect. The contribution of each i-th type of product to the defect index is shown in the diagram in the form of a circular sector. The quality index and the defective index are universal indicators that evaluate the quality of the enterprise's products. The paper assesses the quality level of heterogeneous products being repaired by a machine-building enterprise. To get a real idea of the product quality level, you should use pie charts based on relative indicators of the product quality. It demonstrated that average losses caused by the defects per unit of one product typical size were permissible by the production capabilities of the enterprise. Having evaluated the quality level of 50HP32radial piston pump, YMP-7511 engine, SMZH-81hydraulic jack using two different methods, it was found that in both cases the quality index of heterogeneous products in considered period is higher than the base. The defectiveness index is acceptable in a considered period by the production capabilities of the enterprise. The main direction of index qualimetry is the evaluation of changes, the speed of the "movement" of the product quality indicators, and processes.
Keywords: *coefficient of weight, index, quality, evaluation, defectiveness, central angle*

1. INTRODUCTION
When evaluation of the quality level of heterogeneous products, the quality *index, and the defectiveness index is used. These indexes are universal indicators that can evaluate the quality of the enterprise's products as a whole and analyze its changes for several years [1]. The quality index is a comprehensive indicator of the quality of heterogeneous products released within a considered period equal to the weighted average of the relative values of the quality indicators of these products [2]. The defectiveness index is a comprehensive indicator of the quality of heterogeneous products released within a considered time equal to the weighted average of the coefficients of defectiveness of this product (the defectiveness coefficient is the weighted average number of defects per product unit) [2]. In this article, we evaluated the quality level of heterogeneous products (50HP32 radial piston pump, a YMP-7511 engine, a SMZH-81hydraulic jack), repaired by Maker LLP – Karaganda Casting and Mechanical Plant. Evaluation of the quality level of heterogeneous products using the quality indexes and defectiveness indexes as implemented by two methods of Professor A.V. Glichev and Professor V.K. Fedyukin.

2. RESEARCH METHODS
During the evaluation of the quality level of heterogeneous products according to the method of A.V. Glichev, as like during the comprehensive evaluation of the quality of the products of one kind, the main index is the average weighted quality index, determined by the formula [3]:

$$V_\Theta = \prod_{k=1}^{M}(\Theta_k)^{ak} \qquad (1)$$

in this formula, Θ_k is the value of the relative quality indicator of the "K" type of the product [3]:

$$\Theta_k = \frac{W_k}{W_k^\delta} \ , \ k=1,\ldots,M \tag{2}$$

In this formula, W_k is the value of the single or comprehensive quality indicator of the "K" type of the product;

W_k^δ —is the base value of the quality indicator of the "K" type of the product;

a_k- is a relative volume of the "k" type of the product (coefficient of weight) [3]:

$$a_k = \frac{C_k}{\sum_{k=1}^n C_k} \tag{3}$$

$$\sum_{k=1}^n a_k = 1, a_k \geq 0, \tag{4}$$

In this formula, C_k is the volume of production of the product of the "K" type in cash. Another quality indicator, which also used in a comprehensive evaluation of the quality level of heterogeneous products according to the method of V.K. Fedyukin is the weighted average geometric quality index I_{kv}, which is determined by the formula [4]:

$$I_{kv} = \prod_{n=1}^N (K_n')^{a_n} \tag{5}$$

In this formula, K_n' is a relative quality indicator of the "N" type of the product, determined by differential method, i.e. [4]:

$$K_n' = \frac{P_n}{P_{n\delta}}, \ (n=1....N), \tag{6}$$

In this formula, P_n - is the main single or comprehensive indicator of the quality of the "N" type of the product;

P_{nb}- is a basic indicator of the quality of the "N" type of the product;

N- is the number of manufactured products;

a_n-is relative volume of the product of the "N" type, i.e.coefficient of weight.

The coefficient of weight a_n is determined by the formula [4]:

$$a_n = \frac{\Theta_n at^N}{\sum_{n=1}^N C_n} \ a=1_{\sum_{n=1} n} a \geq 0, \ n \tag{7}$$

In this formula, C_n - is planned or real production volume of the "N" type of the product in cash (in retail, wholesale prices). The defectiveness index is equal to the weighted average coefficient of defective evaluated product and is determined by the formula [3, 5]:

$$I_\partial = \sum_{n=1}^N a_n \sqrt{R_\partial}, \tag{8}$$

In this formula R_∂ - is coefficient of defectiveness of the product of the "N" kind, which is the indicator of the quality of the production of this product;

N- is the number of the types of products being evaluated;

a_n — is the coefficient of the weight of this type of product, which is determined by the above formulas.

The coefficient of defectiveness is determined during selective (or complete) inspection control of finished products. It is a characteristic of average losses caused by the defects per unit of a certain type of the product, and is equal to [3, 6]:

$$R_\partial = \frac{1}{n} \sum_{i=1}^{m} \varphi_i S_i \qquad (9)$$

In this formula n - is the number of inspected copies of the products (selection volume);
m - is the number of all the types of defects encountered in this product during the selection;
S_i — is the number of the defects of the "I" type of the defects;
φ_i — is the coefficient of the weight of the "I" type of the defects (in shares of costs or points).

3. RESEARCH RESULTS

To obtain a visual overview of the level of quality of heterogeneous products, you can use circular charts built on relative indicators of the product quality and their coefficients of weight. The contribution of each "i" type of the product to the quality index is indicated in the diagram as a circular sector, the r_i radius of which is equal to the value of the relative indicator of the product quality, and φ_i — central angle to the coefficient of weight expressed as a conditional value in degrees or radians [5]. Central angle for the "I" type of the product is determined as $\varphi = 2\pi\alpha_i$ or $\varphi = 360\alpha_i$. The level of the quality of heterogeneous products was determined based on a weighted average geometric index of the quality by the formula (1) mentioned here as a weighted average circular index. It is equal to the radius of the circle the area of which is equal to the sum of the areas of the diagram sectors [6,7]. Based on the data obtained as the result of the evaluation of the quality level of heterogeneous products according to the method of A.V. Glichev and V.K. Fedyukin, it is necessary to build the diagrams of the quality indexes and defectiveness indexes of heterogeneous product. Initial data for the building of the diagram of the quality index of heterogeneous products according to the method of A.V. Glichevare shown in table 1.

Table 1: Initial data for the building of the diagram of the quality index of heterogeneous products determined according to the method of A.V. Glichev

Type of the product	Relative quality indicator Θ_k	Coefficient of weight a_k	Central angle φ_k, degrees
50HP32 pump	1,01	0,03	10,8
YMP-7511 engine	1,03	0,72	259,2
SMZH-81 jack	1,025	0,25	90

The value of the weighted average geometric quality index is graphically displayed by the circle in the form of a dashed line and is $V_\Theta = 1,028$. $V_\Theta > 1$ means that the quality level of products repaired by the enterprise in the considered period exceeds the quality level of the base period by 3%. The diagram of the quality index of heterogeneous products, determined by the method of A.V. Glichev, is shown in Figure 1.

Figure following on the next page

Figure 1: The diagram of the quality index of heterogeneous products, determined by the method of A.V. Glichev
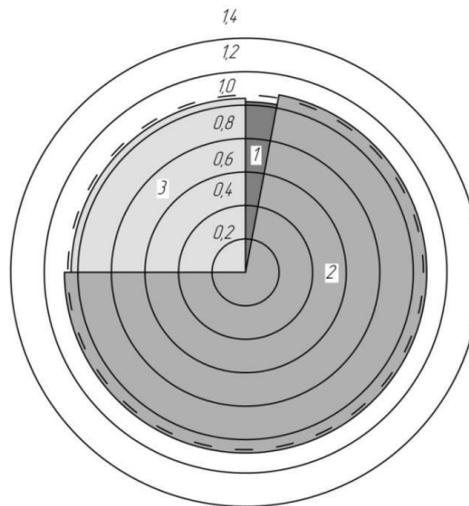
Initial data for the building of the diagram of the quality index of heterogeneous products according to the method of V.K. Fedyukinare shown in table 2.

Table 2: Initial data for the building of the diagram of the quality index of heterogeneous products determined according to the method of V.K. Fedyukin

Type of the product	Relative quality indicator $K_n^{'}$	Coefficient of weight a_n	Central angle φ_n, degrees
50HP32 pump	1	0,03	10,8
YMP-7511 engine	1,02	0,7	252
SMZH-81 jack	1,02	0,27	97,2

The value of the weighted average geometric quality index is graphically displayed by the circle in the form of a dashed line and is $И_{kv} = 1,019$. $И_{kv} > 1$ means that the quality level of products repaired by the enterprise in the considered period exceeds the quality level of the base period by 2%. The diagram of the quality index of heterogeneous products, determined by the method of V.K. Fedyukin, is shown in Figure 2.

Figure 2: The diagram of the quality index of heterogeneous products, determined by the method of V.K. Fedyukin
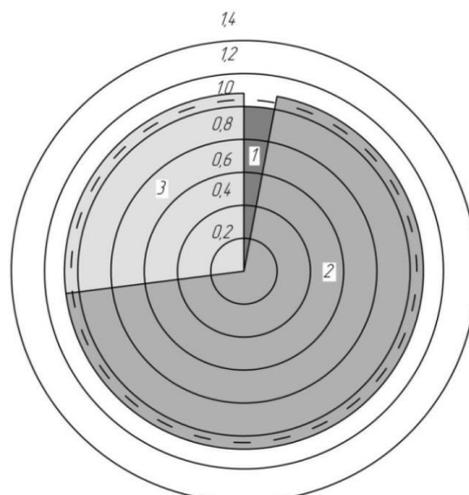
The building of a diagram of the defectiveness index of heterogeneous products is similar to the building of a diagram of the index of quality of heterogeneous products. The contribution of each "i" type of the product to the defectiveness index is indicated on the diagram as a circular sector the radius r_i of which is equal to the value of relative defectiveness indicator of the product, and central angle φ_i −the coefficient of weight expressed as a conditional value in degrees or radians [6]. Initial data for the building of the diagram of the defectiveness index of heterogeneous products determined according to the method of A.V.Glichevare shown in table 3.

Table 3: Initial data for the building of the diagram of the defectiveness index of heterogeneous products determined according to the method of A.V.Glichev

Type of the product	Relative defectiveness indicator Q_k	Coefficient of weight a_k	Central angle φ_k, degrees
50HP32 pump	1,33	0,03	10,8
YMP-7511 engine	1,09	0,72	259,2
SMZH-81 jack	2,25	0,25	90

The value of the defectiveness index is graphically displayed by the circle in the form of a dashed line and is V = 1,11. The diagram of the defectiveness index of heterogeneous products, determined by the method of A.V.Glichev, is shown in Figure 3.

Figure 3: The diagram of the defectiveness index of heterogeneous products, determined by the method of A.V.Glichev
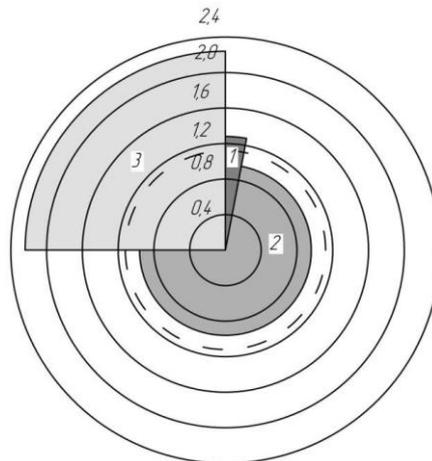
Initial data for the building of the diagram of the defectiveness index of heterogeneous products determined according to the method of V.K. Fedyukinare shown in table 4.

Table 4: Initial data for the building of the diagram of the defectiveness index of heterogeneous products determined according to the method of V.K. Fedyukin

Type of the product	Bas indicator of defectiveness $R_{\partial b}$	Relative defectiveness indicator Q_n	Coefficient of weight α_n	Central angle φ_n, degrees
50HP32 pump	3,20	1,32	0,03	10,8
YMP-7511 engine	4,14	1,09	0,7	252
SMZH-81 jack	1,25	2,26	0,27	97,2

The defectiveness index of heterogeneous products according to the method of V.K. Fedyukinis determined by the following formula (8):

- The value of the defectiveness index is graphically displayed by the circle in the form of a dashed line and is $I_\partial = 1{,}95$. The diagram of the defectiveness index of heterogeneous products, determined by the method of V.K. Fedyukin, is shown in Figure 4.

Figure 4: The diagram of the defectiveness index of heterogeneous products, determined by the method of V.K. Fedyukin
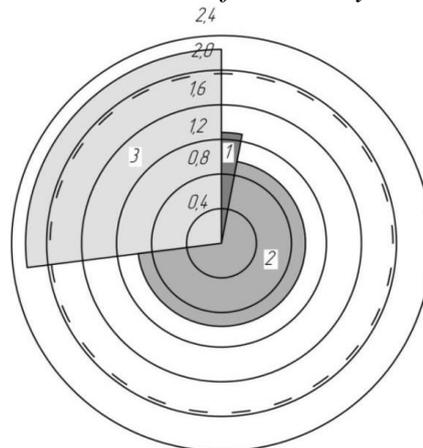
Found defectiveness index suggests that average losses caused by the defects per unit of one product typical size are permissible for the considered period by the production capabilities of the enterprise.

4. CONCLUSION

Having evaluated the quality level of 50HP32radial piston pump, YMP-7511 engine, SMZH-81hydraulic jack using two different methods, it was found that in both cases the quality index of heterogeneous products in considered period is higher than the base. The defectiveness index is acceptable in the considered time by the production capabilities of the enterprise. The main direction of index qualimetry is the evaluation of changes, the speed of the "movement" of the product quality indicators, and processes.

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FISCAL MECHANISM IN A TRANSITIONAL ECONOMY AND STATE REGULATION OF ECONOMIC GROWTH

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ABSTRACT
Each state independently determines for itself the main directions of the budgetary and tax mechanism. It is necessary that the fiscal mechanism is well adapted to new social relations and consistent with world experience. At present, it acts as the main instrument of the state's influence on the development of the economy, determining priorities and economic and social development. The state of the domestic economy depends on the fiscal policy pursued. The state will have to fulfill the main tasks With the help of fiscal policy: create predictable fiscal conditions, balance the state and regional budgets, and reduce the shadow sector of the economy. The present main directions of budgetary and tax policy are aimed at the implementation of the budgetary and tax strategy for the medium term, the unconditional fulfillment of both previously adopted and accepted expenditure obligations, and increasing the efficiency of budget expenditures. In this regard, budget and tax regulation is an integral part of the state's interests. In order to implement the principle of a balanced budget, so to minimize the budget deficit, the process of drafting, approving and implementing the budget must proceed in accordance with the rules: budget regulation follows tax regulation. This sequence is unchanged. In the coming period, implement measures in the region aimed at preserving and developing tax potential, ensuring fiscal sustainability in the medium and long term is necessary.
Keywords: fiscal policy, budget, tax regulation

1. INTRODUCTION
The present main directions of budgetary and tax policy are aimed at the implementation of the budgetary and tax strategy for the medium term, the unconditional fulfillment of both previously adopted and accepted expenditure commitments, and increasing the efficiency of budget expenditures. The low efficiency of the implementation of state programs or a formal approach to their implementation is evidenced by the continuation of the practice of increasing the volume of budget allocations for individual state programs with a low or below average degree of their effectiveness, as well as the lack of adjusting the values of the corresponding indicators of state programs with a significant change in budget allocations for the implementation of the envisaged activities.

2. INTERACTION OF THE STATE WITH ECONOMIC ENTITIES OF THE MARKET ECONOMY
The development of microeconomics contributed to the establishment of the public sector economy, which led to the creation of the concept of public goods by P.Samuelson. The most intensive development of the scientific foundations of the economy of the public sector, for which the revenues and expenditures of the state are equally significant, was the study, first of

all, at the microeconomic level, of the interaction of the state with other economic entities of the market economy as the influence of the state on the economic situation and behavior of organizations and households. Public sector economics analyzes the economic behavior of the state as one of the subjects of the economy, as a specific organization among other organizations, with special emphasis on interaction and its consequences. The activity of the state in a market economy is expressed in financial flows, income and expenses, as the entrepreneurial activity of the public sector of the economy. The state acts as an independent economic (economic) entity, as a participant in social reproduction, as an organizer of this process, providing natural resources limited by the territory and creating conditions for the sphere of material production and providing social needs, while simultaneously producing public goods and services of a social nature. The existence of taxes is due to the need to finance public needs supplied by the state to its citizens. The states need funds to cover the costs of providing public services and implementing social programs; such funds can be accumulated through tax types of income or non-tax instruments for forming the revenue side of the budget. Government spending and taxes are the most important components of the government's fiscal policy. Taxes form the financial basis of government regulators of the economy. Fiscal policy is a set of government measures to change government spending and taxation, aimed at ensuring full employment and the production of equilibrium GNP.

3. BUDGETARY AND TAX REGULATION AS INSEPARABLE COMPONENTS OF THE SPHERE OF INTERESTS OF THE STATE

Budgetary and tax regulation are inseparable components of the state's sphere of interests. In order to implement the principle of a balanced budget, i.e. in order to minimize the budget deficit, the process of drawing up, approving and executing the budget should proceed in accordance with the rule: budget regulation follows tax regulation. This sequence is unchanged. At the same time, there is, of course, a feedback. By introducing amendments to tax legislation, the state adjusts the mechanism for fulfilling the revenue side of the budget, in turn, the revenue side of the budget is formed based on the needs of the state for the implementation of the tasks facing it, that is, the expenditure side. Consequently, the introduction of amendments to the legislation on taxes and fees creates the necessary reserves for financing government expenditures. It should be noted that the introduction of bills is possible only on issues related to the jurisdiction of authorized bodies to regulate budgetary relations. Thus, the fiscal mechanism should be understood as a model for the distribution of tax powers between different levels of government for the legal impact (regulation) on economic relations in the field of taxation, on the one hand, and balanced financing of budgets of different levels, on the other hand. Of course, in this context, legal regulation means the action of the regulatory function of taxation, one of the mechanisms of which is to stimulate investment and business activity, which must be reflected in the tax policy of the state. The contradiction is a consequence of the extensive type of development of fiscal relations, which determines the nature of fiscal regulation. This type is characterized by strict criteria for the allocation of state funding, the presence of a quota system, as well as an equal distribution of tax payments in favor of the budgets of the regional and local levels. The intensive type is devoid of these shortcomings, which allows a differentiated approach to be used, and, thus, to achieve a balance of budgetary interests. Meanwhile, the arguments in favor of decentralization of state budgetary powers are quite serious and should be taken into account to create a system of budgetary structure aimed "at ensuring economic efficiency, budgetary responsibility, social justice, political and territorial integration." A clear delineation of tax powers on an ongoing basis and the assignment of revenue sources to budgets of various levels will allow at the tactical level to take into account the specifics of tax bases and increase tax collection, and at the strategic level to improve the self-sufficiency of regional budgets.

Securing tax sources of budget revenues for the regions should correspond to the volume of obligations of the regions in the socio-economic sphere of relations in order to balance the budgets. An analysis of the construction of multi-level tax systems shows that strengthening the role of fiscal regulation is possible with a harmonious combination of centralized tax regulation, taking into account the specifics of the functioning of the tax system at the regional level. To increase the efficiency of the implementation of the incentive function by taxes, it is necessary to determine the vector of reform to improve, first of all, the regulatory and legal framework, to eliminate existing contradictions. At the same time, the implementation of the reform is under the condition of observing the integrity of the state and building a balanced tax system, so that the norms for the transfer of taxes to the budgets of various levels are of a long-term nature. One of the most important tasks of state authorities is to equalize the financial capabilities of the regions to implement the powers assigned to them. The long-term economic policy of the state should be aimed at the implementation of investment projects, for example, the orientation of the tax mechanism to stimulate investment. Tax reform must be carried out in combination with budgetary regulation. It is also necessary to take into account the world experience of reforming tax systems in terms of determining the possibility of using certain elements as building materials for building a model of the fiscal mechanism.

4. THE MAIN PRIORITIES OF FISCAL REGULATION

The main objectives of budgetary policy are:
- integration of the processes of strategic forecasting and budget planning;
- introduction of the principles of proactive budgeting in order to involve the population of the municipalities of the region in the budget process;
- further improvement of inter-budgetary relations.
- increasing the efficiency of providing targeted inter-budgetary transfers;

In terms of budgetary and tax policy, investment incentives should include measures in these areas:
- Formation of stable fiscal conditions. Recently, a lot has been done in terms of creating stable and predictable fiscal and financial conditions: "budget rules" have been introduced, the foundations for long-term budget planning have been laid, and key parameters of the tax system have been fixed. In addition, it is planned to legislate the suspensive norms for the entry into force of changes in the elements of taxation, which worsen the position of taxpayers or significantly change the tax ones. The continuity of budgetary and taxation policies and the consistency of implementation of the adopted decisions should increase confidence in the established institutions and contribute to an improvement in the investment climate.
- Formation of fair competitive conditions. In order to eliminate the unfair competitive advantages of the shadow sector and the growth of revenues of the budgets of the budget system, a set of measures will be continued to improve the administration of revenues of the budget system, including through the digitalization of tax administration and the integration of all sources of information into a single information space. The development of a new form of tax control - tax monitoring, will allow large companies to organize extended information interaction with the tax authority and provide access to data in real time. Tax monitoring allows you to quickly coordinate approaches to taxation, advise on completed and planned transactions by providing a reasoned opinion of the tax authority, reduce the labor costs of organizations to support tax audits, submit revised tax returns, explanations and required documents. This access allows a risk-based approach at the transactional level to be applied and only those transactions that contain elements of risk are verified.

In the sphere of inter-budgetary relations, it is possible to implement the following tasks:

- improvement of the legal regulation of the system of delineation of powers between the levels of public authority;
- legislative clarification of the powers of state authorities and local self-government bodies;
- Conducting an assessment of the regulatory impact of existing regulatory legal acts that establish additional requirements for the exercise of powers by public authorities and local governments;

It should ensure that all budgetary expenditures are covered by budget expenditure reviews, which will allow:

- to maintain the optimal volume and structure of expenses for the implementation of functions and obligations of a permanent nature, taking into account current social, market, technological and other realities;
- to stimulate the main administrators of budgetary funds to search for internal reserves for optimizing budget expenditures in order to ensure financing of priority areas of state policy;
- to ensure the introduction of a permanent assessment of the feasibility and relevance of relevant measures, mechanisms for their implementation and financial support, results and the availability of alternative instruments to achieve the goals of state policy.

Based on the results of the review, the use of standards that have lost their relevance, the non-transparent formation of the contract price and its overestimation, a significant differentiation of identical costs of different government agencies and other proposals for improving the efficiency of costs can be revealed.

5. CONCLUSIONS

In the coming period, it is necessary to implement measures in the region aimed at preserving and developing tax potential, ensuring fiscal sustainability in the medium and long term. The budgetary policy for the medium term should be focused on increasing the efficiency of budget expenditures in order to meet the needs of citizens in high-quality and affordable public services. During its formation and implementation, it is necessary to solve the following tasks:

- ensuring the reliability of economic forecasts and prerequisites underlying budget planning, limiting the budget deficit and public debt of the region;
- coordination of strategic and budgetary planning to ensure long-term stability and sustainability of the regional budget;
- full-scale implementation of the principles of program-target planning and the transition to the program budget;
- standardization of the provision of public services, bringing the provision of services by various institutions to a single format, improving the quality of services provided by clearly defining the content of each service;
- development of new forms and improvement of the quality of the provision of public services, introduction of elements of competitive relations into the activities of state and municipal institutions;
- optimization of the network of budgetary institutions, taking into account the need for the volume of public services provided by them;
- strengthening control over the placement of orders and the execution of contracts, agreements concluded as a result of placements, in order to efficiently use budget funds;

In the coming years, the policy in the field of inter-budgetary relations will be aimed at ensuring the balance of budgets of all levels in their formation and execution by solving the following tasks:

- creating incentives to increase the revenue base of local budgets, improve the efficiency and quality of organization and implementation of the budget process at the municipal level;
- implementation of constant monitoring of local budgets;
- provision of additional financial assistance to local budgets, subject to bringing budget parameters to the real economic situation;
- creation of incentives for improving the quality of municipal finance management, increasing the efficiency of spending budget funds;
- ensuring control over the spending of subventions provided from the regional budget and the quality of the provision of delegated public services.

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FEATURES OF HUMAN RESOURCE MANAGEMENT INNOVATIVELY ACTIVE COMPANIES

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ABSTRACT

The article examines the features of human resource management in domestic innovation-active companies. The approaches of domestic and foreign experts to the problem under consideration are described. The results of a pilot study of the opinions of the heads of 118 domestic companies are presented, groups of innovatively active (33%) and non-innovative companies (67%) are distinguished. The features of the strategy and practice of human resource management, contributing to innovative activity, are analyzed. The authors come to the conclusion that in those companies in which innovative projects are carried out, there is a holistic strategy for their implementation, including software practices aimed at the formation of innovative working behavior of personnel. Scientific achievements and advanced technologies have radically changed and continue to change the way of the world economy, forming the structure of a post-industrial society. These patterns directly affected Azerbaijan, which faced serious problems associated with the insufficient efficiency of the system of organizing, managing and supporting scientific and technological progress, mechanisms of reproduction and rational use of innovative resources of science, as well as the implementation of its achievements in the economy. Human resources is a term that characterizes, from a qualitative, substantive point of view, the staff or all personnel of an enterprise, labor force or labor resources of an industry, territory, region, country as a whole. Along with the traditional features that are inherent in the elements of the defined population - personnel, personnel, labor force, labor resources, the term "human resources" includes the ability to create, defines potential opportunities for the all-round development of employees, general culture and moral reliability, a certain effect of cooperation and self-organization, first of all, collective forms of labor organization and acceptance decisions, "quality circles", "team spirit", as well as improving labor relations, self-motivation, entrepreneurship.
Keywords: human resource management, innovative work behavior, innovative activity

1. INTORDUCTION

At the current stage of economic development, the ability to create innovation is becoming the cornerstone of a company's long-term success. Almost every company striving to become an industry leader is looking for ways to develop and create innovative solutions. Innovation is among the priorities of the overwhelming number of companies around the world. Innovative solutions are a product of intellectual activity, so companies strive to attract creative employees, develop their abilities and skills that contribute to the creation of innovations. In the foreign business community, to define the term "innovation" they use the methodological document "Oslo Leadership", developed by the Organization for Economic Cooperation and Development (OECD) jointly with Eurostat. It provides the following definition:
- "Innovation is the end result of innovative activity, embodied in the form of:
    - new or improved products or services introduced to markets;
    - new or improved technological processes;
    - new methods of production and its organization, used in practice;
    - new markets and product promotion" [Oslo Guide, 2006,p6]

In the Oslo Guide, innovation refers to the creative activity associated with the creation and implementation of innovations. Innovation activities include scientific, technological, organizational, financial and commercial actions that actually lead to the implementation of innovations and are conceived for this purpose. An innovation-active company is a company that meets the following conditions: "A firm can engage in many activities that are not related to research and development, but participate in the creation of innovations. This activity can enhance the firm's ability to innovate, or its ability to successfully absorb innovations developed by other firms or organizations" [Oslo Guide, 2006, p44]. Currently, many experts recognize the need to implement a strategy for the country's innovative development, where all resource opportunities (personnel, financial, material and technical) should be focused on achieving this goal. Only on the basis of an innovative breakthrough is the transition to a fundamentally new quality of life of the population possible. According to employees of the McKinsey consulting group, creating an innovative economy will allow Azerbaijan to return to the group of world technological leaders and ensure sustainable long-term development based on the growth of labor productivity, regardless of the dynamics of the world market situation. That is why the search for ways to stimulate innovative development is one of the most urgent tasks of the modern period. The works of many domestic and foreign authors are devoted to the study of the problems of innovation management, however, the problem of human resource management in innovatively active companies cannot be considered solved until now. Foreign research in this area is represented to a much greater extent than domestic. And although abroad works devoted to the general problems of the relationship between the quality of human resource management and the innovative orientation of an organization appeared at the end of the last century, on a large scale empirical studies of the role of HR strategies and practices in innovative development began to be carried out at the beginning of the 21st century. In the work of D. Mate et al. [Mate et al., 2010] it is indicated that the problem of the relationship between human resource management and innovation is rightly called the modern "black box". In general, this relationship is characterized as complex, multifactorial and dynamic, which further complicates the process of its analysis and interpretation. A scientific direction has emerged abroad that focuses on the human component of the innovation process: innovative work behavior (IWB). Innovative work behavior is considered as a complex of mental and physical activity of workers, aimed at solving a number of tasks that contribute to the achievement of the main goal - innovative development [Kanter, 1988; Messmann, Mulder, 2011]. Innovative work behavior can be viewed as a phenomenon that mediates the relationship between human resource management and innovation in an organization. This study is a pilot project that is part of a large-scale study, the purpose of which is to identify global and local strategies and practices of human resource management inherent in innovatively active companies in developed and developing countries. The main objectives of the pilot project are as follows:

- determination of the characteristics of human resource management activities that affect the formation of innovative work behavior and are essential for the implementation of the innovative activity of domestic companies;
- Assessment of the severity of these characteristics in the practice of human resource management of the surveyed companies;
- identification of the features of human resource management activities related to the innovative activity of companies.

Thus, in the context of this article, we consider personnel management as an activity aimed at achieving a certain result - the implementation of innovations - and determined by appropriate strategies and practices that contribute to the formation of innovative working behavior of employees.

From our point of view, new studies of methods of managing innovative activity should contribute not only to the development of management theory, but also to the scope of their practical application.

2. RESEARCH

The world is entering an era of competition for the possession of human resources, which are a form of the existence of intellectual power in whose heads innovative ideas are born. Azerbaijan will not be able to achieve a leading role in the international arena without the development of the country's scientific potential, where innovation should be defined as the end result of creative work that has been implemented in the form of new or improved products, a new or improved technological process, used in economic circulation. Since innovative ideas are born in the minds of smart people, it is necessary to decide what kind of personnel skills are needed for the development and implementation of innovations. The problem of staffing scientific and engineering activities is extremely important for Azerbaijan. Today, there are 4 main centers of scientific progress in the world - the United States (35% of world R&D spending at purchasing power parity), the European Union (24%), Japan and China (about 12% each). Unfortunately, the Russian Federation is not included in the group of leaders - Russia accounts for less than 2% of world spending on R&D at purchasing power parity and 1% at exchange rates. Thus, Russia lags behind the United States in R&D spending by 17 times, from the European Union - 12 times, from China - 6.4 times, from India - 1.5 times. It should be noted that China has now reached the third place in the world in terms of R&D expenditures, which is almost one and a half times more than in Russia, despite its huge population. Today, there is a tendency for China to oust Japan from the second place, and in the 2020s it can be compared with the United States. By the number of scientific publications (120 thousand in 2008). The PRC is already in second place. China accounts for 8.5% of all scientific publications in the world, including 20.8% of publications on materials science, 16.9% - on chemistry, 14.2% -in physics. The share of Chinese publications on crystallography (31.7%), metallurgy (31.2%), interdisciplinary physics (22.1%), and applied mathematics (21.1%) is especially high. The PRC has adopted and is successfully implementing state programs for technological and scientific development.

 In India, government spending on R&D is 0.9% of GDP, and in 2012, according to the government's DOS program 1.2% of GDP will be boosted. India's share in scientific publications is 3%. But in chemistry this figure is 5.7%, pharmacology - 4.3%, physics - 3.7%. The share of Indian publications in organic chemistry (8.3%) and medicinal chemistry (6.5%) is even higher. India is ranked fourth in the world (after the United States, Japan and China) for R&D in information technology and communications. We observe that science has turned into a highly competitive field of activity today. The main trend in changing the conditions of international competition in the field of innovation is a shift in emphasis from competition for the possession of the latest achievements to competition for the possession of creative human resources. Among all the comprehensive measures that form the basis of the national economy and on the development of which progress in the future depends, in the first place in many developed countries are human resources. For example, in most Japanese Firms R&D expenditures exceed investments in machinery and equipment. In Japan, innovation has become a kind of "national idea", and "innovation", "innovative development", "innovation cycle" and other derivatives of this concept have become the core that integrates the main blocks of a comprehensive economic strategy. In Japan, the "New Strategy for Economic Growth" has been developed and is being successfully implemented, in the first place of which is the field of "Human Resources: Innovation". The main focus improvement and modernization of this area is the development of the capabilities of each individual. As part of the implementation of the strategy, it is planned to direct investments in human potential - to educate modern leaders, make the education system and human resource development more flexible, including

diversifying the education system, strengthening its practical focus in technical and commercial higher schools, and developing cooperation between industry and the academic sector. The special attention paid in Japan to the development of the human factor of the innovation process and human capital in general is a response to the changing nature of international competition. Today, there are strong tendencies and prerequisites that in the modern world the power of a country and its influence in the world is determined not only by "hard power", that is, by economic and military potential, but also by "soft", namely by social values, culture, political ideology, the ability to cooperate. Modern "knowledge workers" no longer have a rigid dependence on the organization, since they can produce their information product outside its structures, having the necessary means of production in their personal property [*Baker W. E.,1999]*. Such an employee offers the employer not his ability to work, but his result, not labor, but the consumer value embodied in one or another innovative product or new production technology. Therefore, the management of creative and innovative activities of employees becomes the cornerstone of a modern organization, the content of a new strategy and the embodiment of a new structure. The model of a flexible organization, which allows to use the knowledge and creativity of each individual employee, has been called an "innovative organization", where team organization of activities; involvement of all employees of the organization in innovative activities; innovative organizational culture and project work *[Amabile T. M, 1997]*. The human resource management function in an innovative organization is a long-term strategy tool aimed at removing barriers to innovation. In human resource management, learning, innovation and creativity are of great importance. This, of course, requires a fundamentally different approach to the organization of human resource management. In essence, we are talking about the formation of innovative human resource management, which is a border area between two areas of management science and practice: innovation management and human resource management. Based on this, innovative human resource management can be defined as a specialized professional activity aimed at improving the management system in the field of work, with human resources, in order to develop the creative, innovative potential of employees and stimulate innovative behavior of personnel.

3. RESULTS

This study presents the results of work of employees of the Azerbaijan State Economic Universities lecturer. The target group of the study was made up of heads of companies doing business in the Azerbaijan. The survey was conducted using an online questionnaire on a voluntary basis. Information about the survey was disseminated through various channels (posting on facebook websites) during the spring and summer of 2020. The development of the survey was carried out in three stages. At the first stage, based on the literature data, a prototype was developed, which was sent out at the second stage to experts in the field of innovation management (academic colleagues and practitioners - heads of personnel management departments of Azerbaijan companies). Based on their recommendations, the questionnaire was finalized (third stage) and posted on the facebook based on the online testing IT platform, which further simplified the processing of the results. Such a procedure for forming a questionnaire, in our opinion, contributed to the solution of one of the tasks set - to identify the characteristics of human resource management activities that are essential for the formation of innovative behavior and the implementation of innovative activity of domestic companies. In the final version, the questionnaire included blocks of questions related to the following aspects of innovation management and human resource management:

1) features of corporate values;
2) specifics of planning;
3) characteristics of the categories of employees involved in innovations;
4) forms of support for innovative activities in the company;

5) forms of innovative and creative activity of employees;
6) types of innovative projects in which employees participate;
7) changes in innovation activity in recent years;
8) the forms in which the company organizes the innovative activities of the personnel;
9) problems faced by creative employees and innovative projects in the company;
10) forms of recognition of the talent and merit of innovators in the company;
11) sources of information on scientific and practical achievements in the professional field;
12) supporting innovative activities that are important for employees;
13) types of knowledge exchange in which managers have participated in the last half of the year;
14) the types of knowledge exchange that the manager organized for his subordinates during the last six months;
15) qualities that are appreciated and encouraged by senior managers in their subordinates.

In addition, questions related to age, size, industry and distribution of companies by region were included in the text of the questionnaire. The respondents were asked to choose one or more answers, which which fully corresponded to their opinion. For each question, it was also envisaged to add comments and / or formulate different answers. 118 respondents representing companies from eight federal districts of the Russian Federation took part in the online survey (Table 1). The structure of the sample of respondents is as follows:

- 48% - top managers;
- 34% - middle managers;
- 4% - lower-level managers;
- 14% - specialists and employees.

Table 1: The scope of the companies

Industry Percentage of companies	Percentage of companies
Consumer goods and services	21
Mechanical engineering	20
Education	18
Consulting and other services	14
Healthcare and medicine	8
Financial sector	7
Chemical and petrochemical industry	6
Construction, real estate	3
Agriculture	3

Table 2: Company size

Number of employees, people	Percentage of companies
Up to 50	25
51 to 100	16
101 to 250	14
251 to 500	13
501 to 1000	6
1001 to 2000	7
2001 to 5000	9
Over 5000	10

Table 3: Age of companies

Age of companies	Percentage of companies
Less than 2 years	9
2 to 5 years	14
6-10 years	25
11 to 15 years	15
More than 15 years	37

4. ASSESSMENT OF THE INNOVATIVE FOCUS OF PERSONNEL MANAGEMENT ACTIVITIES IN DOMESTIC COMPANIES

To solve the second task of this work - assessing the severity of the characteristics of human resource management activities that are essential for innovative development - we studied the results of filling out the questionnaire by managers of all 118 companies. Leaders as Innovation Leaders. Innovation needs leaders who can build like-minded teams and unite around the goals of innovative development, there are broad categories of personnel and those possessing the competencies of inspiration, motivation for innovative activity. In fact, leaders serve as a trigger for transformations, including innovative ones. For the success of such transformations leaders themselves must be "charged" with innovations, unconditionally believe in them, profess the principles of innovative development, and also appreciate in the people around them the qualities that are inextricably linked with innovations. The research results showed that 74% of top managers and 63% of middle managers are involved in innovation processes. The innovative activity of the respondents is expressed in various forms, such as: generation of ideas and innovation (47%); examination of colleagues' ideas (41%); organizing and participating in the exchange of experience (33%); creation and support for an innovative climate (32%); initiation of organizational changes (31%); help and support of innovators (25%); attracting creative employees to the company (21%). In this situation, it is logical to assume that innovative values should become the core of the system of value orientations of managers. However, the study showed that among the value orientations of managers, innovative values are not dominant and, moreover, the system of value orientations of the respondents is characterized by inconsistency. On the one hand, survey participants appreciate in employees: personal responsibility (81%); cooperation and teamwork (72%); continuous professional and personal development (52%); the ability to work in a situation of uncertainty (47%); proactivity (43%); openness to new things (42%), i.e. qualities that are indisputably important from the point of in terms of innovative development of companies. On the other hand, only for a minority of respondents are significant: creativity of employees (35%); long-term orientation (24%); trust (21%) and respect (23%). For many, the efficiency of employees is more important (41%).

5. CONCLUSION

This work represents the first stage on the way of researching human resource management systems of innovatively active companies. One of its main tasks was to test the hypothesis about the presence of features that characterize the strategy and practice of personnel management in domestic innovation-active companies. The hypothesis was generally confirmed. At the present time, the models for managing the activities of innovative activity of companies cannot be considered finally formed. Nevertheless, in those companies in which innovative projects are nevertheless carried out, there is a holistic strategy for their implementation, using practices focused on achieving the main goal - the implementation of innovations.

The analysis made it possible to draw the following conclusions:

- At present, the leaders of the surveyed companies do not have a holistic understanding of the strategy and practice of managing innovative activity, including the specifics of human resource management activities aimed at shaping and stimulating innovative behavior. A significant gap can be noted between the mental and real recognition of the need for innovation by leaders.

Companies surveyed. So, 66% of CEOs agree with a statement about the need for organizational innovation, 74% of top managers consider themselves to be participants in the innovation process, but only 33% of companies have successfully implemented innovative projects.

- Significant contradictions in the organization of human resource management activities of the companies under study were noted. These contradictions affected all the main elements of activities (practices) in human resource management: assessment, motivation and incentives, training and development of personnel.Management methods preferred by respondents in the role of leaders do not coincide with their own expectations in the role of executors of innovative projects. These contradictions can play the role of a real "brake" of innovative activity, since management practices do not achieve the intended goal and do not contribute to the development of the required forms of innovative behavior.
- Innovative activity of companies is associated with certain characteristics of personnel management activities. The data obtained support the assumption that innovation-active companies choose, formalize and implement in practice a model of personnel management that combines strategies of a high degree of efficiency and involvement.
- A pilot study conducted revealed some shortcomings Statistics of the questionnaire formed with the help of expert assessments. In the future, it is necessary to focus the questions to a greater extent on the specifics of personnel management activities, as well as to change the assessment scale. We propose to eliminate these shortcomings during the main research.

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FUNDAMENTAL DIRECTIONS OF STATE SUPPORT FOR EXPORT ACTIVITIES OF SMALL AND MEDIUM-SIZED ENTREPRENEURSHIP IN AZERBAIJAN

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ABSTRACT

The purpose of this study is to study the state of support for small and medium-sized businesses, as well as a theoretical and methodological analysis of the economic problem, study the possibilities of expanding this support, develop proposals and recommendations based on scientifically grounded forms, moreover, to determine the importance of increasing export activity in ensuring economic development, the main conditions for increasing the country's export potential, to stimulate exports based on an assessment of the current state of export operations, to increase the country's export potential and stimulate its use. to develop proposals and recommendations to improve the legal framework. The objectives of the study are: to determine the importance of export activity in the modern system of economic relations, to study the main conditions for increasing the export potential in the Republic of Azerbaijan and the stimulated means of using the export potential, to substantiate the need for legal regulation of state intervention to increase the export potential of Azerbaijan and promote its implementation, to analyze the system of legislative acts regulating the implementation of export operations, to study the existing mechanisms of state support in the field of export stimulation in our country, assessment of the use of export potential based on the analysis of the current state of the country's export operations, identification of challenges facing the current state of export potential, to study the main directions of using the experience of foreign countries in increasing the export potential and stimulating exports, to determine the directions of improving the legal framework in order to increase the export potential and stimulate exports in our republic, etc.
Keywords: Export policy, Economic Growth, Small and Medium-sized Enterprises, SMEs Role in Economy, Socio-Economic Development

1. INTRODUCTION

If we look at the practice of economic development of the countries of the world, we can see that the national economic development of countries is possible through integration into the international trade system. Countries that adopt a closed economic development model face serious challenges in ensuring sustainable national economic development. The reason for this is that these countries are left out of the international trade system and do not use import-export operations effectively. Due to the exceptional importance of import-export operations in the development of national economies, the issue of the favorable position of countries in the international division of labor and the optimal use of export potential of countries remains relevant. As indicated in the strategic roadmap, which reflects the perspective development directions of the country's economy, among the important issues considered in the foreign economic strategy of the Republic of Azerbaijan for the future are increasing and realizing export potential, increasing the competitiveness of products on world markets. The issues of compliance with meat standards, increasing the range of exported products, improving the structure of imports by creating import-substituting production facilities, and promoting the "Made in Azerbaijan" brand in foreign markets are reflected. In order to address these issues, the implementation of which is identified as a goal in the foreign economic strategy, in order to

promote exports, the state should provide the necessary support to enterprises and organizations engaged in exports and stimulate exports. With the implementation of this policy, in the post-oil period, exports can become one of the main alternative ways to generate foreign exchange inflows into the country's economy. In modern times, oil and oil products play an important role in the structure of our country's exports. There is a sharp difference between the realized share of the export potential of traditional industries and some agricultural products with an international competitive advantage and its total export potential. Cotton, tobacco, vegetable products, wine, sugar, hazelnuts, etc. only a part of the export potential of the products is used. A small part of the export potential of the non-oil sector is realized, and the fact that there are only a few types of exported products is one of the important problems. Poor development of the processing industry is one of the main factors negatively affecting the realization of export opportunities. The export potential of the non-oil sector can be optimally used by stimulating exports, improving its legal regulation, eliminating the gaps in them by examining the activities of state support mechanisms that promote exports. When we look at the structure of exports, we can see that both individual businesses and SMEs have a small share in exports. These factors reflect the need to take the necessary incentives. Reducing dependence on imports and accelerating the development of priority areas that promote exports, improving the legal framework for exports is one of the urgent problems. From this point of view, it is very necessary and urgent to reveal the essence of the stimulation and legal provision of the use of export potential, to study its scientific-theoretical bases and directions of its improvement.

2. SME EXPORT POTENTIAL: THEORETICAL AND METHODOLOGICAL BASIS

From the perspective of economic development of countries, we can see that export activity, which is an important part of international trade, is of great importance for the national economy. The socio-economic reality of the modern era reflects the inability of any national economy to achieve economic development by consuming only the products it creates. The main reasons for this are the inability of energy resources, raw materials, existing technologies and the scale of production to meet its demand. Therefore, foreign trade is of special importance for the countries. As a result, international competition is intensifying. When formulating export strategies, countries must take into account every factor that contributes to the competitiveness of their products and increases the volume of exports. In modern times, the optimal solution of problems such as improving the welfare of the population, ensuring the sustainability of socio-economic development has been the subject of joint discussion of all countries. The solution of the relevant problems can be achieved by increasing the volume of foreign direct investment, achieving an increase in production using innovative methods in production, the use of technological innovations, as well as the solution of the problem of assortment of export products. In addition to ensuring the sustainability of economic development, exports play an important role in opening the national economy abroad. From the perspective of the country's economy, exports create the conditions for a significant supply of resources to the country. From the point of view of enterprises, the fact is that the rational use of these raw materials, as a result of which production costs can be minimized.

2.1. Study of legislative acts ensuring the implementation of export operations in Azerbaijan

One of the steps taken to create a favorable business environment in our country, the development of entrepreneurship, the elimination of artificial barriers to it is the adoption of the law "On Licenses and Permits." The adopted law defines the economic as well as the legal basis for the application of licenses and permits, the directions of economic activity requiring a license in the country, the characteristics of the applied permits, the principles of its application by the state, licensing procedure, licensing during its application regulates the responsibilities

and rights of the bodies participating in its activities, their officials, license holders. With the adoption of the law, transparency in licensing activities has been achieved, albeit partially. The importance of the law can be illustrated in the following figure:

- the number of licensed and permitted activities has been reduced;
- licensing procedures have been simplified, albeit partially;
- the amount of state fees for licenses and permits is minimized;
- requirements for issuing licenses and permits have been simplified;
- issuance of licenses and permits on a one-stop-shop basis;
- the developed electronic portal was made available to entrepreneurs;
- corruption in the field of licensing, at least partially prevented;
- the deadline for obtaining licenses and permits has been shortened.

Despite the reduction of the number of documents required for licensing and permits with the adoption of the law, the number of documents is still higher than in neighboring countries.
The law stipulates the cases of refusal to issue a license in Article 20, and after checking the compliance of the information provided by the applicant, when drawing up an act of refusal, the refusal must be justified in accordance with the law. However, the law does not specify the legal and economic aspects of refusing to issue a license. Also, the lack of discounts on state fees for obtaining licenses and permits to promote small and medium enterprises has a negative impact on the realization of export potential. The concession is not reflected in the law. In order to promote entrepreneurship in foreign practice, licenses are issued based on minimum quality standards if entrepreneurs have the necessary material and technical equipment in the field in which they will operate.

2.1.1. Mechanisms for the implementation of state support to SME in the field of export stimulation

Restructuring of existing mechanisms used by the state to accelerate the development of entrepreneurship in our country, the optimal use of non-oil export potential, the application of nanotechnologies in production, the organization of new processing plants for the development of the processing industry, export financing, real sector investment, SME financing can increase access to resources. As reflected in the strategic roadmaps, the state should first streamline regulation to increase the efficiency of its foreign economic activity, in particular, increase the efficiency of customs tariffs and non-tariffs, as well as the use of tax mechanisms and other economic and administrative regulation methods. In our opinion, in order to stimulate the realization of export potential in our country, work should be done on the following priority areas:

- implementation of institutional changes in the sphere of foreign economic activity in accordance with the economic situation of the market, improvement of the normative-legal base;
- state stimulation of economic activity of exporting firms;
- establishment of branches and representative offices of enterprises with great export potential in foreign countries, as well as revitalization of economic activity as a result of increasing the flexibility of the institutions of interstate chambers of commerce;
- special attention to information services, product packaging, as well as the organization of advertising activities and flexible marketing activities;
- establishment of production cooperatives with foreign colleagues, use of scientific and technological innovations in the organization of production of consumer goods, expansion of the application of new methods in production;

In order to revitalize the competitive environment, increase the importance of entrepreneurship in the country's economy, modern economic mechanisms must be formed to ensure the sustainability of economic policies pursued by the state to protect the private sector, as well as to build on international experience.

Figure 1: Comparison of loans with the correspondending period of 2019, in million Azerbaijan manat
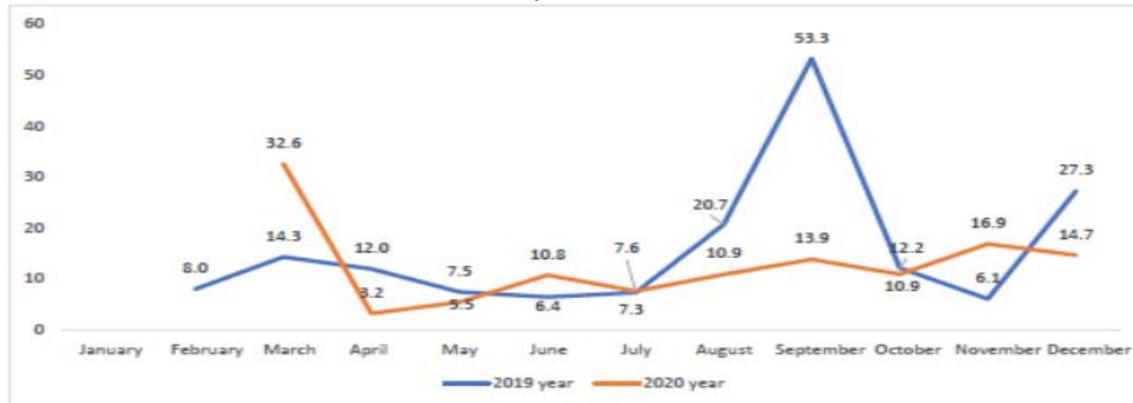
Dynamics and analysis	2020 year	2019 year	Comparison
Number of projects	908	1 573	-42.3%
Total value	397	638.6	-37.8%
Concessional loan	126.9	175	-27.5%
• *Including micro, small and medium enterprises*	106.8	-	-
Debt to Value	31.9%	27.4%	4.5%
Average loan amount	0.140	0.111	26.1%
Average loan term	6.5	7.0	-7.1%
Jobs to be created	2 725	5 363	-49%

Source: The diagram was created by the author based on the information of the Entrepreneurship Development Fund http://anfes.gov.az/

The decrease in the number of business entities wishing to benefit from the preferential financing mechanism provided by the Fund in 2020 compared to the same period in 2019 was due to the negative impact of the coronavirus pandemic on the business environment and economic activity. At the same time, as 50 million manat of the Fund's funds are intended for the implementation of the existing loan portfolio subsidy mechanism, these funds were not used to provide soft loans (Figure 1). The Fund's soft loans are provided to business entities through authorized banks or non-bank credit organizations on their own behalf and at their own risk. Concessional loans are aimed at financing the priority areas identified by the acts of the President of the Republic of Azerbaijan, as well as the decision of the Supervisory Board of the Fund within the socio-economic development of the country. By the Decree of the President of the Republic of Azerbaijan dated June 4, 2020, the "Rules for granting soft loans at the expense of the Entrepreneurship Development Fund of the Republic of Azerbaijan" were approved and the Charter of the Fund was amended. As a rule, in areas requiring long-term investment in agriculture (eg, tea, horticulture, etc.), the loan term for small loans has been increased from 3 to 5 years, and for medium-sized loans from 5 to 7 years.

The main purpose of the mechanism is to reduce credit risks and increase the access of small and medium enterprises to soft loans.At the same time, due to changes in the circumstances related to force majeure (natural disasters, epidemics, etc.), the Rules provide for the restructuring of credit institutions' debt obligations to the Fund and the postponement of credit obligations in the manner prescribed by the Fund's Supervisory Board.

3. ASSESSMENT OF THE CURRENT STATE OF EXPORT OPERATIONS

In January 2021, Azerbaijan's exports amounted to 1.6 billion US dollars.The non-oil sector exported $ 146 million worth of goods.Exports in the non-oil sector increased by $ 5.2 million or 3.7 percent compared to the same period in 2020. In January this year, 52.7 million to Turkey, 42.8 million to Russia, 10 million to Switzerland and Georgia. Non-oil goods worth $ 6.4 million and $ 4.3 million were exported to China. Refers to the non-oil sector exported in January 2020 In the list of goods, dates ($ 16.7 million) were first, cottonseed meal ($ 14.3 million) was second, and shelled hazelnuts ($ 10.2 million) were third. In general, fruit and vegetable exports in January 2021 37 million, cotton fiber exports 14.3 million, aluminum and its derivatives exports of products 13.8 million, exports of chemical products 3 million, exports of ferrous metals and their products 7.8 million, cotton yarn 3.2 million, alcoholic and non-alcoholic beverages 1 million, sugar 1.5 million, vegetable and animal fats and oils 1.7 million, tea Exports amounted to 760,000 US dollars. During February of the current year, 20.1 (20,060,664.97) million USD worth of exports were made through the "Single Window" Export Support Center. Valuable ingots, pomegranates, apple juices, soft drinks, beer, feijoa and quince soft drinks, saffron jams, vegetable and sunflower oils, medical leech, salted sheep intestines, chrome-plated animal skins, internal organs of large and small horned animals, cheese by legal entities and individuals , feijoa and quince spirits, fresh frozen sturgeon meat, dry fruits, condensed milk, ice cream, bird vaccines, exhaust catalysts, steel fittings, steel pipes, steel squares were exported.Among the above-mentioned products are the export of valuable ingots (64.5%), (steel reinforcement (11.7%), sunflower oil (10.1%), cheese (6.1%), fruit juices (1.9%). Certified products were exported to 22 countries - Switzerland (64.5%), Russia (10.4%), Georgia (9.4%), Turkey (7.2%), Ukraine (0.8%), Exported to other countries (7.8%) - (USA, Baltimore, Dubai, Palestine, Poland, Egypt, Belarus, Ivory Coast, Australia, Iraq, Canada, Belgium, Hong Kong, Israel, Kazakhstan, UAE, Uzbekistan) Exports of goods by air (64.9%), automobiles (28.2%), rail transport (6%) and mixed transport (0.9%). It should be noted that the development of SMEs in Azerbaijan is a serious problem. For this reason, macroeconomic policy measures need to be taken to address a number of issues, including clear goals, from the point of view of Azerbaijani citizens, especially entrepreneurs and relevant government officials. Therefore, the implementation of institutional changes that support the development of SMEs and the creation of an enabling environment for their development is of strategic importance. Ensuring the sustainable development of modern entrepreneurship is the basis for the implementation of the strategy of socio-economic development of Azerbaijan. It is the foundation of the innovative and productive nature of the economy. At present, the private sector in Azerbaijan accounts for over 84% of the country's GNP. In the past years, the obligation to create conditions for accelerated rates of stable socio-economic growth has gained widespread popularity in the country.In addition to creating a favorable business environment in the country, it is imperative to establish contacts between entrepreneurs, facilitate their activities, organize networks in crisis situations and regulate relations between the public and private sectors (Figure 2). The development of small and medium enterprises (SMEs) in Azerbaijan is of particular importance in terms of economic diversification, increasing competitiveness, employment, meeting the demand for consumer goods from local resources and ensuring economic development.

Thus, looking at the share of SMEs in GDP and employment in developed countries, it can be concluded that one of the main challenges ahead is to make SMEs the main driving force in ensuring sustainable economic development in Azerbaijan.

Figure 2: Number of micro, small and medium business entities operating by economic activity and types of property

- Agriculture, forestry and fishing
- Industry total
- Mining industry
- Processing industry
- Production, distribution and supply of electricity, gas and steam
- Water supply; waste treatment and processing
- Construction
- Trade; repair of vehicles
- Transport and warehousing
- Tourist accommodation and catering
- Information and communication
- Real estate transactions
- Education
- Provision of health and social services to the population
- Provision of services in other areas

Source:The State Statistical Committee of Azerbaijan Republic

The Strategic Roadmap identifies key areas for economic reform and development in SMEs in the short, medium and long term. This document includes a strategic vision for 2020, a long-term vision for the period up to 2025, and a target for the period after 2025. The Strategic Roadmap outlines not only the strategic goals and objectives for the relevant period, but also the priorities set for achieving the goals set for those years and the measures to be implemented within those priorities. the name of the event, main and other executors, outcome indicators and specific implementation period are reflected. Effective implementation of these priorities in the short term will form the basis of the next steps to be implemented in the medium and long term, thus ensuring the efficiency of the implementation process. The implementation of the Strategic Roadmap will be ensured through communication and cooperation with non-governmental organizations, local and international private sector partners.

In order to achieve the strategic goals set out in the Strategic Roadmap for the development of SMEs in the country and to ensure maximum use of relevant opportunities, the following have been identified as strategic goals:

- Further improvement of the business environment and regulatory framework in the country in order to increase the impact of SMEs on Azerbaijan's GDP in the long run;
- Ensuring efficient and effective access to financing resources in order to create a sustainable network of SMEs;
- Internationalization of SME activities and increasing access to foreign markets in order to increase the country's foreign exchange reserves and ensure compliance of goods produced in the country with international standards.

Table 1: Rating of non-government exports in the non-oil sector for January 2021, in million US dollars compared to the same period last year

NON-STATE EXPORTERS	2020	2021
"MKT PRODUCTION COMMERCE" LLC	6.5	8.4
"ALMEYVE" LLC	0	5.2
"BAKU STEEL COMPANY" LLC	2.8	3
"CRITICAL FRUIT' LLC	0	3.7
"AQROVEST" LLC	1.9	3.1
"SUN FOOD" LLC	1.7	3
"LAND LOJISTIC" LLC	0	3
"P-AQRO" LLC	3	2.9
"METAL TRADE LTD" LLC	0,043	2,6
"RAM INTERNATIONAL TRANSPORT AND TRADE LTD" LLC	1,6	2,5

Source: The table was created by the author based on the information of the Center for Analysis of Economic Reforms and Communication of Azerbaijan Republic

The "Export Review" has compiled a rating of both non-state and state-owned exporters on exports in the non-oil sector in January 2021.The following companies are represented in the top ten in the ranking of non-state exporters for January 2021: "MKT Production Commerce" LLC, "Almeyve" LLC, "Baku Steel Company" LLC, "Critical Fruit" LLC, "Agrovest" LLC, "Sun Food" LLC, "Land Logistic" LLC, "P-Agro" LLC, "Metal Trader LTD" LLC and "Ram International Transport and Trade LTD" LLC (Table 1).

Table 2: Ranking of main state exporters in the non-oil sector by January 2021, in million US dollars compared to the same period last year

STATE EXPORTERS	2020	2021
"SOCAR POLYMER" LLC	11	14.7
"MARKETING AND ECONOMIC OPERATIONS DEPARTMENT" LLC	11.5	14.6
"AZERALUMINUM" LLC	7.8	12.2
"AZERGOLD" JSC	9.4	9.9
"AZERPAMBIQ AGRICULTURAL INDUSTRIAL COMPLEX" LLC	1.2	5.2
"AZERENERJI" OJSC	7.7	0.35
"AZERIPEK" LLC	0	0.239
"AZERBAIJAN RAILWAYS" LLC	0	0.191
"AZERTUTUN AGRICULTURAL INDUSTRIAL COMPLEX" LLC	0	0.064
"AZERBAIJAN AIRLINES" CJSC	0.595	0.055

Source: The table was created by the author based on the information of the Center for Analysis of Economic Reforms and Communication of Azerbaijan Republic

The list of state-owned companies involved in export operations in the non-oil sector is headed by Socar Polymer LLC and the Marketing and Economic Operations Department of the State Oil Company of Azerbaijan. Then the following companies are represented in this list: "Azeraluminium" LLC, "Azergold" CJSC, "Azerpambig Agrarian Industrial Complex" LLC, "Azerenergy" ATSC, "Azeripek" LLC, "Azerbaijan Railways" CJSC, "Azertutun Agrarian Industrial Complex" LLC and "Azerbaijan Airlines" CJSC. The information on the rating of these exporters in the infographics provided through (Table 2).

4. CONCLUSION

In response to the challenges facing the economic development of our country, it is necessary to make a number of institutional and structural improvements. The balance of payments deficit, the negative impact on the financial and banking sector and the non-oil budget deficit have shown the need for the country's transition to a new model of development.It is possible to note some agricultural products of our republic, which have a large export potential. These products include pomegranates, figs, potatoes, natural honey, grapes, saffron, walnuts, hazelnuts, etc. can be attributed. It should be noted that saffron products may have promising export opportunities in the future. At present, the demand for saffron in the domestic market is met by products imported from Iran to our country, which negatively affects local production and hinders the development of saffron. At the same time, the absence of saffron in the Cabinet of Ministers Resolution No. 103 on export-stimulated products has a negative impact on the use of its promising export opportunities. In the future, our country can get large foreign exchange reserves from the export of viticulture and wine products, which have great export potential. However, the lack of competitiveness of wine products in European markets is due to its low quality, as well as the fact that the packaging and advertising of wine products do not meet modern market requirements. Due to the fact that our country is not a member of the WTO, the small export quota set by our countries for wine and wine products of national origin also has a negative impact on the use of its export potential.Although some work has been done to improve the regulatory framework for export stimulation, we believe that in order to achieve a significant increase in the country's export performance, increase the share of non-oil exports in the structure of exports, adopt new laws and eliminate gaps in existing legislation. adaptation is inevitable. The issue of Azerbaijan's membership in the WTO is important in order to increase the export performance of our country and expand the activities of our exporters in foreign markets. Legislation on regulation, intellectual property, as well as investment does not comply with international standards, as well as WTO requirements. In order to increase the attractiveness of investment in the non-oil sector, an incentive mechanism should be created to ensure that foreign investors are interested in investing in the sector, and foreign investors and local investors should be treated equally. It is necessary to improve laws and regulations on investments and bring them into line with international law. There is no legislation on the provision of low interest rates on export loans by banks to exporters to finance exports, and a regulatory framework for export insurance should be established.In order to reduce the tax burden on small and medium-sized businesses that play a special role in exports, it is necessary to transfer the patent tax system applied in many countries to international practice, and the patent tax system should be reflected in the Tax Code. Russia, Kazakhstan, Belarus, etc. are among the countries where the patent tax system is applied. takes place.

5. PROPOSAL

In order to increase the export potential of our country and its realization, it is necessary to liberalize foreign trade as much as possible. The predominance of extractive industry products in the structure of exports reflects the need to increase exports of high-tech processing products.

Weak diversification of exports, both in terms of species and geography, and the very low share of non-oil exports in exports underscore the importance of effective government regulation that creates a healthy competitive environment and transformation into a high value-added export-based economy. In our opinion, the closure of the non-oil import deficit is possible due to the increase in export potential, and the implementation of the following measures can yield positive results:

- The use of advanced technologies that create high added value in industry, management, communications, finance, agriculture, information and other fields, and the invitation of highly qualified specialists to our country as a workforce during the import of these technologies may be considered expedient.
- One of the important measures in increasing and realizing the export potential is the membership of the Republic of Azerbaijan in the WTO. WTO membership can create new opportunities for the country's exporters, simplify foreign trade procedures, lower customs tariffs, increase import and export operations, reduce monopolies, eliminate monopolies, revitalize the free competitive environment, and liberalize foreign trade.
- In order to diversify the export of agricultural products and processed products from a geographical point of view, the maximum use of logistics opportunities to realize the access of these products to the target markets can have an effective impact. Improving the legal and regulatory framework for foreign trade to increase access to international markets for exports of goods and services produced in our country.
- Simplification of foreign trade procedures, minimization of time spent on documentation as a result of flexible execution of documentation in real time, reduction of the number of required documents may make firms interested in export.
- It is important to maximize the unification of tariffs and non-tariffs applied in order to protect the domestic market, to ensure the accuracy and transparency of rate change procedures.
- Positive results can be achieved by eliminating bureaucratic barriers to cooperation with international financial institutions, directing the obtained loans to the implementation of strategic goals related to exports.
- Effective results in export growth can be achieved by accelerating the process of establishing free economic zones and focusing on the export-oriented nature of the established free economic zone.
- It is forecasted that the reduction of the number of activities requiring licenses and permits and the elimination of gaps in the Law of the Republic of Azerbaijan "On Licenses and Permits" will be a positive impetus for the realization of export potential.
- It is expedient to create an agricultural insurance system and ensure favorable insurance conditions.
- The use of the patent tax system can create conditions for the growth of exports. As a result, the legalization of the shadow economy will be possible, and confidence in ownership will increase.
- The reduction of interest rates by the Central Bank, reduction of the required reserve ratio, minimization of interest rates on business loans of commercial banks were assessed as one of the necessary steps taken to increase exports, and the implementation of these measures is considered appropriate to increase exports.
- The establishment of logistics centers and the establishment of a system to monitor their effective operation can be a positive impetus to export growth.
- It is considered acceptable to eliminate gaps and improve a number of legislative acts included in the legal framework of foreign economic activity.

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BUDGET AND TAX POLICY OF THE GOVERNMENT OF AZERBAIJAN AGAINST THE CORONAVIRUS

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ABSTRACT

The challenge of COVID-19, thrown to virtually all human beings, forced them to take urgent decisions. The COVID-19 epidemic required the government to adopt operational solutions to minimize the spread of the virus, as well as to support the economy and the population. Similar to the main areas of anti-crisis policy, the developed and developing countries are differentiated, first, by the volume of support and, secondly, by the set of tools used. Resolutions adopted by the Government of Azerbaijan fully agree with international practice in the areas of support. In this regard, the stated volumes and priority tools of neutralization of the negative socio-economic consequences of the pandemic in Azerbaijan differ from the leading economic world. The most important tasks of the Strategy for the further development of Azerbaijan in the conditions of the pandemic are the improvement of tax administration, the continuation of the course on the reduction of tax breaks and the simplification of the tax system. The main objectives of tax reform in Azerbaijan are to ensure financial security and the development of small and medium enterprises in the country, the creation of favorable conditions for entrepreneurship and budgeting. The creation of a favorable institutional environment for small and medium-sized businesses contributes to the diversification of the economy, the expansion of the non-oil sector on the principles of development, the opening of new jobs and, at the same time, its modernization. Timely reform of the system of state management allows Azerbaijan not only to adequately respond to the challenges of the pandemic period, but also to formulate tasks and defense mechanisms for the entire post-pandemic system of key interference. This work is dedicated to the study of tax policy in Azerbaijan in overcoming the pandemic. There is a review of scientific literature and normative legal acts, synthesis and analysis of the information obtained, as well as comparisons and analogies.
Keywords: *Tax policy, pandemic, tax system, tax benefits and holidays*

1. INTRODUCTION

According to the order, to assess the impact of the coronavirus pandemic on the economy of Azerbaijan, it was instructed to create a working group headed by the Minister of Economy. The working group was instructed to approve the criteria for identifying entrepreneurs affected by the coronavirus within 15 days; prepare a package of proposals and submit it to the Cabinet of Ministers on measures that will allow in the short and medium term to reduce the impact of coronavirus on the business environment and ensure economic growth; determine the amount of possible damage to entrepreneurs. «The Central Bank of Azerbaijan has extended the term for full deposit insurance from March 4 to December 4, 2020, regardless of the amount of deposits, currency and financial condition of banks» (Мамедов,2020). According to the "Order of the President of the Republic of Azerbaijan on a number of measures to reduce the negative impact of the coronavirus pandemic (COVID-19) and the sharp fluctuations in the global energy and stock markets caused by it, on the economy of the Republic of Azerbaijan, macroeconomic stability, employment in the country and business entities »Programs were developed to provide state support to various sectors of the economy and the sphere of entrepreneurship. Azerbaijan is implementing economic support measures worth up to 3.3 billion manats (about US $ 2 billion, or 4% of GDP). The volume of measures to support the Azerbaijani economy in 4 months of 2020 exceeds 4.3% of GDP.

Obviously, the funds are spent not only on anti-storm stabilization - support of citizens and business entities (by the end of May, a total of about 4 billion manat were spent directed to 1.4 million citizens), but also on a structural breakthrough of the national economy in new, globally changed conditions. The total volume of anti-crisis measures, including fiscal holidays and tax rate cuts, at the end of five months of 2020 reaches 4.3% of GDP (Mamedzade, Karavaev (2020). It is worth emphasizing that in recent years, large-scale work has been carried out in Azerbaijan to stabilize the economy, industrial industrialization has been underway, effective measures have been taken to increase transparency in the tax and customs spheres, which ultimately brought significant surplus revenues to the budget.

2. BUDGET POLICY IN THE CONTEXT OF A PANDEMIC
Fiscal policy in many countries acts as a balancing mechanism in two areas - as a tool to ensure the conditions for economic growth and all-round sustainable development of the economy, with one side, and a viable budget system. One of the main objectives of the authorities, the existing budget policy, is the positive impact of the adopted managerial decisions on the economic development of the country as a whole, as a guarantee of the growth of the budget. It is also important to manage budget management not only with the fulfillment of obligations, but also with the development of society and the smoothing of inequality, especially in relation to a well-thought-out balanced policy. The preparation, discussion and adoption of the state budget for 2021, unlike previous years, coincided with a time of great tension and excitement for the people of Azerbaijan, which ended in a glorious victory. Thus, the outbreak of the coronavirus (COVID-19) pandemic at the beginning of this year and its outbreak has affected the social and economic development of the Republic of Azerbaijan, as well as other countries, and hindered the implementation of projects and programs in many areas. When calculating the revenues of the state budget for 2021, the negative impact of the coronavirus (COVID-19) pandemic in 2020 will continue in 2021, OPEC + agreement on the reduction of oil production, changes in the energy market, as well as forecasts of international financial institutions and our country. macroeconomic indicators were taken into account. At the time of the project, the price of a barrel of oil was calculated at $ 40 and the state budget revenues for 2021 were projected at 25,427.0 million manat, which is 1,303.0 million manat or 5.4 percent more than the 2020 forecast. 54.2% or 13776.0 million manat of state budget revenues fall to the oil sector, 45.8% or 11651.0 million manat to the non-oil sector. 88.6% or 12200.0 million manat of the state budget revenues in the oil sector are transfers from the State Oil Fund of the Republic of Azerbaijan, and 11.4% or 1576.0 million manat are revenues from the oil sector through the tax authorities. 48.7% or 5674.0 million manat of the state budget revenues in the non-oil sector were received by the tax authorities, 33.5% or 3900.0 million manat by the customs authorities, 7.6% or 880.0 million manat by the customs authorities. Transfers from the Guarantee Fund of public debt and guarantee liabilities, 2.1 percent or 250.0 million manat from the Central Bank's profit, 8.1 percent or 947.0 million manat other income. Expenditures of the state budget for 2021 are envisaged at 28543.0 million manat, which is 1050.8 million manat or 3.8 percent more than the forecast for 2020. The main factor that characterizes that the state budget expenditures are aimed at improving the welfare of the people and contributes to the sustainable and sustainable development of the country's economy is that it is socially oriented and investment-oriented.

3. TAX POLICY OF AZERBAIJAN IN THE CONTEXT OF A PANDEMIC
Timely reform of the public administration system allows Azerbaijan not only to adequately respond to challenges during a pandemic, but also to formulate tasks and protective mechanisms for the post-pandemic period in a number of key areas in the system of national interests of the country.

Currently, the tax system, which is an integral part of the ongoing in the country and determining the socio-economic line of development of economic reforms, is undergoing reform. The ongoing tax reforms include supporting the development of entrepreneurship, reducing the "shadow economy", increasing transparency, expanding the tax base, increasing the economic efficiency of tax incentives, and improving tax administration. The ongoing reforms will open up new opportunities for the tax system to adapt to the tasks set, establish modern business relations and increase the role of the tax system in the development of the country's economy. The important tasks of the Action Strategy for the further development of Azerbaijan in the context of a pandemic are to improve tax administration, continue the course to reduce the tax burden and simplify the tax system. The main goals of the tax reform in Azerbaijan are to ensure financial security and the development of small and medium-sized businesses in the country, to create favorable conditions for entrepreneurship and to increase state budget revenues. The creation of a favorable institutional environment for small and medium-sized businesses contributes to the diversification of the economy, the expansion of the non-oil sector according to the principle of branching, the creation of new jobs and, at the same time, its modernization. Tax policy in the context of global instability, first of all, should be aimed at supporting the real sector, be stimulating in protecting investment policy and economic competitiveness, should be flexible and support the development of innovative spheres. The need to revise the existing tax rates seems to be an urgent task from both economic and social points of view. The use of a progressive scale will allow, firstly, to increase the incomes of not only the republican, but also regional budgets, which can be used to implement social programs aimed at improving the quality of life of the population. The two Doing Business indicators - Starting business and Paying taxes - are directly related to tax issues. Our country has significantly improved its position in both indicators, over the past year Azerbaijan has risen from 18th to 9th place in terms of "Starting a business", and from 35th to 28th place in terms of "Payment of taxes". "Reducing the "shadow economy", developing the infrastructure of electronic payments and strengthening the institutional base, expanding the introduction of innovative technologies, attracting individuals and business entities to use electronic payment services are of particular importance in the activities of the State Tax Service to achieve progress in increasing the volume of non-cash payments. In order to increase the volume and expand the coverage area of non-cash payments, the tax service is constantly focusing on international trends in this area" (Mamedov, Gasimov.2020). The State Tax Service approved the Action Plan for the implementation of the "State Program for the Expansion of Digital Payments in the Republic of Azerbaijan in 2018-2020" and established modern standards for more effective organization of activities in this area (https://www.taxes.gov.az/ru/page/umumi-melumat).

4. THE PROGRAM OF TAX INCENTIVES, PRIVILEGES AND TAX HOLIDAYS FOR BUSINESS ENTITIES IN A PANDEMIC

In addition, on June 2, Azerbaijan adopted amendments to the Tax Code and introduced temporary tax breaks and vacations designed to reduce the negative consequences for enterprises. Measures included abolishing land and property taxes throughout the year, as well as reducing income taxes and social security contributions for businesses particularly hard hit by the pandemic. The government also seeks to provide financial support to individual entrepreneurs and business owners and help them pay wages; for this, an online platform is used to transfer funds directly to the bank accounts of the persons concerned. By the end of July 2020, over 100,000 microentrepreneurs received 63.55 million manats (37.4 million US dollars), while nearly 30,000 entrepreneurs' applications for assistance in paying wages were approved for a total amount of about 98 million manats (57, $ 7 million). In August, entrepreneurs who retained workers received additional financial assistance in the amount of a

monthly wage fund. In addition, the Agency for the Development of Small and Medium-Sized Enterprises has begun to conduct online seminars for entrepreneurs facing economic difficulties associated with the pandemic to raise their awareness and provide them with information on existing support measures. According to the amendments, from January 1, 2020, hotels and other tourism facilities, the activities of tour operators and travel agencies, the catering sector, car passenger transportation within the country, including taxi activities, are completely exempt from property and land taxes for a period of one year (https: //tourism.interfax.ru/ru/ news/articles/69737/). In addition, the activities of delivery services, the sphere of organizing exhibitions and stage activities, cinemas, museums, theaters and concert halls, activities of sports and recreation facilities, educational courses, out-of-school educational institutions, and psychological centers are exempted from taxes on property and land. The release will also affect other areas, whose activities have been partially or completely suspended due to the quarantine regime introduced by the Cabinet of Ministers. Along with this, from January 1, 2020, for a period of one year, a number of additional benefits will be introduced for the above areas, depending on the tax regime. Payers of income tax (or income tax - IF) will receive benefits in the amount of 75% (of the tax amount payable), payers of simplified tax - in the amount of 50%. For taxpayers who are not micro entrepreneurs, the deadlines for payment of taxes on profits (or income tax - IF) and property assessed for 2019 have been extended until September 1, 2020. Also, the accrual of interest on unpaid taxes, contributions for compulsory social insurance and unemployment insurance has been postponed from April 1, 2020 to January 1, 2021. The program of tax incentives, privileges and tax holidays for business entities operating in areas that have suffered losses from the coronavirus pandemic:

1) Provision of privileges for a certain period for micro-business entities under a simplified tax.
2) Exemption for a certain period of taxpayers from payment of property and land tax
3) Exemption in an appropriate volume and for a certain period of taxpayers from paying income tax (income tax).
4) For the catering sector - a reduction in the simplified tax rate, exemption from taxation of payers of income tax (income tax).
5) Exemption for a certain period from VAT of certain categories of taxpayers.
6) Exemption from the implementation of current tax payments in the fields of activity, which will be provided with benefits;
7) Extension of the deadline for payment of income tax (income tax) based on the results of 2019.
8) Extending the deadlines for paying taxes and the deadlines for filing tax returns.
9) Exemption for a certain period from VAT for goods necessary to meet the food and medical needs of the population (exemption from VAT on imports and sales of certain goods).
10) For the purpose of flexible regulation and provision of food, medical and other important needs of the population, exemption of raw materials and materials used for the production of goods for the specified purpose from VAT.
11) Tax exemption for donations from individuals and legal entities to the Corona Virus Support Fund (for income tax and income tax).
12) Application of VAT at a zero (0) rate to free services provided in order to prevent the epidemic.

According to the Ministry of Economy of Azerbaijan, these tax benefits are estimated at 114 million manats ($ 67 million) (https://www.oecd.org).

5. CONCLUSION

As a conclusion of the study, we note that over the past ten years, the priorities of the economic development strategy in the country have been to improve the investment and business environment, aimed at the development of small and medium-sized enterprises in Azerbaijan, the adoption of regulatory legal acts in this industry, or their improvement by making changes and additions to the current legislative acts, as well as attraction of local and foreign investments, modern technology and management experience, thereby ensuring the production of high-quality and competitive products. It is worth emphasizing that in recent years, large-scale work has been carried out in Azerbaijan to stabilize the economy, industrial industrialization has been underway, effective measures have been taken to increase transparency in the tax and customs spheres, which ultimately brought significant surplus revenues to the budget. The important tasks of the Action Strategy for the further development of Azerbaijan in the context of a pandemic are to improve tax administration, continue the course to reduce the tax burden and simplify the tax system.

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ANALYSIS OF THE IMPACT OF AZERBAIJAN'S OIL STRATEGY ON THE DEVELOPMENT OF NON-OIL SECTORS

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ABSTRACT

After the independence of the Republic of Azerbaijan in 1991, the main leading area of national economic development fell to the oil sector. Despite the country's economic difficulties in the first years of independence, foreign investment in the oil and gas sector in 1995 by the world's leading companies boosted the economy. The signing of the so-called "Contract of the Century" agreement with the oil companies of developed countries (DCs) in 1994 played an important role in increasing the country's financial capacity, boosting economic growth and maintaining currency stability in the following years. The full operation of the Baku-Tbilisi-Ceyhan oil pipeline in 2006 led to the peak of oil export revenues to Azerbaijan between 2006 and 2012 and led to the rapid development of the national economy. Azerbaijan's new oil strategy started with the "Contract of Century" between newly-independent Azerbaijan and multinational oil corporations reached the following achievements. Ensuring rapid access of Azerbaijan to the world energy market through the involvement of international oil corporations in oil and gas projects, foreign business circles as a whole, establishment of an export pipeline system to ensure free and rapid access of Azerbaijani oil to the world market, sighing of 26 oil agreements with foreign oil companies since the contract the Deal of the Century. The oil strategy of Azerbaijan provided the flow of billions of dollars into the national economy, and the gained money supports the reform today non-oil export sectors including manufacturing, agriculture, non-oil industry as well as entrepreneurship. This paper illustrates that the oil strategy of Azerbaijan today provides the flow of petrodollars to Azerbaijan, and this in turn provides liquidity of the reform in non-oil sectors.
Keywords: Oil strategy, Azerbaijan, non-oil sector, diversification

1. INTRODUCTION

After the independence of the Republic of Azerbaijan in 1991, the main leading area of national economic development was oil and gas sectors. Despite the country's economic difficulties in the first years of independence, foreign investment in the oil and gas sector in 1995 by the world's leading companies boosted the economy. The signing of the so-called "Contract of the Century" agreement with the oil global companies of developed countries in 1994 played an important role in increasing the country's financial capacity, boosting economic growth and maintaining currency stability in the following years (Spatharou, 2002, p.29). The full operation of the Baku-Tbilisi-Ceyhan oil pipeline in 2006 led to the peak of oil export revenues to Azerbaijan between 2006 and 2012 and led to the rapid development of the national economy (Balat, 2006.p, 118). Azerbaijan's oil strategy was about constructing oil and gas pipelines systems from the Caspian to the West, the development of oil and gas transportation infrastructure as well as providing access of national energy sector to western capital and western markets freely (Kaynak and Nasirova, 2005, p. 34; Ismailzade and Babayev, 2020, p.

80). However, the sharp fall in world oil prices, which began in 2015, and the decrease in oil production in Azerbaijan began to have a negative impact on the country's income. Given that Azerbaijan is a revenue-generating economy from oil exports, falling production and volatility in world oil prices have made the development of the non-oil sector and economic diversification at the expense of oil revenues crucial for the sustainability of the economy. Improving competitiveness, identifying areas for research into the integration of the non-oil export sector into the world economy and preparing proposals are extremely important both for the relevance of research and for the development of the national economy in practice. It is important to note that the only way to reduce the country's dependence on oil revenues is to build a non-oil export sectors, integrate them into the world economy and ensure the country's revenues from different sources. Since 2004, it has been emphasized both in the official speeches of the President of the Republic of Azerbaijan, Mr. Ilham Aliyev, and in the programs for the economic development of the Azerbaijani economy and its regions. The development of the non-oil sector and the need to increase non-oil exports are reflected in the development concept "Azerbaijan 2020: vision for the future", "Strategic Roadmap for the national economy of the Republic of Azerbaijan", "Social development of the regions of the Republic of Azerbaijan in 2019-2023", State Program of Economic Development "and other documents. In 2016, the "Strategic Roadmap for the National Economic Prospects of the Republic of Azerbaijan" approved by the Decree of the President of the Republic of Azerbaijan No. 1138 dated December 6, 2016, in order to increase Azerbaijan's income from non-oil exports, determining agricultural production, tourism, heavy industry, machine building, logistics, trade, small and medium businesses, as well as information technologies as priority areas. Despite all the necessary measures the analysis of Azerbaijan's economic exports in 2019 show that 91.6% of Azerbaijan's total exports, including oil; fell on mineral fuels, which brought Azerbaijan $18.4 billion in revenue. Exports of agricultural products are second with a small percentage and do not bring significant revenues compared to oil products. The analysis of these indicators raises challenge that the country's revenues will decrease in the post-oil period and makes the study of the integration of the institutional structure of the non-oil export sector into the world economy and the development of proposals in the required areas an extremely important. This paper examines the development dynamics of main non-oil sectors prioritized by the government of Azerbaijan and shows that the oil strategy has been providing the flow of petrodollars to Azerbaijan, and this in turn provides liquidity of the economic sectors for reform.

2. KEY NON-OIL SECTORS AND THEIR DEVELOPMENT DYNAMICS

President Ilham Aliyev spoke at a Davos World Economic Forum interactive session on Strategic Outlook: Eurasia in 2018 and said that "as a source of big income, we should look at technology, innovation, manufacturing, entrepreneurship, and agriculture" as an alternative to oil (President.az, 2018). Also, the directions of the non-oil export sector determined by the Azerbaijani government include support for the agricultural and processing sectors, the industrial sector and entrepreneurship. In addition, tourism, information technology development and the establishment of logistics centres are important for the Azerbaijani government. The UAE, Nigeria and Norway models on economic diversification show that successful integration into the global economy and strengthening of competitiveness are among the most important indicators for increasing the export potential of the economy. The analysis of the models from an international perspective shows that the most successful and appropriate model for Azerbaijan is the UAE model (Babayev, 2019, p.77). The UAE has an open economy; it integrated into the world economy; has a competitive economy as well as its WTO membership have enabled the UAE today to reduce its dependence on oil exports by 12%. Neither Nigeria nor Norway, a success story in oil revenue management, has achieved this. The agricultural sector is one of the most important sectors in the Azerbaijani economy that can be

reformed. Agriculture is the most profitable sector in Azerbaijan's exports after oil. After 2018, after the oil sector, the sector that brings 3% of income to the country falls on agriculture (Aliyev and Gasimov, 2018, p. 177-195). The main way to the global integration of agriculture is to increase agricultural exports and diversify markets by attracting investment in this area. In addition, the state must make significant investments in infrastructure and irrigation. At the same time, there is a serious need to increase productivity and increase the competitiveness of products produced in industrial processing enterprises which can support this sector. Azerbaijan's agriculture sector employs 37 percent of the population and has been regarded as one of the country's earliest engagements by the local population since ancient times. Azerbaijan's agricultural exports are second only to oil exports in terms of foreign trade indicators. Azerbaijan's agricultural sector has enormous potential due to its fertile soils, natural water supplies, and diverse climate zones. In recent years, the government has made major investments in agriculture, and large-scale reforms are in the works. According to experts, the agricultural sector will expand rapidly in the coming years. The state's agricultural growth priorities are outlined in the Strategic Roadmap for Agricultural Development (2016: 41). The state's goal is to improve agricultural production's competitiveness by 2025. (2016: 45). The strategic map shows that modern farms need the implementation of technologies and agricultural automation in order to improve productivity (2016: 45). The non-oil export field also involves industrial production. As it comes to the industrial sector, it is divided into light and heavy industrial sectors. The industrial sector, mining industry, manufacturing industry, energy, coal, steam processing, distribution and supply, and water supply, as well as waste management, are all part of Azerbaijan's national industry. Textiles, fabrics, carpet weaving, leather goods, and footwear manufacturing are all part of the industrial sector (Ministry of Industry of Azerbaijan, 2016: 2). The light industry is characterized by its low capital requirements and reliance on manual labor to drive production. Despite Azerbaijan's significant investment in the development of industrial facilities and parks, the majority of existing industrial enterprises are inefficient. To endorse industrialization, Azerbaijan has chosen "import substitution." However, this technique, which was widely used by Latin America's and Africa's least developed countries between the 1930s and 1980s, struggled to yield results (Yilmazkuday, 2003, p.2-14). Since industrial development necessitates significant investment, the majority of the funds invested in this sector were genuine petrodollars raised by Azerbaijan as a result of its oil strategy. However, it still needs to be reformed. The growth of small and medium-sized businesses (SME) and their potential for export remains a third important component of the non-oil export market. SMEs are at the centre of the global economy and play a key role in job growth. The Strategic Roadmap, which includes several activities for SMEs such as the establishment of a centralized SME department, the establishment of clusters, the creation of business incubators, and start-ups, has aided entrepreneurship in Azerbaijan (2016: 5). Furthermore, the growth of technologies in Azerbaijan has been reflected in the country's main strategic maps in order to boost efficiency and competitiveness in various sectors. The government believes that all sectors should benefit from innovation-driven growth (Babayev, 2019: 140; Babayev and Hajiyev, 2019:312).

3. ANALYS AND POLICY RECOMMENDATIONS

The relationship between Azerbaijan's oil policy and the growth of non-oil sectors can be summarized in a single sentence. Azerbaijan's oil policy has brought oil revenues to the country, which has aided in the massive implementation of reforms in the following fields.

3.1. The agricultural sector

The agricultural sector is one of the most important sectors in the Azerbaijani economy that can integrate into the world economy. As mentioned earlier, agriculture is the most profitable sector

in Azerbaijan's exports after oil. After 2018, after the oil sector, the sector that brings 3% of income to the country falls on agriculture. The main way to the global integration of agriculture is to increase agricultural exports and diversify markets by attracting investment in this area and moving to an open economy model. In addition, the state must make significant investments in infrastructure and irrigation. At the same time, there is a serious need to increase productivity and increase the competitiveness of products produced in industrial processing enterprises. At present, Azerbaijan's agrarian policy is set in the right direction. Another role of the state is to simplify exports to farmers and provide access to information. Simplification of tax, transaction and export regulations in the local context will increase the interest of farmers and individual investors in the country's agriculture. In order to accelerate trade while increasing agricultural productivity, World Trade Organization (WTO) membership makes it inevitable that Azerbaijan will have ample opportunities to integrate its agricultural system into the world economy.

3.2. Entrepreneurship

The development of small and medium enterprises is one of the main promising areas for increasing the exports of the non-oil sector in Azerbaijan. It is the involvement of small and medium-sized enterprises in agriculture, processing and light industry that can lead to development in the field and increase the export potential of businesses operating in the national economy. Therefore, it is important to establish a national competition system to be ready to compete in the world economy. It must be mentioned that the role of the state is to create a fully competitive environment for the development of small and medium enterprises and create the most favourable conditions for the growth of new firms. When applying Porter's Diamond Model, it is easy to see that countries need four key factors to increase their competitiveness. The first is the existence of factors of production (capital, raw materials), the structure and level of competitiveness of the national economy, the existence of clusters and consumers (Grant, 1991: p. 535-548). The level of competition and the competitive philosophy of firms lead to more development the greater the competition. Firms that are developed and strengthened by competition in the domestic economy and increase their profits can easily withstand the competition that dominates the world economy. Therefore, the only step facing the Azerbaijani state should be the formation of a fully competitive environment in the country's economy. In this regard, although the reforms that started in 2019 go in this direction, judicial reforms in 2020 and the formation of a competitive environment in the economy and the creation of equal opportunities for entrepreneurship can create opportunities for the integration of domestic firms into the world economy. The application of a free trade model in the country's economy and accession to the WTO open up great opportunities for firms to integrate into the world economy. However, given the local competitive environment and the level of development of firms, it is important to note that prior to integration, there is a need to strengthen the competitive environment, improve legislation, introduce working mechanisms, and have an independent, flexible and low-cost judicial system. This, in turn, goes through institutional reforms, good governance and infrastructure investment. It is very important to learn and apply foreign experience to promote business activities. Surely, Azerbaijan's policy through the newly established Small and Medium-Sized Development Agency (KOBIA) is a good measure. The provision of consulting services to entrepreneurs, the strengthening of business education, the establishment of incubators, and export support are part of a successful policy to strengthen small and medium-sized enterprises. While loans and financial access to the Entrepreneurship Support Fund are all part of a successful public policy, the government's greatest role is to create a competitive environment for integration and remove all barriers to firms' empowerment. Minimizing the administrative costs associated with permits for companies engaged in export activities can increase the number of these companies.

3.3. Industry

Light and heavy industries with comparative advantages of Azerbaijan should be identified. State investments in inefficient enterprises should be saved and invested in areas with comparative advantage. From the history of light industry to the history of carpet weaving, silk, cocoons, and cotton garments, the Azerbaijani economy can compete abroad. It is important to note that although Azerbaijan is currently building many new industrial enterprises, it is mainly used to meet domestic needs. As for heavy industry, the Strategic Roadmap for the Development of Heavy Industry and Mechanical Engineering in the Republic of Azerbaijan states that traditional heavy industry and machine building in Azerbaijan include "ferrous and nonferrous metallurgy, chemical industry, aerospace industry, military industry, household appliances, electricity, energy and transport. production of equipment, agricultural machinery "(p. 5). At the same time, the map notes that the work done for the development of industry is public investment, the construction of industrial parks, and the training of personnel working in the field of industry. There is a serious need to assess Azerbaijan's industrial policy. There is a serious need to identify specific areas, reduce efficiency areas and prepare effective areas to compete in the world economy. Strengthening the national education system should be part of the policy and should be implemented in parallel. While there are prospects for the integration of industry into the world economy, it is important to note that a few results have been achieved in this area. Azerbaijan's economy is developing industry to meet the needs of local consumers, which could result in the country losing significant incomes and facing major failures in the post-oil era without government support. Industrial liberalization, integration into the world economy, and increasing competitiveness. According to Porter's diamond model theory to determine the competitive advantage of countries, the advantage of competition in the economy indicates that the country is more successful in international competition. This is true in all three sectors of Azerbaijan's industry.

4. CONCLUSIONS

In conclusion, it is important to note that Azerbaijan's oil strategy mainly associated with the full operation of the Baku-Tbilisi-Ceyhan oil pipeline in 2006 led to the peak of oil export revenues to Azerbaijan between 2006 and 2012 and led to the rapid development of the national economy. The gained money from oil has enabled the Azerbaijani government to invest in the development of the non-oil export sectors in order to achieve economic diversification. Successful implementation of economic reform in Azerbaijan has a direct association with oil income that provides funding for supporting reforms and entrepreneurship. As for the Azerbaijani economy, the country's documents show that the development of the non-oil sector is one of the most important for the country's economy. For many years, the Azerbaijani economy has been dependent on oil revenues. Although between 90 and 95% of the country's export earnings are currently provided by oil exports from various sources, several areas have been identified as priorities for the development of the non-oil sector. These areas include the agricultural sector, the development of light and heavy industry, the development of small and medium enterprises, tourism, communication technologies, innovations and technology development. The country has adopted strategic development maps for the development of these areas, and large public investments are being made in the development of these sectors. Starting in 2019, large-scale institutional reforms have been launched to diversify the economy, and joint projects are implemented with international organizations. It must be mentioned that WTO membership, trade liberalization and integration into the world economy in Azerbaijan is a necessary process to increase the export potential of the non-oil sector. However, the first factor hindering the country's economic liberalization is the country's dominance in oil products in trade. The current alternative is that dependence on oil poses a serious issue to the economy in the future.

However, increasing the competitiveness of the economy, building the industrial, processing and agricultural sectors with quality indicators of the world economy can accelerate Azerbaijan's WTO membership and integration into the world economy. Competitiveness and institutional harmonization must be ensured, and government agencies must continue to carry out institutional arranegments for economic development.

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XENOBIOTICS - AS A MAJOR FACTOR AFFECTING HUMAN HEALTH

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ABSTRACT
In this article, we propose to consider the problem of human interaction as a biological species with a multitude of synthetic and strange substances in general, which have recently been intensively added to the huge amount of natural xenobiotics produced by plants, fungi, microbes and viruses.This problem is considered to be general biological, where chemicals, among other things, were and especially now are the most powerful factor of evolution and natural selection. Nutrition is one of the most important factors mediating human relationship with the external environment, and determining the state of health. Rational nutrition creates conditions for the normal physical and mental development of the body, supports high performance, contributes to the prevention of diseases, and provides significant attention to the ability of the body to withstand the effects of adverse environmental factors of the physical, chemical and biological nature. Currently, the problem of xenobiotics as a whole has not only been developed, but also has not been touched. It should be noted that the identification of particular aspects of the effect of xenobiotics on humanity does not exhaust the problem of the relationship of living beings with chemical compounds of the environment. The value of the chemical factor of natural selection with the development of civilization will increase until a certain point, when scientists and society realize the tremendous importance of studying this problem and will not learn to control this system of the body.
Keywords: *xenobiotics, human health, environment, balanced diet, harmful factors*

1. INTRODUCTION

The ability and necessity inherent in all living nature to perceive and use the most diverse information from the environment have developed for millions of years to the highest level that academician V. I. Vernadsky called as "noosphere", hereby emphasizing that this concept also covers economical and informational fields of this environment. In this chain, the chemical environment is the most important evolutionary factor that studies living organisms and humans as well [1]. Nutrition is one of the most important factors mediating human relationship with the external environment, and determining the state of health. Rational nutrition creates conditions for the normal physical and mental development of the body, supports high performance, contributes to the prevention of diseases, and provides significant attention to the ability of the body to withstand the effects of adverse environmental factors of the physical, chemical and biological nature [2]. It is known that the impact of harmful factors of external and internal human environment leads to the emergence of mutagenic, carcinogenic, allergic and other effects that really depend on the "dose" and "time" of exposure to humans. Therefore, a detailed analysis of these phenomena on the basis of advances in biochemistry, immunology, molecular pharmacology and bio-cybernetics allowed the concept of an immunochemical functional system of homeostasis to be formulated, according to which a living organism

maintains a continuous dialogue with the chemical environment, and through this dialogue provides its adaptation to emerging changes in itself [3]. It is known that chemicals can cause diseases, and simultaneously can protect and heal a person. It is necessary to emphasize that the use of these substances for medicinal purposes has already played an enormous role in the development of mankind, comparable in its significance to the discovery of fire in ancient times, the development of agriculture and cattle breeding, or the recent development of atomic energy. Humans cannot develop without pharmacology (or rather, without pharmacology and immunopharmacology) [4].

2. THEORETICAL ANALYSIS

At first glance, the idea expressed by us may seem phenomenal. But the mankind could not increase its number, create a modern civilization, live in big cities, and communicate intensively if vaccination methods, disinfectants, antibiotics, sulfamides, food preservatives, etc. had not been discovered. Achievements of pharmacology and immunopharmacology are powerful factors that alter, and at the same time weakens the natural selection among people. This allows you to put natural selection under conscious control and realize the potencies of the human gene pool much more widely [5].

Figure 1: Disruption of the DNA structure of the body

However, a huge amount of various chemical substances, introduced by mankind into life, create new, mostly uncertain and alarming situations. A significant part of these compounds is strange for humans and other creatures of the biosphere. The concept of unusualness is specific and concrete: for a given organism, a compound that is not a habitual component of food, drink, a gaseous medium over a sufficiently long period of evolutionary development will be strange. The name of such substances xenobiotics takes its root from here (from Greek - stranger, - life) [6]. Many natural substances that have long existed in the biosphere are, nevertheless, genuine xenobiotics for humanity or its individual populations. This is explained by the fact that the regions in which such substances occur are recently started to be inhabited by humans (for example, migration of the European population to tropical regions). The rapidly growing man-made flow of chemicals in millions of ways affects the livelihoods, destroying the harmony of biochemical transformations in the biosphere. A man as a part and generation of the biosphere assumes the largest and most sophisticated share of this chemical avalanche. For example, a modern person receives an average of about 7 kg of xenobiotics annually. Medicines and industrial pollution, insecticides, household chemicals, all food additives and preservatives, substances with which a person deals at work (occupational hazard) are the main components of the world of new chemistry (new for human as a biological species) [7].

Figure 2: Main sources of complex effects of xenobiotics on human body.
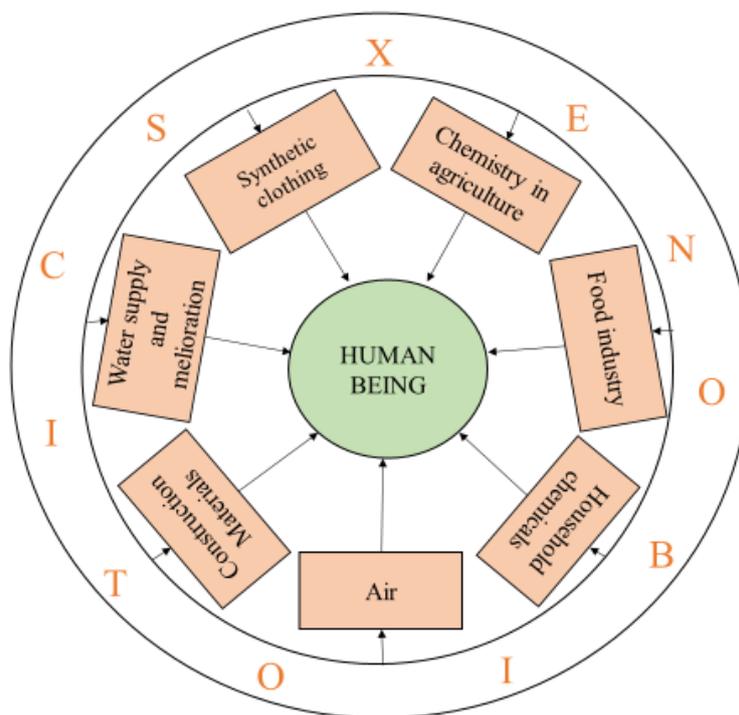
Considering the problem of the relationship of living beings with chemical compounds of the environment, they usually speak of some obviously dangerous substances: poisons (heavy metals, carbon monoxide, etc.), carcinogens (polycyclic hydrocarbons, azo dyes), mutagens, etc. This is natural. A modern man daily receives a certain amount of xenobiotics with food, drugs, through the skin and lungs. There are many compounds among xenobiotics that are relatively poorly soluble in water. Such substances, as a rule, dissolve well in fats, and in a living organism they are embedded in membranes, hydrophobic regions of protein molecules, and DNA. Living beings fight for the chemical purity of their internal environment, actively converting such xenobiotics through chemical reactions into water-soluble compounds and then removing them from the body in usual ways. The ingestion of xenobiotics (including drugs) into the body of premature babies, whose system that removes fat-soluble xenobiotics functions very poorly, can lead to tragic consequences [8-10]. Let these substances particularly in doses; actually received by a person, (the average person!) be harmless. However, such regular absorption of strange chemicals can have a significant effect on the body. The enormous genetic diversity of people and dozens, hundreds of xenobiotics that enter each organism make such situations not exotic, but rather ordinary. It is very important that children are generally much more sensitive to xenobiotics. Besides these individual aspects, there is also a population-evolutionary aspect of the same problem. It has been established that there are individuals with whom the introduction of xenobiotics causes the appearance of intracellular enzymes that processes fat-soluble xenobiotics, and individuals with whom this reaction is weak. Which group, by the will of the "genetic game," this or that person will get is of paramount importance (but little understood by doctors and other specialists yet) for his fate.

3. CONCLUSION

Currently, the problem of xenobiotics as a whole has not only been developed, but also has not been touched. It should be noted that the identification of particular aspects of the effect of xenobiotics on humanity does not exhaust the problem of the relationship of living beings with chemical compounds of the environment.

The value of the chemical factor of natural selection with the development of civilization will increase until a certain point, when scientists and society realize the tremendous importance of studying this problem and will not learn to control this system of the body.

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DIRECTIONS OF BUDGET FINANCING OF SCIENTIFIC AND INNOVATIVE ACTIVITY IN THE REPUBLIC OF BELARUS

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ABSTRACT

The purpose of the article is to consider the financing of scientific and innovative activity in the Republic of Belarus. Improving the effectiveness of an innovative development strategy of organizations in national social and economic systems is one of the key objectives in today`s conditions of strong competition.
Keywords: *Innovation activity, Planning, Financial resources, Social processes*

1. INTRODUCTION

Improving the effectiveness of an innovative development strategy of organizations in national social and economic systems is one of the key objectives in today`s conditions of strong competition. Manufacturers strive to create a unique product (work, service) that will distinguish them from other organizations of the same industry, this way creating additional competitive advantages. To strengthen this process in order to generate and implement innovations it is advisable that organizations function on a basis of cooperative resource model. It is based on cooperation of partner organizations (temporary or consequently permanent) of the research and education sector, the real economy sector, the business sector, the government sector and public sector. The process of cooperation itself provides access to scarce resources of partner organizations, which in turn is an opportunity to create a competitive product both for the national and foreign market.

2. DIRECTIONS OF BUDGET FINANCING OF SCIENTIFIC AND INNOVATIVE ACTIVITY

One of the most important steps in the process of innovation activity, which should be thoroughly planned together with the process of generating innovation in order to overcome emerging obstacles (or initially defined ones), is searching financial resources for the proposed innovative solutions (proposals). Without financial resources it is impossible to properly implement an innovation project (on a sufficient technical, professional and competent level, considering the expected results). According to the results of the author`s previous studies, based on international surveys (2021a) of representatives of scientific and educational organizations, industrial enterprises, business entities, state authorities and public organizations about problematic aspects that prevent the increase in the effectiveness of innovation activity in organizations operating within the cooperative resource model, the biggest obstacle was the insufficient funding. One of the most important steps in the process of innovation activity, which should be thoroughly planned together with the process of generating innovation in order to overcome emerging obstacles (or initially defined ones), is searching financial resources for the proposed innovative solutions (proposals). Without financial resources it is impossible to properly implement an innovation project (on a sufficient technical, professional and competent

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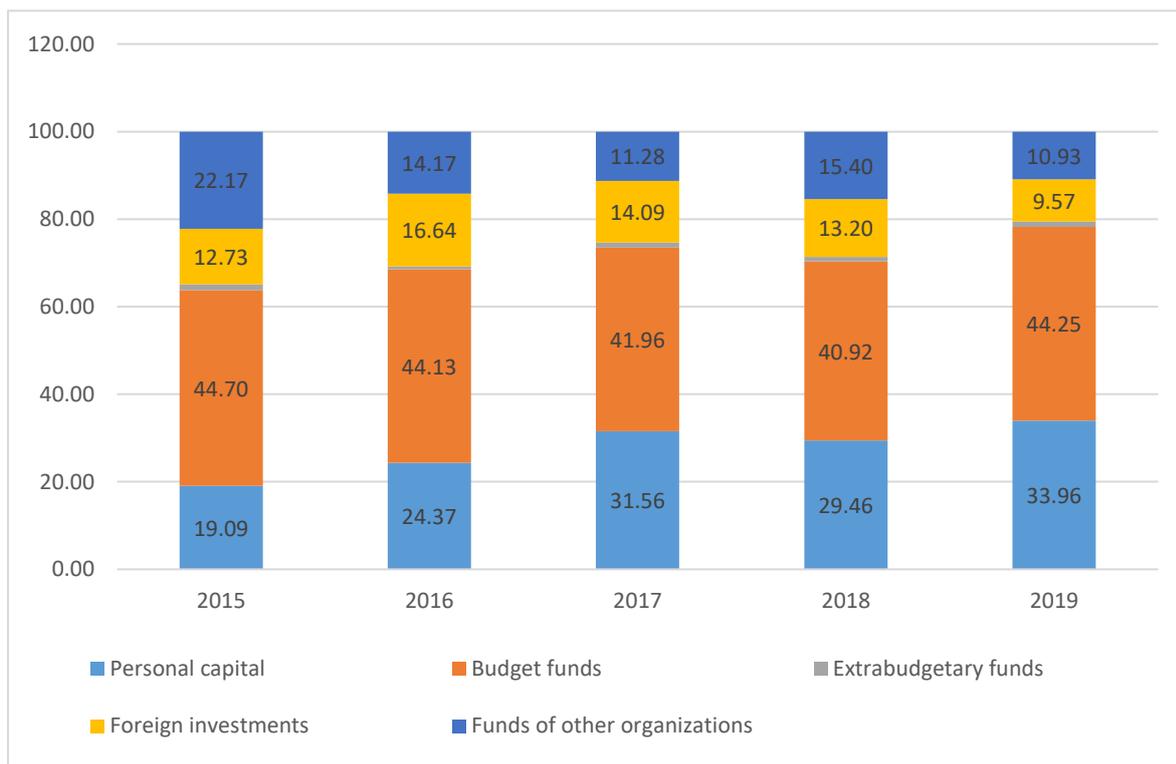
Figure 1: Structure of the sources of funding for domestic expenditures in research and development in the Republic of Belarus for 2016-2019, %

The largest share of the sources of funding for domestic expenditures on research, scientific and technological activities and innovations belongs to budget funds (44,25% of total amount of all sources of funding in 2019) (Fig. 2). Budget funds, in turn, cover financing expenditures of the republican budget on research, scientific and technological activities and innovation, republican centralized innovation funds and local innovation funds.
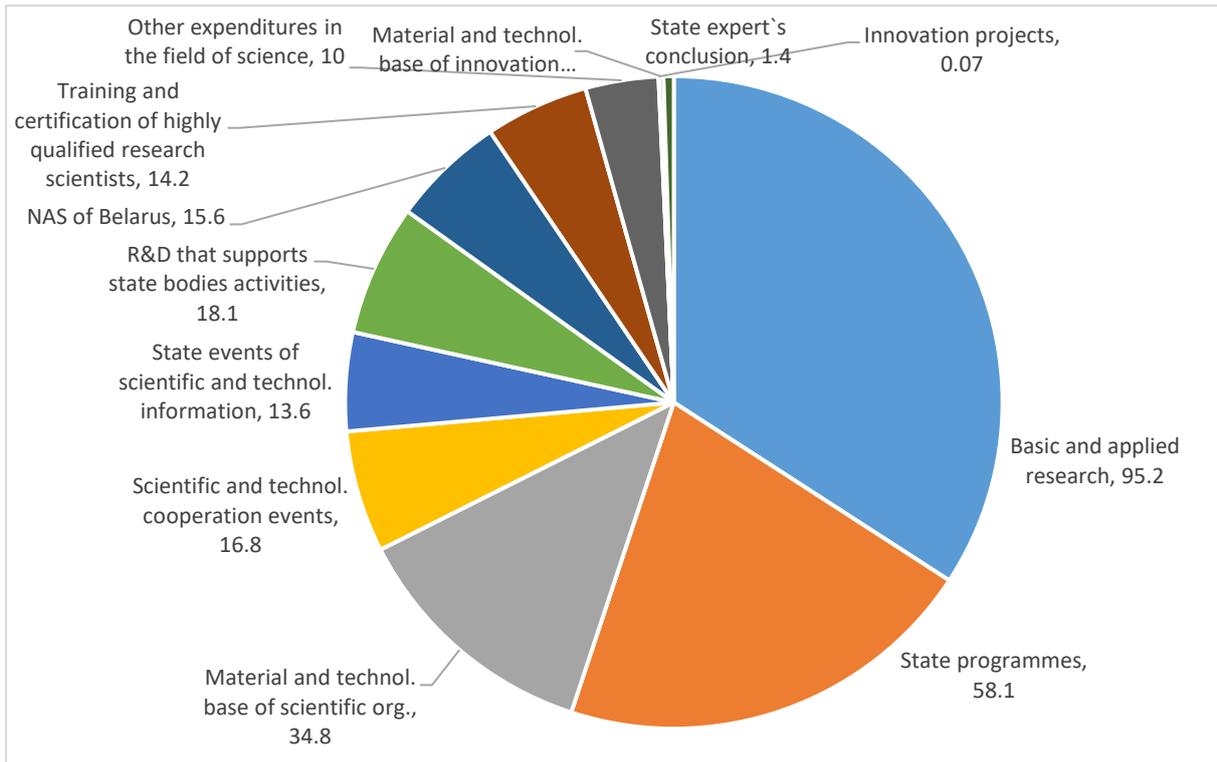
Figure 2: Structure of the republican budget expenditures on research, scientific and technological activities and innovations for 2019, million rubles

The statistical data demonstrate that the areas with the highest financing priority are basic and applied research (34,2% of total amount of funding), state research programmes, state scientific and technological programmes (20,9%), development of material and technological base of scientific organizations (12,5%). The largest share of the budget funds on research, scientific and technological activities and innovations the Republican centralized innovation fund allocates for applied scientific research (42.2%) and implementation of the State programme of innovation development (34%) (Fig. 3).
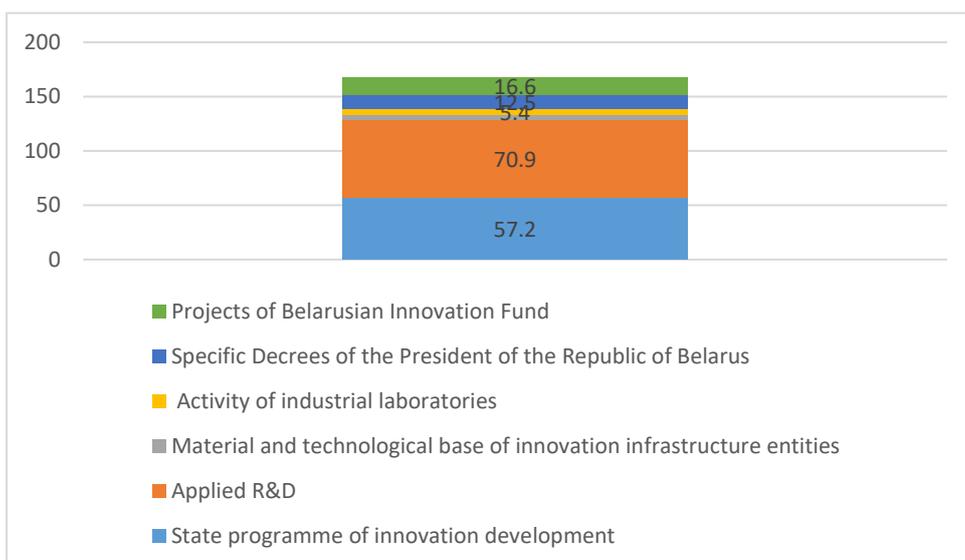
Figure 3: Expenditures of the Republican centralized innovation fund on research, scientific and technological activities and innovations in 2019

The largest share of the expenditures of local innovation funds is allocated for implementation of the State programme of innovation development (41%), development of material and technological base of the entities of innovation infrastructure (29%) and financing the expenditures of industrial laboratories (20,1%) (Fig. 4) (2021b; 2021c).
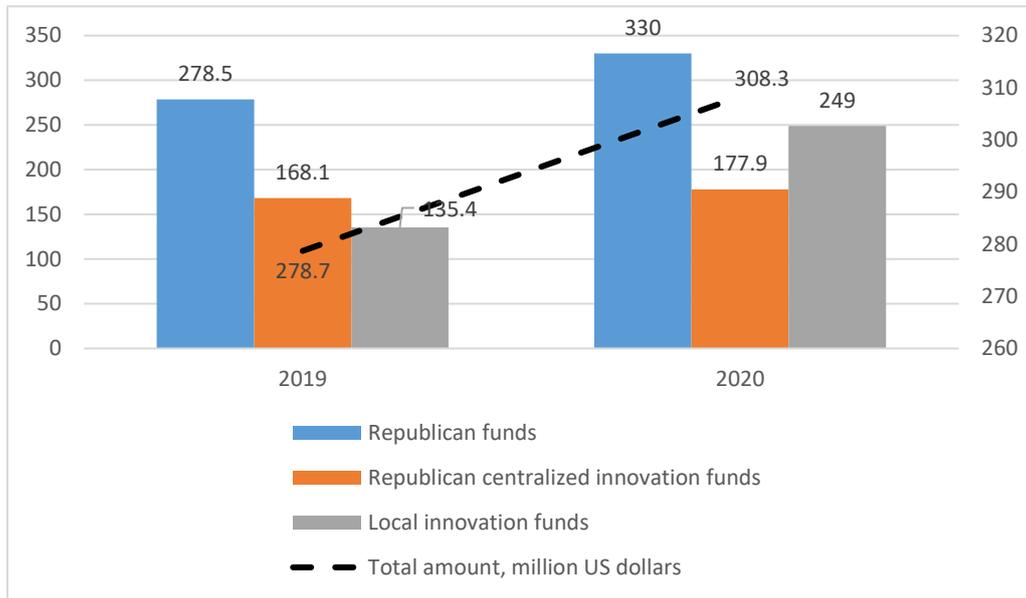
Figure 4: Dynamics of the budget funds allocated for research, scientific and technological activities and innovations in 2019-2020 (2021b), million rubles (2021c)

Analysis of the domestic current expenditures on research and development by type of work indicates a relative stability in annual dynamics: for the period from 2011 to 2019 basic research is approximately 12,2% - 17,1% of the total amount of the domestic current expenditures, applied research - 26,1% - 36,8%, experimental development - 48,8% - 60,4% (Fig. 5) (2020).
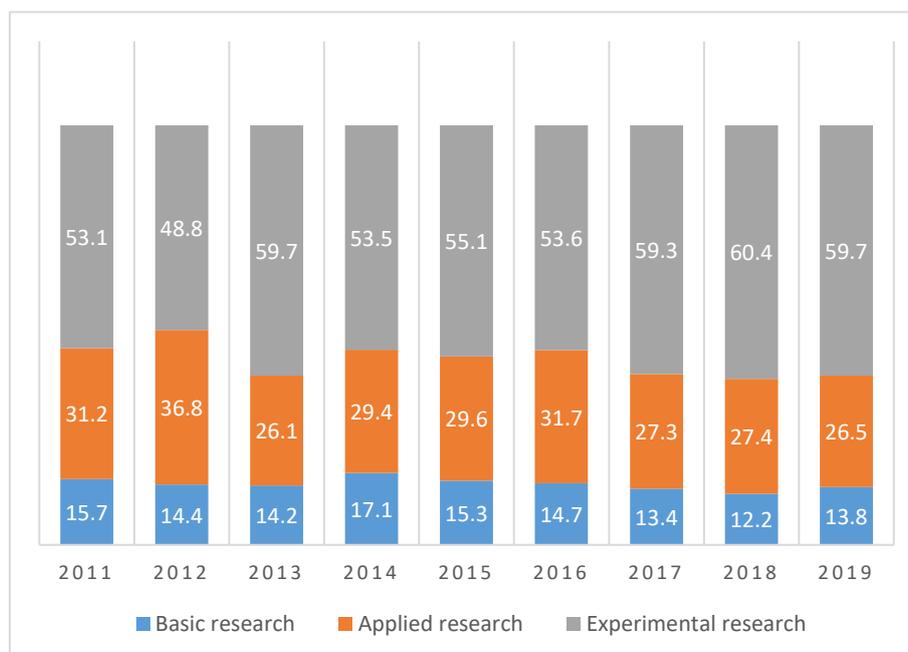
Figure 5: Structure of the domestic current expenditures on research and developments by type of work, % (2020)

It is noteworthy that the basic research financing increased in 2019 compared to the preceding year (+2,6%), even though from 2015 to 2018 this indicator tended to decrease annually. This may indicate the process of updating the priority areas of research, scientific and technological activities and innovation in the country in order to gain new knowledge to solve promising and current problematic tasks.

3. CONCLUSION

Analysis of the expenditures of industrial organizations on technological innovation showed a significant increase in funding in 2019 (665.64 million US dollars, 20% more than the previous year`s level in dollar equivalent (2021d)), which indicates the desire of the country`s organizations to find solutions to enhance the innovative activities in order to increase the competitiveness of manufactured products in foreign markets. It should be noted that over the last 2 analysed periods (2018-2019) the share of budget funds (2020) of industrial organizations allocated for technological innovations decreased (-9,2% compared to the specific indicator of 2017; -3,3% compared to the level of 2018), which indicates the allocation of the budget funds for priority social tasks, increasing the importance and objectives of industrial organizations in developing high-technology and competitive products. Furthermore, the share of imported innovative industrial products on the domestic market has been growing since 2017 (from 32% in 2017 to 40% in 2019), which is a sign of insufficient competitiveness of domestic products on the international market. At the same time, in 2019 the dependence of the export of innovative industrial products on the market of the Russian Federation had increased (35,4% of innovative industrial products were exported to the Russian Federation in the total volume of exported innovative industrial products outside the Republic of Belarus; compared to 26,5% in 2018). The intensification and effectiveness of research and innovations is determined by the development of the county`s intellectual potential. According to the Human Development Report 2020 "The Next Frontier: Human Development and the Anthropocene", at the end of 2019 the Republic of Belarus was ranked 53 among 189 other countries assessed by the human development index (index value 0,823), staying very close to the countries with very high human development (together with the Russian Federation (52nd place), Kazakhstan (51st place) and Bulgaria (56th place)) (2021e). Further development of the country`s intellectual potential, revitalization of research, implementation of innovations closely depends on financing. For this purpose, specialized funds are created at the national (regional) level and priority programmes financed by private organizations, as well as foreign companies are approved (Terziev, Klimuk, 2021f; 2021g; Terziev, Georgiev, Klimuk, 2021h; 2021i).

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THE ISSUES OF FINANCING OF ACTIVITY OF OIL AND GAS INDUSTRY

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ABSTRACT
The oil and gas sector has high export revenues, but this does not relieve it of the need to solve the problems of financing large-scale, highly risky investment and innovation projects. Currently, leading oil and gas companies are seeking to finance innovation activities at their own expense, formed on the basis of net profit and depreciation. In the context of globalization, in order to ensure high rates and quality of economic growth, increase its competitiveness and efficient use of resources, the main task is to develop innovative activities of enterprises of all sectors of the economy, including the oil and gas complex. State financing in the form of budgetary and tax benefits is directly related to technologies at an early stage of development, since these stages are characterized by significant technological barriers, time-consuming and non-guaranteed commercial benefits. Other various methods of state support and private financing from venture funds and various other funds, institutes and organizations are characteristic of the subsequent risk stages associated with the stage of demonstration of a prototype and its commercialization. However, this mechanism should be based not only on the optimization of tools and methods for financial support of innovative processes of oil and gas sector enterprises taking into account foreign experience.
Keywords: *state, financing, economic development, oil and gas sector*

1. INTRODUCTION

Funding in the oil and gas sector is large in nature and long term. The increase in the profit of oil and gas companies is directly affected by the reduction in costs, which leads to an increase in both liquid cash and an increase in the competitiveness of the project as a whole. Distinctive features of financing projects in the oil and gas complex are that investment projects have a wide range of risks that have a great impact on the key economic indicators of an investment transaction. In addition, these projects are directly dependent on the prevailing global energy situation, which affects their economic efficiency. The main advantage of project financing is the ability to concentrate significant financial resources on solving a specific business problem, and to localize project risks on the project company. It is created specifically for the implementation of a specific project, is responsible for its implementation and usually has no financial history or property for collateral. Responsibility and risks are distributed among the project participants and are regulated by a set of contracts and agreements.

2. OIL AND GAS INDUSTRY - AS AN IMPORTANT ELEMENT OF THE WORLD ENERGY MARKET AND PART OF THE GLOBAL SYSTEM

The oil and gas sector has high export revenues, but this does not eliminate the need to solve the problems of financing large-scale high-risk investment and innovation projects. Currently, leading oil and gas companies are trying to finance innovative activities at their own expense, formed on the basis of net profit and depreciation charges. Thus, in contrast to the traditional financing mechanism for innovative enterprises, the sources of which are their own and borrowed funds, foreign companies widely use venture capital, the maneuverability of which contributes to the acceleration of the introduction of new innovative technologies at the early stages of the innovation cycle. In the context of globalization, in order to ensure high rates and quality of economic growth, increase its competitiveness and efficient use of resources, the main task is to develop innovative activities of enterprises in all sectors of the economy, including the oil and gas complex. The oil and gas sector, along with other industries, has a significant impact on all sectors of the national economy. At the same time, the oil and gas industry is an important element of the world energy market and part of the global system of all energy supply, and also forms a competitive production complex, which currently not only fully meets the country's needs for oil, gas and oil products, but also due to its active export activity creates a significant share of foreign exchange earnings in the state budget. However, despite such a key role of the oil and gas complex in providing the state with financial resources, the current situation is characterized by a number of negative trends that affect its development. The existing mechanism for financing innovative activities of the oil and gas industry (OGP) in foreign countries allows oil and gas companies to organize a single research network, consisting of national and leading foreign research institutes, centers and universities and is necessary for joint focus on the study and adaptation of best practices in the oil and gas industry of the world. , the development of the national complex and the improvement of technologies, as well as for the implementation of the results of our own national scientific structures, which reduces possible risks, contributes to an increase in the efficiency and level of commercialization of innovations, as well as the general level of the innovation process in the country's economy as a whole. It should be noted that in foreign practice, the key point is that each stage of the innovation cycle, especially alternative energy, has its own source and method of financing. Therefore, in the current conditions, the solution to the problem of strategic development of the oil and gas complex is acquiring special relevance based on the activation of innovative activities of oil and gas companies, the introduction of high-tech subsoil use technologies and the transition to the implementation of the import substitution policy, which will not only allow the national economy to improve its competitiveness and create the foundation for sustainable growth based on innovations, but also provide it with energy and environmental security, as well as the possibility of implementing a geopolitical strategy in the world market. To implement the strategy of innovative development of the oil and gas complex, domestic companies need not only to ensure a high level of development, implementation and implementation of innovative technologies, but also to solve the problems of financial support for their innovative activities.

3. PROBLEMS OF VENTURE FINANCING OF THE OIL AND GAS SECTOR

The oil and gas sector of the economy is the most attractive for investment. Foreign oil and gas companies resort to this form of financing for innovative activities by creating corporate venture funds as their internal divisions, which allows them to use both the company's free capital and external resources. Currently, corporate venture funds of both the largest international companies and national ones are successfully operating in the world. Venture funding allows them to keep in touch with governments, various research companies, centers, innovation organizations of any country, invest in small start-ups and provide financial resources for all

stages of the innovation process, not only internal, but also external development. In turn, this enhances commercialization, expands access to a wide range of technologies in various industries, reduces technological gap with competitors, increases the profitability of innovative projects, and also ensures a balanced innovation portfolio. At the same time, the main feature of using venture financing is not only to increase high profits, but also to expand the activities of oil and gas companies in the world. Thus, the development of alternative and renewable energy is largely due to venture investment. State funding in the form of budgetary and tax incentives is directly related to technologies at an early stage of development, since these stages are characterized by significant technological barriers, time-consuming and non-guaranteed commercial benefits. Various other methods of government support and private funding from venture capital funds and various other funds, institutions and organizations are characterized by subsequent risky stages associated with the stage of demonstrating a prototype and its commercialization. Therefore, comparing the features of the innovation activities of domestic and foreign companies of NGP, there is a need to form an effective mechanism for financing the innovative activities of NGP enterprises, which should become one of the important factors in the structural transformation of its economy and increasing competitiveness in the world market. However, this mechanism should be based not only on the optimization of tools and methods of financial support for innovative processes of oil and gas sector enterprises, taking into account foreign experience, but also take into account the main factors that influence the development of oil and gas companies at the present time:

- long-term and high capital intensity of projects;
- high dependence on imported technologies;
- lack of a competitive environment;
- focus on financing internal developments;
- monopoly;
- stricter control by government agencies.

4. WAYS TO IMPROVE THE EFFICIENCY OF PROJECT FINANCING AND BANK LENDING TO THE SUBJECTS OF THE FUEL AND ENERGY COMPLEX

In the context of a decline in the profitability of oil production in the economy, there is an acute issue of attracting private investment in the real sector. Price shocks in the oil market amid sharp fluctuations in the internal situation in the commodity market are one of the factors that impede the systematic formation and use of financial resources for the development of the oil and gas sector. In connection with the above aspects, the article touches upon the actual topic of project financing and bank lending to the subjects of the fuel and energy complex. At the same time, it was emphasized that the dominant role in the system of financial support of the oil and gas complex is played by investments. In order to comply with the principles of bank lending, an objective need to carry out systematic calculations of the price of credit resources, comparison of credit and lease payments has been identified. Of particular practical interest is the mechanism of municipal targeted lending, for the implementation of which, in our opinion, it is advisable to calculate the effects of proactive budgeting, assess the economic benefits of municipal-private partnership. A sufficient degree of discussion on this issue is due to the fact that financing the oil and gas complex is a systemic and complex task of managing the fuel and energy sector, and restrictions on the level of the municipality can cause disproportions in financial flows of consolidated budgets. In the course of the research, one of the key goals of the development of the raw materials economy was achieved - a wide range of sources of financing and lending to companies in the oil and gas sector was identified. Due to the fact that one of the priority tasks for the development of the economy of the oil and gas and energy industries includes the implementation of program measures for long-term socio-economic development.

At the same time, certain difficulties in attracting credit resources are experienced by the oil and gas production sector in the context of instability of prices for oil and gas resources exported abroad, leading to inaccurate forecasts of macroeconomic development, and, as a consequence, the weakening role of the financial mechanism for the functioning of the oil and gas industry. All over the world, the oil and gas sector is given special attention, it is exposed to the influence of the state in connection with the decisive role of hydrocarbons in solving energy, financial and economic problems. In the context of limited access to external funding sources, it is important to find optimal financing mechanisms for organizations in the oil and gas sector in order to direct them to investment projects. Depending on the level of project financing, its risks should be considered. The risks are specific to the energy and oil and gas industries. With this in mind, let us turn to the dynamics of individual indicators of the development of the studied sectors of the economy. For the effective functioning of the oil and gas industry it is necessary to ensure: expanded reproduction of the mineral resource base; create favorable conditions for the implementation of large investment projects; optimize the tax burden on oil and gas enterprises; to ensure the maximum possible use of competitive domestic equipment and technologies in all technological processes; stimulate the development of small and medium-sized businesses in the oil and gas industry. The efficiency of traditional oil and gas companies is determined by the sustainability of their economic growth. At the same time, one of the main issues is the establishment of compliance with the criteria that can characterize: the choice of forms and methods of financial support; determination of the boundary values of the technical, economic, financial and production characteristics of the activities of organizations that ensure the recoupment of state budget expenditures; determination of the volume of government spending that can be aimed at stimulating the activation of the growth point. Systematization of external and internal sources of financing allows you to organize a rational movement of cash flows and determine the sources of investment resources of organizations. In addition to budget funding for oil and gas companies, there are many alternative sources of meeting the need for working capital for the development of the oil business. So, in conditions of a decrease in the liquidity of funds that can be used to finance investment projects, NGP companies turn to borrowed capital. Financing from borrowed funds is carried out in two main areas: debt and equity. The prevailing mechanisms for attracting debt capital are bank loans along with the placement of bonded loans.

5. CONCLUSION

Thus, as a result of our research, we have identified a wide, but not an exhaustive list of sources of financing and lending to NGP companies. Due to the fact that the implementation of program measures for long-term socio-economic development is one of the priority tasks for the development of the economy of the oil and gas and energy industries, therefore, the primary role is played by budget financing as an external source of investment attracted for the implementation of projects in NGP. A set of tasks to maximize the efficiency of attracting credit resources and other sources of borrowed capital, as the most expensive external source, comes to the background. The third role is assigned to corporate profits and other internal sources of financing involved in the circulation of flows accumulated by oil and gas enterprises. It is quite obvious that the key sources of financing for oil and gas companies are concentrated in a single organizational and economic mechanism: forecasting targeted budget financing, organizing the attraction of external borrowed sources and corporate management of investments, capital and profits. Taking into account the adaptation of this mechanism to the practice of the operation of the oil and gas complex, it is advisable to develop a strategy for the long-term selection of targeted sources of financing and prevention of external risk factors: negative inflationary processes, unfavorable political decisions, deterioration of monetary policy, etc.

The greatest attention to the assessment of internal factors: the adequacy of equity capital, break-even and profitability, the effectiveness of management decisions, including in terms of ongoing investment projects.

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INTERCULTURAL DIVERSITY AND MANAGEMENT

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ABSTRACT

As an environmental factor in the cultural atmosphere, it affects the activities of enterprises and managers in the country. The purpose of this study is to determine whether the activities of country managers are related to national cultural values and how these values affect country managers. For this purpose, in the article I tried to explain the history of the development of culture and management, how it developed and changed. At the same time, I tried to show that intercultural differences lead to management differences by referring to the research of GLOBE-an interdisciplinary study on culture and management, Trompenaars, Schwartz, Hofstede.
Keywords: Management, culture, cultural dimensions

1. INTRODUCTION

Culture, which is our social identity, is formed from generation to generation in social environments and changes in relationships. Culture is the norms that govern our behavior, attitudes, thoughts, and actions, and in many cases it is the answer to why we act that way and think differently. Just as each person has a culture that distinguishes them from others, every society has its own culture. The stronger the promotion and unity of cultural values that separate one society from another, the stronger the culture will be. It is a culture that makes society a society, directs it to common thoughts and behaviors by ensuring equality and solidarity. An organization operating in a society creates its own organizational culture influenced by the culture of that society, uniting its employees under many cultural elements such as common interests, values, understanding and attitudes, ensuring sharing and solidarity. Organizational culture also plays a role in the formation and change of social culture. The presence of employees from different cultures, especially in international organizations, reveals intercultural differences within the organization. Institutions with a strong organizational culture will benefit from these differences, along with cultural differences within the organization, which will also enrich the organizational culture. Institutions can gain a competitive advantage by creating and managing a more effective organizational culture without neglecting this.

2. CULTURE

"Culture" is derived from the Latin word "kultura", which means work, service, improvement, as well as education, development and progress. The origin of this concept comes from the words "kolo", "kolere", which means to engage in soil science, to work with the soil, "cultus" - "reworked". In the ancient Latin language, this word had the same meaning and explained the meaning of "agri culture", ie the idea of preparing the land for planting. The main source of information that helps us to consolidate this idea is the book of the same name "De agri kultura" by Mark Porci Cato, dedicated to agricultural issues. In the later stages of historical development, terms related to other areas of culture began to take shape: "civilization", "education", "upbringing", "progress", "development" and so on. Although culture is defined by many disciplines, it is one of the most complex words in English [6, p. 1]. According to Münch and Smelser, the word culture was not widespread before the 19th century.

The concept of culture was first used by Charles A. Ellwood. He described culture as a socially addressed, common name used for all norms of behavior. In this sense, culture encompasses not only concepts such as language, art, science, law, management, and religion, but also material means or man-made objects that embody cultural achievements and are the product of intellectual culture, such as buildings, equipment, and means of communication. Kroeber and Kluckhohn defined culture as the "intellectual side of culture", the development of the mind, tastes, norms of behavior, that is, the conditions of purification. Culture, which is a combination of many factors such as religion, values, social norms, customs, nutrition and decision-making habits, aesthetics and nationalism, is defined as an integrated system of characteristic behavioral patterns of members of society and influencing many things within national boundaries. It also has a profound effect on management concepts and strategies. According to Nalchaoglu (2004, p. 5), "Culture is everything produced by man." According to Bennett (1998, p. 17), "applied results are related to values or perceptions in society." Ergur, on the other hand, described culture as an activity of symbol production that arose as a result of people's ability to think about their own existence and to change nature in order to understand their own existence. Gökalp, while clarifying the culture, spoke about two concepts and expressed them as national culture and humiliation. He said that while national culture consisted of the people's traditions, customs, oral and written literature, language, music, religion, morals, aesthetics and economic products, the reprimand belonged only to highly educated real intellectuals. While national culture is national, it is expressed internationally. One person said that under the influence of national culture, he would probably value only the culture of his own nation, but he would respect the cultures of other nations as well. [19, p. 104-105]. Discretion is perceived as a unique, unchanging event, a continuous system of core values that distinguishes it from another group by its choices. Like Gokalp, King defined culture as a trait that people possess, both materially and symbolically. It is the joint programming of thoughts that differentiates members of a group or category. The culture of a group is the main assumption learned by group members. Adaptation problems within the group and adaptation problems of those who join the group later are factors that need to be addressed. Cultural structure can be defined by values, symbols and norms. According to Minkov, the main elements of measurable culture are values, norms, beliefs, social relations, individual perceptions, cognition, behaviors and stereotypes [8, p. 4-9]. According to Öğüt and Kocabacak, culture is the sum of the knowledge, beliefs, art, morals, traditions and all kinds of skills and habits possessed by a society. It has been observed that the main factor behind the success or failure of institutions is related to the culture they have [18, p. 151].

3. MANAGEMENT

The English word "management" means the process of dealing with things or people, organization. For people at different levels of management in various sub-areas of management (public management, business management, education management, etc.), the words manager (department head, branch manager, hospital manager, school principal) and chairman are widely used in our lexicon. The word "chief" (chief of police), which has the same meaning as the word "chairman" in security agencies, is also used. In English, the verbs "manage" and the nouns "management" and "manager" have been used since the 16th century, and the oldest of these is the word "manager" [4, p. 81-94]. There are other words related to management in English. One of the most commonly used is the word "administration", especially in North America. In addition, in English, for example, for managers in various positions related to education management, "head", "principal", "rector", "leader", "deputy", "master", "mistress", "officer", "adviser" ", "inspector"are also used. Linguistically, the word management comes from the Latin words "manus" and "hand" and is similar to the word used in Italian as "maneggiare".

The word "maneggiare" in Italian was first used as "manage" in connection with the training of horses, and then expanded to mean skill (for example, teaching to play any musical instrument). It has been determined that the word "husbandry" is related to the French words "menage" and "household". Today, the word "management" encompasses the meanings of both the words "manege" and "menage" and can be said to be used by different cultures, different managers with different meanings. As a result, the concept of management can be perceived differently by different cultures (societies) [4, p. 81-94]. Adam Smith, considered the founder of modern economics, used the words "manage", "management" and "manager" in his 1776 book, The Wealth of Nations, and also referred to "badmanagement". These words are used in the book in connection with both business processes (organization, planning, direction, etc.) and human resources within the enterprise (human resource management). John Stuart Miley (1806-1873), one of the most important figures in the British economy, also followed Adam Smith's use. Later in the 19th century, the word "management" was used in books written by some American authors. The word "management" in the book "Fundamentals of Scientific Management" by Frederick W. Taylor in 1911, considered the founder of the science of management (scientific management), has become a word used in almost the same sense in the field of management science today [4, p. 81-83]. Although both Smith and Mili use the word "management" in management processes and the word "manager" in relation to the human resources within these processes, Today, the use of the word "manager" in the United States is not limited to management processes, but also refers to a group of people belonging to the highest social class in the United States as numerous "managers". Those who belong to this class are those who make management a profession, who do not have a specific job, and who use their skills and powers on behalf of business managers. These managers are not directly involved in the production processes in enterprises, but are considered necessary in motivating the people involved in these processes and in the production of the product, and indirectly contribute to production [4, p. 83]. The word "management" in American culture means proactive, optimistic, and pragmatic. According to Hofstedey (1993), this word has no exact equivalent in other world languages, and there is no other word or term that is fully compatible with this word. Therefore, in German and US English, there are words such as "leadership", "leading" and "directing", but the word "management" does not correspond to the style of expression in the United States. Thus, it is not considered possible to translate this word into another language as a word or term. It is also claimed that it is extremely difficult to translate into Russian, Czech, Slovak, Hungarian, Polish and German. [1, p. 63-68].

4. DIFFERENCES IN CULTURE
Because societies have different lifestyles, they also have different cultures. Although social cultures are different, each culture has some values that vary from society to society. The interrelationships between these values, which ensure the continuation of the social life of society and its citizens, affect international business behavior. Language is the primary indicator of the existence of societies and the most powerful tool in building culture. Language is the clearest indicator of intercultural differences. Language, which informs about the cultural values and characteristics of societies, is considered to be a system of symbols that enables people to understand each other and interpret the future by thinking about the past. The protection of social culture and the transmission of cultural heritage from generation to generation is also carried out through language [17].

4.1. Relationships and Beliefs
Beliefs are people's perceptions of a particular situation or concept. The more similar the beliefs of the people in a society, the stronger the cultural beliefs of the society will be. Behaviors are formed as a result of beliefs, feelings and reactions. Attitudes of people with positive or negative

evaluations of objects, thoughts and events also vary from society to society. That is, different societies may perceive and evaluate the same events differently. [15]

4.2. Technology and material culture
Material culture includes tools and products created by humans, machines and vehicles, in other words, material or physical tools. For example, a pine tree is not part of culture, but a New Year's tree is part of material culture. Technology is also a concept closely related to culture. The technical and technological level of a society affects the level of demand of that society, the quality and form of the products required, and the means needed to produce and distribute products and services. For example, Hoover, a washing machine manufacturer, conducted a study of product design advantages in the French and German markets, which found that German housewives think that large and bulky washing machines are more durable, while French housewives prefer small and light washing machines that do not take up much space in the kitchen. (Rachlı, 2011: 20).

4.3. Aesthetics
Aesthetics provides information about the art of a culture. Especially subcultures have their own aesthetic values. For this reason, aesthetic differences should be assessed regionally, not nationally. The aesthetics of a particular culture helps to interpret the symbolic meanings of various artistic expressions. The sharing environment created by the rapid development of technology and communication in recent years has reduced the importance of aesthetic values in terms of cultures. Aesthetic values are also used in the study of the traditions and roots of societies. Aesthetics, known as the concept of beauty and quality reflected in the art, theater, music and dance of a culture, also largely shapes the management activities of international enterprises. Multinational enterprises should be aware that aesthetic values differ from country to country [16].

4.4. Social institutions
Each society has its own social structure, which is formed by cultural features and ensures the observance of these features. Cultural changes over time necessitate changes in social structure and institutions. Social institutions define the role of people in society. In all societies, individuals live in families and work together as a group. But the concept of social structure, its importance and the roles of individuals vary from society to society. Just as there is a difference between blue and white-collar workers within an enterprise, certain social classes in each society are more privileged than others. The social class of an individual is decided according to his / her personal characteristics and the groups he / she belongs to. Hereditary membership is a group membership in which an individual is born by sex, family, age, ethnic origin, race, place in the caste system and ancestors. *Congenital membership* is membership obtained through religious associations, political relations, professional relations and friendships, ie membership acquired later. In addition to the differences in social strata in each society, the importance given to them is also variable. In collectivist countries such as Japan, individuals are known by the groups to which they belong. In India, the separation of social classes is determined by the caste system. According to the caste system, the jobs that individuals will work for, the class to which they belong, and the jobs that they have the right to do are determined by birth [2, p.127-136]. Education, which is considered an indicator of the level of development, not only contributes to social culture, but also ensures the formation of culture. A society that does not cultivate and develop human strength is also economically impossible to develop. Education is a necessary cultural value for the sustainability of social culture. It is possible to pass on the cultural values we have to new generations, to adapt to today's living conditions through education. Cultural transfer of innovations and developments

in different societies is also carried out through education. Most of the staff of international companies that invest in societies with low literacy rates are from their home countries. However, in this situation, they face the problem of adapting to the culture of the new society. To overcome this, enterprises train their employees in the culture of the new society and try to shorten and facilitate the adaptation period [2, p.127-136].

4.5. Religion

A religion that affects all social and cultural values has always existed in human history. The most important function of religion, which shapes the values of the individual, is to ensure peace in a society that depends on it. Religion that exists in a society constitutes the moral and ethical system of that society. The appearance of religion in the business world, which has a profound effect on the norms of attitude and behavior of society and individuals, is especially evident in the entrepreneurial, consumer and social structure. The influence of religion on a society depends on the strength of the dominant religious groups. In Muslim societies, because religion is related to social life, its influence on work behavior is greater than its influence on other societies [15].

5. RESEARCH ON CULTURAL DIMENSIONS

Since the first half of the 20th century, great advances have been made in social anthropology. Many sociologists have studied their cultural structures. First, in 1951, two American sociologists, Parson and Shils, conducted a five-point classification of world cultures [10, p. 71]. This classification includes the following comparisons:

- Comparison of emotional behavior with neutral behavior
- Comparison of personal inclination with social inclination
- Comparison of universality and grouping
- A comparison of who people are and what they do
- Comparison of classification according to certain regularities with the extracurricular environment

The next step is to identify the problems and values that are important to all social groups based on scientific and statistical data. In 1954, two American sociologists, Alex Inkeles and psychologist Daniel Levinson, conducted a major study of national cultures and recommended the following basic classifications to reveal the structure and characteristics of all cultures in the world. Their classification includes the following concepts: [3, p. 29]

Relation to social status
- Social inequality
- Communication between the individual and the group
- A review of the social status of men and women
- Behaviors and reactions in uncertainty and sudden situations

In the contex of the above, the concept of cultural dimension throughout the text of this study refers to the definition given by Merkin (2006). Therefore, cultural dimension is a hypothesis that varies from culture to culture.

5.1. GLOBE Cultural Dimensions Research

GLOBE is an intercultural leadership study that covers 62 different countries representing different geographies of the world. GLOBE is a combination of the initials of the words Global Leadership and Organizational Behavior Effectiveness. The GLOBE project aims to determine the extent to which factors such as a country's industrial and economic development,

governance, widespread religion, and climatic conditions affect leadership and cultural values. In the study, information and data were collected through a variety of methods, such as questionnaires, cross-interviews, media analysis, review of archival records, and assessment of inconspicuous features. The study tested 27 hypotheses and involved 951 employees and 17,300 managers. Researchers from the GLOBE project developed a 9-item classification of values proposed by Hofstede. The cultural dimensions used in the GLOBE project are listed below:

Avoid uncertainty
- Corporate collectivism
- Group-based collectivism
- Performance orientation
- Human orientation
- Time orientation
- Future orientation
- Self-confidence

In addition to comparing the cultural dimensions of the countries studied in the GLOBE study, cultural clusters of countries with similar cultural characteristics were also created.

5.1.1. Trompenaars Culture Dimensions Research
Fons Trompenaars, a compatriot of Hofsteden from the Netherlands, is also an interesting researcher in this field. Trompenaars conducted a survey of 8,841 managers from 43 different countries. He analyzed the data and identified 7 related directions and dimensions. The 7 dimensions he identified were similar to those measured by Hofsteden.

- Achievement - Definition (Ascription)
- Individualism – Collectivism
- Neutral - Emotional (Affective)
- Specific – Diffuse
- Universalism – Particularism
- Sequential – Synchronous
- Internal control - External control

In the concluding part of his study, Trompenaars stated that there are different values and judgments underlying cultural differences between countries, but that other factors also play a role.

5.1.2. World Values Research
The World Values Survey (WVS) is also known as the Inglehart Survey. It covers an example that has been applied in about 100 countries and represents 90% of the world's population. Societies are measured by secular-traditional and self-development-vital dimensions. The research is prepared in the form of waves, and the first wave was prepared in 1982. It is conducted using a common survey for all countries. The World Values Survey is the largest social survey of human thought, behavior, beliefs, and values, covering approximately 400,000 participants. [14]

5.1.3. Schwartz Cultural Dimensions Research

Shalom H. Schwartz (1992) introduced a new approach to research on cultural dimensions by identifying that cultural values are derived from individual values. Schwartz's study claimed that people living in different cultural structures had seven different value traits, and that individual and socio-cultural assessments were possible using these values. These values are determined by simultaneous research in different cultural structures and are influenced by cultural, religious, historical, philosophical and geographical factors and differences. Schwartz gradually expanded his work to more than 60 countries and the number of participants reached 60,000. The cultural dimensions defined by Schwartz are given below: [12]

- Conservatism
- Intellectual Autonomy
- Affective Autonomy
- Hierarchy
- Egalitarianism
- Mastery
- Harmony

The above-mentioned studies were later expanded to 73 countries and 7 transnational cultural clusters were established [11].

5.1.4. Hofstede Cultural Dimensions Studies

Geert Hofstede's 1967-1973 study of 117,000 different IBM employees in 71 countries (Hofstede, 2001) was considered by many authors to be the most effective, widely used, most comprehensive, and conceptually based of cultural measurement research (Cross and Erdmann, 2000) and is shown as a leader in this field. In addition, Hofsteden's theory of cultural value dimensions, first proposed in 1980, has been evaluated as a breakthrough and transformation in different disciplines (eg, Schwartz, 1992; Trompenaars, Hampden-Turner, 1999). According to another study, Hofstede has been among the top 10 authors in terms of scientific research for the past 30 years. Hofstede revealed human relations in a culture by dividing them into 6 main dimensions. These dimensions are given below: [3,4]

- Power Distance
- Uncertainty Avoidance
- Individualism- Collectivism
- Masculinity- Feminity
- Long Term /Short Term Orientation
- Indulgence-Constraint

The above criteria are used as a criterion for determining the cultural characteristics of countries and comparing them. The rationale for this decision is based on the distinctive features of the Hofstede study described above. These concepts of cultural dimension, developed by Hofstede, will be explored in more detail than the cultural dimensions of other researchers.

6. THE IMPORTANCE OF INTERCULTURAL DIVERSITY IN MANAGEMENT

The importance of culture in terms of science stems from its contribution to information production. Just as the cultural effects of science arise from the combination of information or the creation of an instantaneous source of information, such as a new discovery, it also has guiding properties on cultural components. The relationship between science and culture is a relationship based on mutual relations. Culture is also very important in the field of management, which is based on the human factor.

The cultural perspective in this area has changed in parallel with the development of management science. The classical management approach, which emerged in the 1870s, is the first management approach to cover three perspectives: the scientific management approach, the management process approach, and the bureaucratic approach. The intellectual basis of the classical management approach is based on the economic human model. For this reason, a person who stays away from emotions is thought to be more effective by acting rationally. This approach, which advocates the employment of people in routine work and the creation of the best and only perfect structure for the organization, is not interested in the concept of culture because it considers the enterprise as a closed system and the employee as a passive being. For this reason, the importance of culture in terms of classical management is not discussed. The neoclassical or behavioral management approach adopted after classical management is also called the human relations approach to the value given to people. This approach is based on the possibility that an employee who is satisfied with the workplace will master the job and be more productive. This approach, which takes into account the satisfaction of both the manager and the employee, is the first approach that realizes that people have different desires, goals, character and beliefs. This approach, which advocates taking into account the employee's traditions, beliefs and expectations for economic efficiency, emphasizes the concept of individual culture, although it has not yet been named. The modern management approach adopted after the neoclassical approach generally consists of two main perspectives: a systemic approach and a situational approach. The system approach is an approach that accepts all the features of culture and reflects it in management science, and according to its basic assumptions, the system is an open system and interacts with the environment. The assumptions of this approach, which considers the enterprise as a system, are similar to those of culture. The emergency approach focuses on social behavior and environmental conditions, especially the technological factor discussed in cultural factors. The approach, which does not take into account the universality of management, claims that the management style depends on organizational strength and environmental conditions. This perspective also makes it necessary to take into account the environment of the enterprise, the values of the manager and the employee, ie the culture of the organization. In modern management, there are areas of management such as diversity management, intercultural communication management, multinational business management, change and development management, general quality management, strategic management, government management, purpose management, conflict management, chaos management, team management that directly address cultural influences. In addition to management, applications such as benchmarking, learning organization, change engineering, outsourcing, virtual organizations, network organization, restructuring, agglomeration organization, human resource development and strategic partnerships are also implemented taking into account cultural influences. The importance of culture from the point of view of management science arose when management strategies and motivational techniques were adopted at one time, in one culture, and not accepted in another culture. This result highlights the need for an emergency approach to management due to cultural influences and different management approaches, such as cultural synergy management in intercultural organizations. If we look at research and this area, we will see that as a result, intercultural management will emerge.

7. RESULT

From the past to the present, the failure of strategies developed without taking into account the values within the enterprise, on the other hand, the role of the human factor in the success of Japanese companies has led enterprises to explore their social realities and cultures. Today, it has been scientifically proven that management and administration activities need to adapt their practices to the social culture, and that success can be achieved.

Because Japanese and American management concepts and strategies can only be explained by social structure and culture. Indeed, every culture and belief system can create a healthy foundation for its people to be more successful by providing a more comfortable and peaceful environment than other cultures. In enterprise management and management strategies, in short, there is a model of organizational culture that is specific to the society itself and its culture. In this context, organizational culture is a subculture of social culture and is often perceived as a specific application of social culture to the business world. In this study, first of all, the relationship between social culture and organizational culture is focused on the structures of Japanese and American management culture and the social culture of these countries. Then, taking into account the social identity and structure of Turkish society, lifestyle, value dimension, in short, the social culture, the main features of the Turkish management culture were tried to reveal as much as possible using research. When evaluating the data obtained from these studies, the following main conclusion emerges: our social culture, and ultimately our management culture, interacts with the cultures of both Eastern and Western societies. The culture of management bears the traces of Eastern culture in terms of decision-making system, organizational structure and sense of responsibility, and the traces of Western society in terms of wage policy and rising system. As a result, the most important point to note here is the words of Professor Inglehart, Coordinator of the World Values Study: "The lack of models that are indifferent to cultural factors is becoming more apparent every day." According to Peter Dructer, management and administration activities are also deeply connected with culture and social structure. For this reason, to be successful, the values of society must be known and analyzed at the scientific level. For example, the "human first" factor, which is just beginning to take root in Western societies, is a social fact. This topic requires an interdisciplinary approach and more research. However, this requires a team effort, both in time and technically. Practical work on the topic was used as much as possible in this study. Therefore, the study should be evaluated in this context.

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THE ROLE OF DIGITAL ECONOMY IN THE DEVELOPMENT OF FINANCIAL SYSTEM

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ABSTRACT
The digital finance is one of the key components of public policy, and it is particularly relevant in terms of the efficient utilization of financial resources, improving the quality of management in the financial system, and the formation and implementation of perfect financial services in coordination with international standards in modern globalization condition. The digital financial market of Azerbaijan is currently experiencing a rapid growth period, driven by digital financial decisions for more mature markets, such as the application of online payments and transfers, which are typical for emerging economies, and on the other hand, investment insurance, crediting and management. This area was one of the first to introduce advanced technologies such as biometrics and blockchain, and was the driving force behind the application of the national digital identification system. The economic structures, including the public sector, regulators, digital financial companies, banks and other financial institutions, should further promote innovation in this area by strengthening relevant regulatory and partnership relations in the digital financial system. The aim of the research is to investigate the theoretical and practical issues of the formation and development of the digital economy in the growth of the financial system based on the experience of developed market economies. Research methods such as scientific abstractions, comparative and empirical analysis, and logical generalization were used in the research. The practical significance of the research is to enrich the scientific and practical knowledge of the experts working in this area, as well as for the development and implementation of the digital economy in the fiscal policy of developing countries. The article reveals the role of the digital economy in the development of the financial system, and its impact on improving the existing financial infrastructure by highlighting the essence, content and character of digital finance in a global context. The importance of financial innovation in the digital financial system of the country has been identified, the potential benefits of digital finance such as efficiency, competitiveness and new business models have been emphasized, and the importance of partnerships with digital financial service providers is emphasized. The expansion of SMEs opportunities by enhancing of digital finance as well as improving the efficiency of regulatory processes and control over financial market participants have been substantiaed by the application of innovative technologies. The current situation of the digital economy in the financial system of Azerbaijan has been analysed and evaluated, the existence of potential opportunities for the wider use of digital financial technologies in the country have been revealed, and relevant recommendations have been made in their implementation.
Keywords: *financial system, digital economy, digital finance, financial innovation, innovative technology*

1. INTRODUCTION
The digital financial market of Azerbaijan is currently experiencing rapid growth, driven by the application of online payments and remittances typical of emerging economies and digital financial decisions for more mature markets such as investment insurance, lending and management. This field was one of the first to apply advanced technologies such as biometrics and blockchain and was the driving force in the application of the national digital identification

system. Governing bodies should continue to promote innovation in this area by strengthening appropriate regulatory and partnerships in the digital financial ecosystem, including the public sector, regulators, digital finance companies, banks and other financial institutions.

2. THE ESSENCE AND CONTENT OF FINANCIAL TECHNOLOGY OR DIGITAL FINANCE IN A GLOBAL CONTEXT

The financial sector is undergoing significant changes due to the rapid development of new financial technologies, commonly referred to as "fintech". The financial sector has historically surpassed the other sectors of the economy with the opening of deposits, lending and the rapid introduction of technological innovations and new ways of their widespread use. The financial sector has traditionally been a leader in the adoption of technological innovations, but so far the focus has been on computerization, increasing the efficiency of existing processes and the introduction of additional operating channels. Recent developments in Fintech represent a fundamental change in the entire financial services industry. New players and market participants are creating business models that are radically different from traditional business models. Despite some subtleties, the terms "digital finance" and "fintech" are usually used synonymously. Digital finance is linked to the digitalization of financial services and the financial sector of the digital economy as a whole [1]. In our opinion, the digital economy is an economy characterized by the maximum satisfaction of the needs of its participants through the use of modern information and communication and financial technologies, as well as the availability of infrastructure that provides full access to all participants of financial and economic activities. In comparison with the traditional financial services, digital financial solutions are not limited to "licensed" or state-regulated operators. Most digital financial players are not directly covered by the regulatory system, including mobile operators, digital financial startups and digital companies. They stimulate innovation beyond traditional financial institutions. Nevertheless, banks and other financial institutions remain key players in providing financial services, especially in emerging market economies. The "subversive" nature of emerging technologies destroys traditional business models of financial institutions and encourages them to create new strategies to stay profitable. Therefore, banks and other regulated financial institutions are rapidly adopting digital financial processes and changing their products and services. Digital finance uses existing infrastructure to implement a number of evolving technologies and create new services. At the same time, it can contribute to the improvement of the existing financial infrastructure. Programming interfaces for the interactive and open application of most solutions can help ensure the access of many digital financial solutions. Owing to the open application programming interface, the same technologies can be used globally, allowing entrepreneurs to develop, test and improve consumer services at a very low cost, and make decisions that support integration based on shared technologies or platforms.

3. POTENTIAL BENEFITS OF DIGITAL FINANCE

The processes taking place in the digital financial sector open up new opportunities for banks for increasing business efficiency and development. Traditional players in the financial sector are taking advantage of these opportunities to find new solutions to old problems, while big players are investing heavily in digital finance and actively implementing innovative pilot projects. At the same time, new players are directly developing and selling new products using new supply channels and new business models. The potential advantages of digital finance can be summarized as follows:

- Efficiency: By removing the barriers to the expansion of digital financial services and offering a wider range of products to a wider range of consumers, the financial services industry can bring significant benefits both in terms of increasing its efficiency and

customer satisfaction. Approximately 60% of the unregistered adult population notes "lack of sufficient funding" as one reason, sometimes for other reasons [2].

- Competition and new business models: The development of technology and regulatory framework suitable for services such as electronic money and platform models has allowed the new player class to share different financial services and provide a wide range of targeted financial services to customers.
- Data analysis: Data obtained as a result of the growing number of digital platforms and applications can be used to record recorded telephone conversations, activity on e-commerce platforms, Internet-connected devices, social networks and professional networks, as well as digital transactions.

These factors contribute to the emergence of new forms of partnerships to serve different market segments.

3.1. Partnerships with digital financial service providers

Traditional banks no longer see digital financial companies as competitors, but instead collaborate with them to reach new population groups and improve regular operations. Partnerships allow financial institutions to take advantage of financial innovation quickly, cheaply, and efficiently through the digitalization of financial services. Such a partnership is mutually beneficial. Banks are gaining access to new markets and customers. The partnership allows both parties to diversify payment mechanisms using mobile or digital payments, respond quickly to changes, and adapt to the situation using flexible techniques and new technologies. In addition, they can develop innovative services such as mobile lending without large investment and research costs. The partnership also allows digital finance companies to address market access and regulatory challenges. In addition, banks have huge customer networks and infrastructure, the ability to analyze big data, and a well-known brand. Samples of existing partnerships include: the utilization of open application software interfaces in order to facilitate developers' tasks; utilization of new technologies to make digital payments or small-scale capital investments, which are not very convenient or difficult for a large bank; improvement of identification and customer identification methods, including biometrics; use data analysts to raise awareness and engage customers; as well as options for providing "non problematic" services. The partnership allows credit institutions to take advantage of digital financial services. Digital methods allow such organizations to provide basic financial products to those in need quickly, cheaply and easily. Such organizations use new marketing channels to reach customers and meet their needs, develop new products and services according to customer needs and use the data to present products to consumers who are considered risky due to the lack of traditional indicators. Innovative ways of combining technology with human communication are also important in the service market. Agents in the "advanced" services market can help customers with low digital literacy feel more comfortable using the financial system, choose products, solve problems and increase customer confidence when using new services. Expanding the capabilities of the financial partnership model through utilization of cloud platforms can significantly reduce costs and increase the efficiency of services.

4. ANALYSIS OF THE CURRENT STATE OF DEVELOPMENT OF THE DIGITAL ECONOMY IN THE FINANCIAL SECTOR OF AZERBAIJAN

The digital transformation of the financial sector in Azerbaijan continues at a rapid pace, setting an example for other areas, allowing Azerbaijan to become one of the world leaders in this field. Expansion of digital finance in the financial system of Azerbaijan is one of the main priorities in the "Strategic Roadmap for the Development of Financial Services in the Republic of Azerbaijan" approved in 2016 [3].

The priority is to improve the regulatory mechanism to accelerate the digital transformation of the financial system by 2020. In the context of the priority envisaged in the road map, in September 2018, the "State Program for the expansion of digital payments in the Republic of Azerbaijan in 2018-2020" [4] was adopted. The program identifies four areas for development to achieve its goals. These include further improving the institutional environment for digital payments, revitalizing the banking sector, shaping the digital ecosystem, and strengthening advocacy and awareness of digital payments (Table 1 and Table 2).

CASH-FREE STRATEGY of AZERBAIJAN	
Sub-strategies	*Components of a cashless society*
A) Reducing the scale of the cash economy	Favorable institutional environment
B) Expanding the cashless economy	A society with high financial literacy Modern payment ecosystem Advanced financial system

Table1: State Program on "Expansion of digital payments in the Republic of Azerbaijan in 2018-2020" (Source: [4])

Directions	Priorities
1. Further improvement of the institutional environment for digital payments	. development of a favorable business environment . increasing the efficiency of the tax system . strengthening the social protection system
2. Revival of the banking sector	. Acceleration of the banking sector recovery . formation of an active money market
3. Formation of digital ecosystem	. development of digital entrepreneurship . development of e-commerce . Improving the legal framework for payment services . introduction of new digital payment technologies . development of digital banking . Wide application of smart payment means . development of existing electronic payment services . increasing financial inclusion in the region and remote areas . stimulation of digital payments
4. Strengthen awareness and advocacy on digital payments	. raising financial literacy . raising public awareness of digital payments

Table 2: The main directions and priorities of the State Program (Source: [4])

The development of digital finance is regulated by the Central Bank of Azerbaijan, which oversees financial markets, financial activities and the licensing of new financial technologies. The central bank also controls the cryptocurrency market. The new guidelines propose a number of measures to regulate the use of financial technologies, including the adoption of relevant legislation, as well as the development of remote identification platforms, platforms for financial products and services, the use of blockchain and cloud computing technologies in the field. It is recommended to use open application software interfaces for effective interaction. The goal is to create a level playing field for new market participants and increase the competitiveness of Azerbaijan's financial sector.

5. FEATURES OF RISK MANAGEMENT AND WAYS TO IMPROVE THE DIGITAL ECONOMY IN THE AZERBAIJANI FINANCIAL SYSTEM

Today, the development of production and financial resource management technologies in a number of countries is carried out within the framework of state programs for the transformation and creation of the digital economy: "Industrie" in Germany, "Advanced Manufacturing Technology" in the US, "Strategic Concept for Innovation and Advanced Technologies" in China, "Innovate UK" in England, "National Digital Economy" in Australia, creation and implementation of IoT platforms in the Russian Federation, development of applied services projects are also implemented [5]. Another risk group in the digital economy is organizational and management risks, which are directly related to the structure and organization of the financial system, as well as fundamental decision-making. Given this group of risks, it should be noted that the various distortions in the financial system are of great importance. Moreover, the greater and larger extent of such distortions, the wide organizational and managerial risks that affect the financial system. Professor B.A. Heifetz in his research, speaks about two main imbalances: the widening gap between financial and real economies and the imbalance of forces in the global economy, and the role of new economic leaders in the process of globalization [6, p. 48-56]. According to him, certain risks for the financial system are the increase in the financial depth of the economy, which is the ratio of the value of financial assets to world GDP, as well as the dominance of two major currencies in the international economy - the US dollar and the euro. The role of currencies such as the rupee and the Russian ruble is inconsistent with the size of national economies on a global scale). If we talk about external organizational and management risks, it should be noted that they are also specific to the digital economy. In this regard, we can pay attention to a number of global imbalances in the financial system of Azerbaijan. Thus, in our opinion, the digital economy is not a substitute for the real economy, but only a part of it, or rather, some business processes that have moved to the 1T sphere. Human society exists in the material world and in the digital economy its material needs will not be lost. For example, although food is purchased online, it still needs to be produced. However, the digital economy can develop certain sectors and fields of the economy, some of which can even be transformed. Digital finance creates new challenges that can negatively affect financial integrity, consumer protection and financial stability. Ensuring equal conditions in the provision of services and strengthening consumer protection is one of the most important tasks. While overly cautious or flexible regulation may hinder the expansion of fintech services, the lack of effective regulation faces increasing risks and sensitivities for the financial sector and consumers. In terms of risk, traditional risks, including commodity and organizational risks, remain, and new types of risks arise in connection with the application of new technologies for money laundering and terrorism financing, piracy and data seizure, and increasing consumer sensitivity. In particular, the use of big data and new forms of processing in credit risk assessment, online operations and consumption rules exacerbate the problems of data protection and consumer privacy [7]. To ensure equal opportunities for all players in the sector, it is important to find the right balance between regulating the activities of existing financial service providers and creating conditions for new players. İt is important that both of them have access to the financial infrastructure and customer data (or customer interface).

6. CONCLUSION

Azerbaijan has ample opportunities for better utilization of digital financial technologies.

- Development of an appropriate regulatory framework that helps to create favorable conditions for the further development of digital finance in Azerbaijan and ensures the stability, security, efficiency and integrity of the financial system.

- The use of technology (RegTech / SupTech) to flexibly regulate and maintain the balance between service delivery and innovation in the privacy and security of users, as well as to increase the transparency of financial products and services, guarantee customer rights and protect financial markets from unreasonable operational risks.
- Focus on cyber security and prepare to manage new risks.
- Strengthening Azerbaijan's financial infrastructure for the acceleration of the transition to a cashless economy by developing an ecosystem approach taking into account all players in this area.

Stimulation the development of comprehensive capabilities of digital identifiers and ensure full digitalization and compliance with regulatory requirements for customer attraction and service processes.

- Utilization of distribution registry technology to provide financial services and increase transaction efficiency, transparency and customer satisfaction.

A significant inequality in the pace of digitalization of various sectors of the economy should be noted. One of the important points in the implementation of digital transformation in the financial sector is to ensure the security of information technology, utilization and protection of data in information systems, as these technologies have become the main tool for doing business. However, it must be acknowledged that the penetration of advanced information technology is confusing banking functions, and banks are gradually losing expert functions to virtual communities, and the logical transition to the digitalization of the financial system will be the full transfer of banking services to the online space. It is important to recognize new opportunities provided by technological advancement and use them to develop new products, manage customer relationships, and increase operational efficiency. It should not be forgotten that the impact of new technologies can lead to changes in sources of income, the transformation of markets and the breakdown of business relations, the change of leaders.

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THE INFLUENCE OF ENZYME PREPARATIONS ON GENERAL INDICATORS OF GRAIN

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ABSTRACT
Wheat used for human consumption is customarily processed into flour. The most important fraction of the by-products obtained during grain processing is bran, which constitutes approximately 25% of the microstructure of the grain. The bran fraction also consists of the starchy endosperm and the aleyron layer, because it is impossible to completely separate all the anatomical parts of the wheat grain. Bread made from white and refined flour is devoid of many biologically active compounds. Furthermore, these compounds are concentrated in bran. It is known that the use of whole-grain products reduces the risk of disease.A research aim is to research the effect of fermentation by using a phytase-based complex enzyme preparation to change the microstructure of anatomical parts and some indicators of wheat composition. Hordeum vulgare L. "Karabakh 22" (R2 P 1) wheat sort was fermented in solution of phytase-based (manufacturer of Penicillium canescens) complex enzyme preparation for 15 hours at a pH 5.5 in a 55 ° C thermostat. The drug contains xylanase and phytase, selobiohydrolase, β-glucanase (phytase 12005 units / g, xylanase activity - 801 units / g). A pH 4.5 citrate buffer was used to maintain the pH level. Grain: water ratio is 1: 1.5. The concentration of the enzyme preparation was 0.7 g / l. Local grains and dry grains was used as examples. The analysis was carried out under the JMOL JSM 6390 electron microscope. Antioxidant activity was determined by spectrophotometric method in alcohol extract.The polypeptide content of the total protein in the grain was determined by gel-chromatography.Determination of phenolic compounds was carried out by high-efficiency liquid chromatography on the Milichrome-5-3 device.
Keywords: grain, protein, enzyme preparation

1. INTRODUCTION
Heavy metals accumulate mainly in the peripheral areas of the grain. Grinding process is applied in the technology to minimize the amount of harmful substances in food. The current modern technologies of grain crops processingduring the production of food productsare based on the production of various types of flour by peeling the shell of the grain, in which more than 20% of the flour mass is lost. Studies show that the perfect type of flour contains almost no heavy metal salts.[1].Foods with higher nutritionalproperties can be obtained through proper formation of hierarchical structures [2].Degradation of these matrices by enzyme hydrolysis affects the structure and biologically active compounds. [3]. The application of innovations in the production and processing of grain crops (wheat, oats, barley, and etc.) is always of some interest. [5].The aim of the study was to determine the effect of the fermentation process on changes in the microstructure of the anatomical parts and some parameters of the composition of the wheat grain using a complex enzyme preparation based on phytase. During the grinding process, some of the biologically active components, such as vitamins, biogenic minerals, dietary fiber, as well as essential amino acids and proteins, are extracted.The spread of civilizational disorders (obesity, atherosclerosis, diabetes, etc.) through the use of refined

products, including grain crops, in food is a concern for physicians, nutritionists and physiologists. In this regard, methods to reduce the amount of toxic elements in grain raw materials are of particular importance to increase the safety of grain and its processed products. The application of biotechnical operations such as cellulose-based biocatalysts used in the decomposition of extracellular adsorbents to implement this process is promising. [4].First of all, they are enzymesthat catalyze changes in the natural structure and break-down of cellulose fibers, release cellulose microfibrils from the cell wall matrix and break-downhemicellulose and pectin, and catalyze the break-downof phytonutrients[6]

2. RATIONALE OF ENZYME PREPARATIONS RATIONAL DOSES

In order to reduce the amount of toxic elements, cellulolytic enzyme preparations such "Celloviridin G20x" and phytase-based laboratory preparation F 4.2B (P-215) FD-UF, Novozymes: Pentopan 500 BG and Fungamyl Super AX preparations, and preparation of Quest– Biobake – 721 company,has been used to modify the structure of fruit and seed shells of wheat grain. Enzyme preparations were applied during the soaking phase of the grain.The process was carried out in a thermostat at a temperature of 55 ° C and a pH of 5.5.The optimum temperature and pH for the action of enzymes in enzyme complexes have been determined. A citrate buffer has been used to maintain the pH of the medium. The most important factors affecting the enzyme hydrolysis process of non-starch polysaccharides in the shell of grain are the soaking duration and the dose of the enzyme preparations applied.The selection of rational doses of enzyme preparations is carried out experimentally. After soaking the grain for 15 hours and washing with water, the amount of sanitary-normalized lead and cadmium toxic elements is determined. During soaking of wheat grain, enzyme preparations as CelloviridinG20X - at a dose of 0.06-0.12% of the dry matter content of the grain (cellulose activity 1.78-3.57 units/g),on the basis of phytase - at a dose of 0.07-0.12% of grain weight (phytase activity 7.5-12.0 units/g), Biobake 721 - at a dose of 0.07-0.12% of the dry matter content of the grain (xylanase activity - 0.47-0.76 units/g), Pentopan 500 BG - at a dose of 0.002-0.006% of the dry matter content of the grain (xylanase activity 0.05-0.16 units/g) and Fungamil Super AX - at a dose of 0.008-0.012% of the dry matter content of the grain (xylanase activity 0.2-0.3 units/g), was included.

2.1. Effect of enzyme concentration and soaking duration on the amount of lead and cadmium in wheat grain

Under normal natural pH, cadmium forms a complex with large amounts of ligands.The element can be easily transferred to plants in the form of organic metal complexes. Cadmium readily takes over most of the metabolic positions in active substances found in cell walls.[7]. Amino acids, amino sugars and polysaccharides contain suitable donor atoms for the formation of cadmium-containing compounds. The amount of cadmium in the wheat grains begins to decrease rapidly from the first hour of soaking, and after 15 hours of soaking, this process slows down somewhat by the action of phytase and CelloviridineG20X-based enzymes. Lead formsa highly stable chelate with organic ligands containing S, N, O donor atoms.The main part of the lead is covered with colloids.A decrease in the amount of lead in the grain is observed when soaking wheat grains in water and solutions with rational doses under optimal conditions for the action of enzyme complexes (pH 5.5, temperature 55° C) of enzyme preparations.The most significant reduction in metal is observed within 6-15 hours regardless of the type of enzyme preparation used to soak the wheat grains. The results show that the use of cellulose-based biocatalystsduring the soaking phase of wheat grain reduces the amount of toxic elements and radionuclides in the grain. Under the influence of cellulose-based biocatalysts, a modification of the natural structure of the cell wall matrix of the fruit and seed shell of the grain.

2.1.1. Changes in the microstructure of the grain surface under the influence of enzyme preparations

The surface of the grain should first react to the action of water and solutions of cellulolytic enzyme preparations.A change in the relief of the grain surface was observed when soaked for 15 hours under the influence of water (sample) at a temperature of 55 ° C.After soaking in water, the cuticular part of the micro-relief of the grain surfacewas in the form of open bundles of undamaged fibers, the transverse lines of the microfibril matrix of the cell walls were more clearly visible. The nature of the changes in the structure of the surface of the grain is determined by the type of preparation and its enzyme complex.Under the influence of CelloviridineG20X, the fibrillar transverse sutures composed of cellulose microfibrils and hemicellulose molecules were degraded. Opened fibrillar paracrystalline areas are suitable for water, colloids and chelates.The cellobiohydrolase enzyme, which is part of the enzyme complex of the preparation, breaks down the outer layers of cellulose microfibrils with an amorphous structure. The use of phytase and Biobake 721-based enzymes causes the break-down of hemicellulose in the tissue. Under the influence of Fungamil Super AX, the shell, consisting of longitudinal fibers of structural polysaccharides, has a smooth structure.As a result, under the influence of Celloviridin G20X, cavities appear on the surface of the grain. Thus, the effect of the preparation is more uneven,the microrelief of the surface is deeper,the shape of the depressions is less accurate, and numerous open chains of polysaccharides are visible.

3. STUDY OF EFFECTS OF SOAKING DURATION IN SOLUTIONS ON WHEAT GRAIN

To study the effect of soaking duration on the microstructure of wheat grain stored in cellulolytic enzyme preparations, the grain was soaked for 6 hours.As a result of wetting, phytase-based Celloviridin, Biobake 721 enzyme preparations, were clearly visible on the grain surface as drops.However, in samples treated with Fungamil Super AX and Pentopan 500 BG, the amorphous formations passing under the upper layer of the fruit peel can be seen on the surface of the substrate. It is possible that Novozymes preparations contain strongly absorbed enzymes that penetrate the deeper layers of the substrate. During six hours exposure, the enzyme preparations had no significant effect on the microstructure of the grain surface.This case confirms the formation of holes on the cuticular surface, and their size and nature are determined by the type of preparation. The shells of wheat grains are composed of layers.When the wheat grains are kept in water for 15 hours,the peel of the fruit and seeds swells, their total thickness increases and the thickness is on average 26.16 μm.Under the influence of a cellulolytic enzyme complex - celluloses, β-glucanases and xylanases sequentially change the structure of the cell wall of non-starch polysaccharides. They are hydrolyzed and hydrolysis products with higher water absorption capacity - poly - and oligosaccharides, pentosans are formed.The products of hydrolysis swell by filling the intercellular spaces. A gap appears between the fruit and the peel.After processing the wheat grain with a complex enzyme preparation, the thickness of the fruit peel was 20.64 microns.The distance between the fruit and seed shell was 30.32 - 35.15 μm, and the thickness of the seed membrane was 14.99 μm. It was determined that the proteolytic activity of the wheat grain changed slightly when it was soaked for 15 hours.However, under the influence of cellulolytic enzyme preparations, an increase in the proteolytic activity of wheat was observed. During the 8-hour soaking, the proteolytic activity of the wheat increased insignificantly, followed by a gradual increase. Grain soaked in Fungamil Super AX enzyme preparation has the greatest proteolytic activityand in this case its amount increases by 29.22% in 15 hours compared to the sample. Compared with grain soaked in water, proteolytic activity increased by 14.58%, phytase-based enzyme preparation - 17.14%, Biobake 721 - 21.03%, and Pentopan 500 BG - 24.60%after 12 hours of

soaking with the use of Celloviridin Q20x enzyme preparation. The amount of protein in the grain decreased by 7.4% after soaking in water for 15 hours. Gliadin is the predominant fraction in wheat protein.During the soaking of wheat grains in water, the amount of albumin proteins, globular and gliadin fractions decreased, but the amount of gluten increased.

Practice options	The amount of protein, %	albumin, %	globular, %	gliadin, %	gluten,%
Dry grain	12,30	1,00	3,62	4,52	3,01
Grain not soaked in enzyme preparation	11,40	0,86	2,59	4,22	3,45
Celloviridin G20x	11,20	0,80	2,48	4,20	3,34
Biobake 721	11,10	0,82	2,32	3,94	3,46
Pentopan 500 BG	10,80	0,66	2,40	3,84	3,67
Fungamil Super AX	10,70	0,60	2,34	3,78	3,68
Phytase based	11,00	0,75	2,37	3,99	3,60

Table 1: Effect of cellulolytic enzyme preparations on the protein fraction of grain

4.CONCLUSION

Research has shown that the fermentation process using a phytase-based complex enzyme preparation at pH 5.5 and 55 ° C for 15 hours affected changes in the microstructure of the anatomical parts of grain.There has been a breakdown of the cross-links between individual microfibrils and fibrils composed of hemicellulose molecules. A gap appeared between the fruit and the seed shell. After processing the wheat grain with a complex enzyme preparation, the thickness of the fruit peel was 20.64 microns.The size and structure of the aleurone layer in the fermented grain changed compared to natural wheat grains. Cracks 8-20 μm wide appeared on the grain surface, bounded by a large cuticle with a microfibrillar parallel texture.Interfibrillar paracrystalline openings are suitable for infiltration of water, colloids and chelates. The dynamics of changes in the amount of heavy metals in wheat grains during soaking in solutions of cellulolytic enzyme preparations showed that the use of the studied enzyme preparations reduces the amount of lead and cadmium in grains.Celloviridin Q20X enzyme preparation has a certain effect on changes in the protein complex.Phytase-based preparation is close to Celloviridinu G20xenzyme preparationin its effect on the protein complex.The most significant changes occur in the enzyme preparation Fungamil Super AX. Thus, the protein fraction of processed grain is more variable.

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ECONOMIC IMPACT OF TOURISM IN AZERBAIJAN: A SAM-BASED MULTIPLIER MODEL

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ABSTRACT
A social accounting matrix is a square matrix that reflect all transactions between economic agents in a specific economy for a specific period of time (usually one year). While it is a comprehensive snapshot of the economy recording economic flows related to production, income generation and its distribution and redistribution among economic agents, it is also an important basis for different types of models. A SAM extends the classical input-output tables, and because reflects both distribution and redistribution of income alongside with production linkages, economy can be analysed in a more consistent way using SAM compared to IO models. Therefore, in this paper, a SAM multiplier model was used to estimate the impact of tourism sector on other sectors of the economy, and at the contrary, the impacts of changes in other sectors on tourism sector. Tourism is one of the main sector of economy and until pandemic it was considered an important area for both emerging and developed economies to compensate for weak export earnings from other goods and services. With the development of the non-oil sector in Azerbaijan as one of the main directions of the economy, the development of the tourism sector was in the spotlight. However, during the Covid-19 pandemic, the tourism sector is one of the most negatively affected sectors. In this regard, the assessment of the impact of changes in this sector on other sectors and the country's economy as a whole is important both in terms of analyzing the current situation and also identifying areas for economic recovery in the post-pandemic period.
Keywords: covid-19, input-output models, multiplier analysis, social accounting matrix, tourism

1. INTRODUCTION

The tourism sector, one of the fastest-growing sectors since the middle of the twentieth century, is an important sector for both developed and developing countries, that makes a significant contribution to the economy. The World Travel & Tourism Council has been quantifying the economic and employment impact of Travel & Tourism for nearly 30 years, considering the importance of the sector to the global economy. The 2019 annual research reveals that the sector accounted for 10.3% of global GDP and 330 million jobs or 10.4% of total employment in 2019. Over the past five years, one in four of all net new jobs created across the world has been in Travel & Tourism (World Travel & Tourism Council: Travel & Tourism - Global Economic Impact & Trends 2020, June 2020). Tourism suffered the greatest crisis on record in 2020 following an unprecedented health, social and economic emergency amid the outbreak of the COVID-19 pandemic. International tourist arrivals (overnight visitors) plunged by 74% in 2020 over the previous year due to widespread travel restrictions and a massive drop in demand.

The collapse in international travel represents an estimated loss of USD 1.3 trillion in export revenues - more than 11 times the loss recorded during the 2009 global economic crisis. The latest UNWTO Panel of Experts survey shows a mixed outlook for 2021. Almost half of respondents (45%) envisaged better prospects for 2021 compared to last year, while 25% expect a similar performance and 30% foresee a worsening of results (https://www.e-unwto.org/doi/abs/10.18111/wtobarometereng.2021.19.1.1). Having considered Azerbaijan is a country abundant in natural resources especially oil and gas, The direct impact of changes in oil prices on the Azerbaijani economy has highlighted the importance of developing the non-oil sector in the country. Azerbaijan's financial authorities have implemented several infrastructure projects to support the development of the non-oil sector, taking advantage of the growing exclusive opportunities for oil exports. The tourism sector in Azerbaijan has developed rapidly, especially since 2000, and efforts have been made to gain a competitive advantage in the international tourism sector. Thus, one of the priority areas for the economy is the development of tourism. The increase in investment in this sector, the creation of new types of tourism, the introduction of the "Asan Visa" system, and the hosting of many international events have led to an increase in the number of tourists visiting the country. In 2019, the share of tourism in non-oil GDP was 3.9 percent (https://economy.gov.az//uploads/fm/files/diger/Qeyri-neft_2019.pdf). During January-September 2020, the value-added in the field of tourist accommodation and catering amounted to 653.0 million manats, and the share of this sector in non-oil GDP was 1.8 percent. The impact of the coronavirus (COVID-19) pandemic has not passed unnoticed in the tourism sector of Azerbaijan, as in other countries. In January-September 2020, 686.3 thousand tourists came to Azerbaijan from 155 countries, and this is 3.5 times less compared to last year (https://economy.gov.az//uploads/fm/files/iqtisadiyyat/qeyri-neft.pdf). The tourism sector is closely interrelated with other sectors of the economy. Thus, the development of this sector has a significant impact on other sectors providing access to the tourism sector. The activities of travel agencies and tour operators, wholesale and retail services, and health services, which use the products and services of the hotel and restaurant sector as revenue, are also contributing to the development of this sector. An intersectoral analysis is based on input-output tables and provides a map of the dynamics of the economy over a period of time (Həsənli Y, 2011). Thus, the "Input-Output" models developed based on "Input-Output" tables are important for the analysis and forecasting of intersectoral relations of the country's economy. And it is also widely used to analyze tourism sector (Briassoulis H., 1991; Fletcher J., 1989). In the last century, a "Social Accounting Matrix" (SAM) was developed based on the principles of "input-output" tables, but covering a wider aspect of the country's socio-economic system. SAM is part of the SNA and is calculated and compiled by government statistics agencies in most countries. Numerous studies have been conducted to estimate the impact of tourism on the Azerbaijan economy using "input-output" models (Hasanli Y. And Salihova S., 2017; Baizakov et al., 2019; Hasanli, Y. and Salihova, S., 2020). The purpose of this study is to analyze the impact of the tourism sector on other sectors of the economy using SAM based multiplier model.

2. METHODOLOGY

Social Accounting Matrix is an accounting system that reflects all the transactions in the economy and describes the flow of resources between economic agents in a tabular form. In other words, SAM is a square matrix in which the sum of rows defines the expenditures of each entity and columns define the income of this entity (Pyatt G. and Round J., 1985). Due to its convenient design and a large amount of data, it reflects the important and necessary features of the socio-economic structure in general, as well as the structure of production and income distribution. At the same time, SAM is a key source for many economic models, including general equilibrium models.

One of these models is the SAM-based multiplier model. A SAM multiplier model is an extension of the input-output model and is designed to analyze the effects of macroeconomic policy (Breisinger C. et al., 2009). The multiplier model is used to study the multiplicative effects of changes in exogenous demand on endogenous accounts. In multiplier models, one or more accounts are presumed to be exogenous, and the response of other accounts to certain changes in these accounts is investigated. Changes in exogenous demand occur as a result of changes in any of its components - export demand, government spending or investment demand. This change has multiplicative effects on endogenous accounts both directly and indirectly. The general effect of changes in exogenous demand on endogenous accounts is the sum of the direct and indirect effects on that account. The first step in creating a simple multiplier model is to decide which accounts are exogenous and which are endogenous. Usually, the government account, the capital account and the rest of the world account are considered exogenous factors. Production accounts (production activities and commodities), factor accounts, and households are considered endogenous accounts. For simplicity, exogenous accounts are combined into a single account. Table 1 describes SAM accounts separated into endogenous and exogenous ones. The elements of the T matrix include economic relationships between endogenous accounts. The vector X represents the flow of resources from exogenous accounts to endogenous accounts, and vector I represents the flow of resources from endogenous accounts to exogenous accounts. The vector Y represents the sum of the elements in a row or column of endogenous accounts, and these sums are equal to each other under the equilibrium condition, since they are equal to the income and expenses of that account, respectively.

Table 1: SAM (accounts separated into exogenous and endogenous accounts)

Accounts	Endogenous accounts				Exogenous accounts	Total
	Activities	Commodities	Factors	Households.		
Activities		T_{12}			X_1	y_1
Commodities	T_{21}			T_{24}	X_2	y_2
Factors	T_{31}				X_3	y_3
Households			T_{43}		X_4	y_4
Exogenous accounts	$İ_1$	$İ_2$	$İ_3$	$İ_4$		
Total	y_1	y_2	y_3	y_4		

Source: Round J., 2003

The basic approach to SAM-based multiplier models is to calculate column ratios, as in input-output tables. Then we get matrix A from the T SAM matrix by dividing each column element of this matrix by the sum of the columns, and it is clear that the following equation will be satisfied:

$$T=AY \tag{1}$$

We can write the following equation for each account:

$$y=Ay+x \tag{2}$$

From here, we can find y as folowing:

$$y=(İ-A)^{-1}x=M_A x \tag{3}$$

Where, M_A is the multiplier matrix. When matrix A is fixed, MA will also be fixed, and then equation (3) determines the equilibrium value of y corresponding to any change in x (Round J., 2003). To get an idea of how this model works, let's say we want to explore the possible effects of changing public spending. This change includes salaries and wages paid to civil servants. In this case, Equation (3) determines how this change affects the costs of production activities, and especially household income. More precisely, the reduction of government spending reduces the level of production and household income. This effect occurs directly. However, this decrease also indirectly causes changes in other accounts as a result of multiplier effects. The overall effect of changes in exogenous demand on endogenous accounts is the sum of the direct and indirect effects on that account.

3. DATABASE OF THE RESEARCH

The database of the article includes the micro-SAM of Azerbaijan developed using the latest available input-output table and other relevant statistics for 2016 released by The State Statistical Committee of the Republic of Azerbaijan. For this purpose, the inter-sectoral balance sheet, consisting of 96 areas, was initially aggregated into 16 areas. Then, using this table, a micro SAM was established using Azerbaijan's macro SAM for 2016 (Həsənli Y. and Rəhimli G., 2018). As mentioned above, in multiplier models, first of all, endogenous and exogenous calculations are distinguished. We took activities, commodities, factors and households accounts endogenously and the remaining accounts exogenously. Then we get the matrix as in table 2. Note that in micro form the intersection of rows and columns in activities and commodities with other accounts calculations represent a 16-dimensional matrix or vector. Here, in general, the sum of these vectors or matrices is reflected.

Table 2: macro social accounting matrix for Azerbaijan economy

	Activities	Commodities	Wage	Capital	Households	exogen	total
Activities		85466,10366					85466,1
Commodities	**29962,3**				**33500,8**	**50627,6**	114090,7
wage	**9693,1**					440	10133,1
capital	**45257,8**					2907,3	48165,1
households			9733,2	22542,88		0	32276,1
exogen	552,9482	**28624,6**	399,9	25622,2	-1224,7		
total	**85466,1**	**114090,6889**	**10133,1**	**48165,07**	**32276,0751**		

Source: Authors' calculations based on input-output table and other relevant statistics from The State Statistical Committee of the Republic of Azerbaijan

4. FINDINGS AND RESULTS

Based on the micro-SAM of Azerbaijan, the impact of the 10 million investment in the tourism sector on other endogenous accounts was estimated and the result was as in table 3.

Table following on the next page

Table 3: The impact of the increase in the volume of the final product of tourism sector by 10 million manats

			Sectors		total
ACTIVITIES	1.1		Agriculture, hunting, forestry and fishing	0,728766	
	1.2		Mining	0,234979	
	1.3		Manufacturing	0,773557	
	1.4		production and distribution of electricity and gas	0,266363	
	1.5		water	0,036384	
	1.6		Construction	0,784367	
	1.7		Trade services, repair of wehicles	1,089508	
	1.8		transport and storage	0,363598	11,1063
	1.9		hotel and 155estaurant services	5,492792	
	1.10		communication	0,178564	
	1.11		Finance, insurance and pension services	0,260799	
	1.12		profession, scientific and technical activities	0,136914	
	1.13		public administration and defence	0,002473	
	1.14		education	0,065672	
	1.15		health and social services	0,108969	
	1.16		other services	0,582592	
COMMODITIES	2.1		Agriculture, hunting, forestry and fishing	0,823903	
	2.2		Mining	0,247928	
	2.3		Manufacturing	1,985868	
	2.4		production and distribution of electricity and gas	0,271633	
	2.5		water	0,0397	
	2.6		Construction	1,093004	
	2.7		Trade services, repair of wehicles	1,139477	
	2.8		transport and storage	0,614043	17,97778
	2.9		hotel and 155estaurant services	10,17794	
	2.10		communication	0,204035	
	2.11		Finance, insurance and pension services	0,265784	
	2.12		profession, scientific and technical activities	0,289497	
	2.13		public administration and defence	0,002643	
	2.14		education	0,066517	
	2.15		health and social services	0,111933	
	2.16		other services	0,643875	
	3.2		labor	0,960737	
	3.2		capital	5,92448	
	4		households	3,695678	

Source: Authors' calculations

As can be seen, investments in the tourism sector increased the total output in this sector the most, while the final demand in this sector increased by 10.2 million manats. This impact increased the country's domestic production by 11.1 million manats and final supply by 18 million manats.

Also, labor payments increased by 1 million, capital gains by about 6 million, and household incomes increased by 3.7 million manats. And the sectors most affected by the tourism sector are manufacturing and trade. Table 4 shows the multiplier effect of the investment of 10 million manats in other areas in the tourism sector.

Table 4: The impact of 10 million manat increase in the volume of the final product of other sectors on tourism sector

	Sectors	toursim output	toruism demand
1.1	Agriculture, hunting, forestry and fishing	0,13	0,24
1.2	Mining	0,15	0,29
1.3	Manufacturing	0,05	0,1
1.4	production and distribution of electricity and gas	0,2	0,29
1.5	water	0,17	0,31
1.6	Construction	0,1	0,19
1.7	Trade services, repair of wehicles	0,17	0,31
1.8	transport and storage	0,1	0,18
1.9	hotel and restourant services	5,5	10,2
1.10	communication	0,15	0,29
1.11	Finance, insurance and pension services	0,18	0,34
1.12	profession, scientific and technical activities	0,1	0,19
1.13	public administration and defence	0,2	0,38
1.14	education	0,26	0,49
1.15	health and social services	0,18	0,33
1.16	other services	0,16	0,31

Source: Authors' calculations

As can be seen, the areas that generate the most growth in the tourism sector are 'education', 'public administration and defense', 'finance and insurance' and 'health and services'. Thus 10 million manats investment in education increases final supply of tourism by 0.5 million, and the same amount of investment in 'public administration and defense', 'finance and insurance' and 'health and services' increases 0.38, 0.34 and 0,33 million manats respectively.

5. CONCLUSION
The article assessed relations between the tourism sector and other sectors of the economy using the SAM-based multiplier model. Estimating Multiplier effects created by 10 million manats investment in tourism sector indicates that This impact increased the country's domestic production by 11.1 million manats and final supply by 18 million manats. Also, labor payments increased by 1 million, capital gains by about 6 million, and household incomes increased by 3.7 million manat. And the sectors most affected by tourism sectors are manufacturing and trade, while the sectors which have more impact on tourism are 'education', 'public administration and defense', 'finance and insurance' and 'health and services'. As can be seen, the sectors that are affected by tourism are the ones tourism sector uses their products and services as input, and the sectors that affect the tourism sector mostly are the ones use the output of tourism or development in these sectors are important in terms of attracting tourists. Therefore, to promote the tourism sector in post-pandemic period development of these sectors needs to be preferred areas when considering investment strategies.

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IMPLEMENTATION'S PERSPECTIVES OF THE HACCP SYSTEM FOR FOOD SAFETY

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ABSTRACT
Hazardous food products originating from microbiological contamination are in the first place, measured by the nature and degree of danger to people's health. All of the activity of microorganisms in the product causes chemical and physical changes. In most cases, these processes are undesirable they deteriorate consistence, taste and even spoil the product. Microorganisms causing food poisoning are of particular importance. According to the list developed by World Health Organization, the degree of food poisoning and frequence of food poisoning cases occurred mostly in milk and dairy product care attributed to the first category (food poisoning, which is the main source of food and its components). The application of HACCP system in milk processing enterprises plays an important role for the human body in order to produce safe products. Thus, HACCP system developed in order to maintain and control the placement of the emerging threats at each point of production. HACCP quality system developed individually for each institution and process separately. The end, result of each production evaluated by the quality of the product. Great importance attached to the quality of food, because it depends on human health and even life. Today, the concept of "quality product" for the consumer means a safe product with health-promoting features and visual appeal. Food safety is important and, above all, the object of sanitary and hygienic control. Food safety is always a focus, as there is always the possibility of danger to the consumer in the food market. Responsibility for controlling the production and safety of food products lies not only with producers but also with state regulators. The food safety system, which includes the elements that make up such a system, is the most effective tool for consumer protection. These include the regulatory framework that establishes product requirements, metrology, conformity assessment, control systems and market control. The basic model of quality management and food safety is the HACCP system. The article explores this system in more detail and explores the prospects for the application of the system.
Keywords: Food safety, food products, HACCP system

1. INTRODUCTION
Dangerous situations can arise at all stages of the production chain, at any point in the production process, storage and sale of the product. Quality and safety indicators are very important in any production, and in order to avoid doubts about the quality of the finished product, it is necessary to monitor it at every stage of production. To ensure the required level of quality of food products, a continuous technological process of processing is required, which is ensured in the production of the conveyor. Production automation is the highest step in achieving a continuous flow of production and continuity of processes. It accelerates technological processes, eliminates temporary breaks between separate operations, reduces the duration of the entire cycle of processing of raw materials, significantly improves the sanitary conditions of production, allows strict adherence to recipes and food preparation regimes. The place among the technical methods of improving the quality (factors) of the product belongs to the constant improvement of the technological base of the enterprise. Achieving a high level of product quality is possible only with the application of the latest technology, strict adherence to technology discipline, provide that the production is highly technical equipment.

Hazards in food can occur at any stage of the food chain, and in this regard, adequate management of the entire food chain is very important. Food security is ensured through the joint efforts of all parties involved in the food chain.

2. THE ROLE OF THE HACCP SYSTEM IN THE FOOD INDUSTRY

At the state level, a warning model of food safety management based on HACCP (Hazard Analysis and Critical Control Point) principles have been adapted and successfully implemented in enterprises around the world. It is a food safety management system that provides control at absolutely all stages of the food chain, at any point in the production process, as well as storage and product sales, where a potentially dangerous situation arises. The HACCP system is mainly used by food companies. In developed countries, each manufacturer develops its own HACCP system, which takes into account all the technological features of production. If the developed system is subject to changes, it can be adapted to any changes in the processes of production equipment for the purpose of conformity. The standard, which reveals a new system of management of the KMT, restores the management of the control process of the KMT. According to ISO 22000, the quality of food depends mainly on its production process. The study of threats to NGOs should be part of the planned work to ensure the production of a safe product. There is always the possibility of a dangerous product entering the food chain, so the organization should have a special recall operation. Food companies use the HACCP system in their enterprises to protect their food or brand as the product progresses in the market. An important and undisputed advantage of the HACCP system is its ability not to detect, to anticipate and to warn of errors with the help of step-by-step control over the entire chain of food production. This is a guarantee of food safety for consumers, and is the starting point and key issue in the work of the entire food industry. The use of production management, certified and HACCP-based systems allows food companies to produce not only products that meet the highest European safety standards, but also products that can withstand tough competition in the European food market. The HACCP can be an excellent argument for confirming compliance with regulatory and legislative requirements. Within the framework of the internal control system in the food industry, the HACCP concept is called upon to prevent threats to consumer health. The experience of the United States, as well as the requirements of the European Union 93/43 / Guidelines on Food Hygiene, were taken into account during the preparation of the national version of the state standard of the safety management system. However, national sanitary and hygienic documents and federal laws "On Ensuring the Unity of Measurements", "On Food Safety Quality", "On Sanitary and Epidemiological Welfare of the Population" are the basis of the system. HACCP plays a very important role in ensuring the NCO, but it is one of the components of the overall system of food security, the main of which is the provision of mandatory conditions. The practical application of the HACCP system in enterprises is a very positive example of the success of high results in ensuring the NCO. However, an enterprise usually has serious problems implementing this system. Globally, the HACCP-based warning model of governance has been adopted and is being used successfully in enterprises. It is a management system with GMO, which controls all stages of the food chain, at a certain point in the production process, including storage and product preparation, where a dangerous situation is likely to arise. The HACCP system is used by food companies. In many DDCs, all manufacturers form their own HACCP system, which takes into account all the technological features of production. Then, in September 2005, ISO 22000 "Food Safety Management Systems, Requirements" were approved, which unified the requirements of the safety management system and harmonized them with other standards of management systems. In contrast to the state standard, the new standard contains additional requirements in the field of document management, management responsibilities, information exchange, emergency preparedness, development of mandatory initial programs, and a developed system of measures

and management. In total, these requirements are aimed at maximizing product safety. Hazards in food can occur at any stage of the food chain, so adequate management of the entire food chain is critical. Therefore, in accordance with the HACCP standard, it is necessary to identify and manage risks to avoid negative consequences. The most important issue is to ensure the safety of food products, to protect the health of consumers through integrated management, to conduct audits for food safety, as well as to manage risks during production. Different food hazards unite several groups. The risk assessment in each group includes three main criteria: severity, frequency of occurrence, and time of onset of the adverse effect. Characterizes the type of effect that causes the severity of the danger, ranging from poorly expressed and temporary discomfort to more serious but reversible consequences; or irreversible consequences, including death. The frequency of occurrence indicates the number of events or the intensity of this effect. The effect of the hazard from the time of the hazard to the immediate onset of the effect reflects the time of onset of the immediate effect. Estimating the amount of these three criteria presents known difficulties in many cases. Only in some cases it is possible to observe a person directly. Often there is only data based on fractures or indirect epidemiologies and other systems of analysis. However, it is possible to give a relative risk assessment for different areas of food security and to get an overview of the whole problem by analyzing each individual area. Types of threats are divided into unequal groups according to the degree of risk - from maximum to minimum risk:

- threats of microbial and viral origin;
- dangers or deficiencies associated with an excess of nutrients in the human diet
- threats from the external environment with foreign compounds associated with food contamination;
- hazards of natural origin, conditioned by the characteristics of the chemical composition of natural raw materials;
- dangers associated with social toxicants: smoking, alcohol, drugs;
- hazards of food additives used in food production technology.

To reduce risk exposure, a small business needs to develop a culture of risk management. However, unlike other types of modern business entities, small businesses usually have a minimal administrative apparatus. Even so, some small businesses have implemented a food safety system in accordance with HACCP principles. they do not have a narrowly specialized manager in their staff, as well as personnel in strategic, financial, operational or risk management. Only a few local small businesses today have access to outside consulting services to provide advice in this area. In this context, the issue of effective risk management is usually left to the head of the enterprise or a small group of managers. They are usually not risk specialists and do not spend much time on this issue. Often, such companies do not have sufficient resources to deal with the consequences of risk realization, as well as limited credit resources and lack of financial support from the state. Hazards in food can occur at any stage of the food chain, so adequate management of the entire food chain is critical. Food safety is ensured through the joint efforts of all parties involved in the food chain. According to the assessment of health risks, research can be conducted within the HACCP system. This system provides control at all stages of food production, where dangerous situations may arise, at any point in the production process, storage and sale of the product, and is mainly used by food producers. In this case, special attention is paid to the critical points of control that the types of risks associated with the use of food can be prevented, eliminated and reduced to an appropriate level as a result of targeted control measures. To implement the HACCP system, manufacturers not only research their own products and production methods, but also apply this system and its requirements to suppliers of raw materials, auxiliary materials, as well as wholesale and retail systems.

The main purpose of the HACCP system is to ensure the production of a safe product through the detection of hazards and proper control. This system provides control at all stages of the food chain, at any point in the production process, storage and sale of the product, where dangerous situations may arise. In this case, special attention is paid to the critical points of control, that all types of risks associated with the use of food are dangerous to human health. And in this case, they can be prevented, eliminated and reduced to an appropriate level as a result of purposeful control measures. The HACCP system is a state-of-the-art management system that routinely identifies specific risks and control measures to ensure food safety. Hazard analysis is the process of collecting and evaluating information about hazards and the situation that led to them, and is important from the HACCP security perspective. Hazard analysis is part of the HACCP system. Its goal is to identify hazards in the production process, prevent or reduce hazards to an appropriate level, and manage hazards. In modern systems of official food control, the main responsibility for product safety passes from the state regulatory body to the producer. After that, the manufacturer is fully responsible for the safety of the product. The role of the public authority is to ensure that these obligations are met by the producer and, if necessary, to enforce them. The task of the manufacturer is to ensure the safety of products with the following elements: to take measures to warn of the production of dangerous products, not to place dangerous products on the market, not to mislead the consumer. In most developed countries, the manufacturer must also provide control and, if necessary, remove the product from the market in a timely manner.

3. ESTABLISHMENT OF CRITICAL CONTROL POINTS

In today's market economy, adherence to the principles of consumer satisfaction is a key issue for food producers. First of all, continuous improvement of quality is carried out in strict compliance with the relevant legislation to ensure product safety for consumers. According to experts, there is a comprehensive policy in the field of food and nutrition to shape the health of the population: it is the provision of optimal nutrition and stable safe food. Food safety is a global target, and weakening food safety controls could lead to bankruptcy. At present, the range of food products is constantly expanding, the nature of food is changing. Under the new economic conditions, the enterprise processing raw materials is in the process of formation and improvement of technological processes, which adversely affects the quality of food products. Food production techniques are a more complex process and require strict adherence to technology and production discipline, hygienic rules. The existence of constant change makes there an urgent need to develop new tools and management methods to help the enterprise become more efficient. The development of recommendations for management and risk assessment in the face of uncertainty can be seen as a prerequisite for the sustainable development of the enterprise. The application of statistical methods in risk assessment in control and organizational practice allows to increase the quality of products and social processes, productivity and occupational safety life cycle processes, the effectiveness of conservation and rational use of natural resources.

4. CONCLUSION

Food safety hazards may arise at certain times, and at any stage of the production cycle, it is imperative that control procedures be applied in accordance with established requirements. Today, the term "quality product" for the consumer refers to a safe product with health-promoting features and visual appeal. Food safety has a special meaning and it should be noted that it is a special object of sanitary and hygienic control. Sanitary rules characterize food safety as the absence of risks to the health of present and future generations, defined by the requirements of sanitary-hygienic rules, hygienic standards with the compatibility of life and food.

Food safety can be described as the absence of mutagenic, carcinogenic toxins or other ineffective effects of products on the human body. The creation of safe conditions is guaranteed by adhering to regulated levels of storage of contaminants and other substances that pose a threat to health. The organization of the production process itself is of special importance. One of the ways to organize production is to determine the scheme of the technological process. Determining the technological scheme in accordance with the requirements of the technological instructions relevant to the production of a particular type of product allows you to look at each operation separately, to create their sequence in a single technological process and determine what is necessary. Not only producers but also state regulators are responsible for ensuring food safety control. Ensuring the safety of food products that include components of such a system is the most effective means of protecting consumers. Examples of these tools are regulatory framework, conformity assessment, control system, metrology and market control. This paper discusses the HACCP system (HACCP - Hazard Analysis and Critical Control Points) and its application. HACCP is a food safety management system. It provides control at all stages of food production, every point of the process of production, storage and sale of products. A dangerous factor in the HACCP system is a biological, chemical or physical factor that can reasonably cause illness or damage if it is not controlled.

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MANAGEMENT ACCOUNTING OF EXPENDITURES IN THE IN HIGHER EDUCATION INSTITUTIONS: CHOOSING OPTIMAL METHOD OF COST ACCOUNTING

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ABSTRACT

The article discusses the issues of choosing the optimal cost accounting method in a higher educational institution, which enables effective management decisions in a higher educational institution (HEI) to improve the quality of education and the competitiveness of the institution. Scientific novelty lies in the development of methodological foundations for the development of an optimal cost accounting method in a HEI. Applied value - Within the framework of the study, an optimal method of cost accounting in the system of a HEI was proposed, the main stages of the development and implementation of this method were described. Economic efficiency of work - The development and implementation of an optimal cost accounting method in a HEI will improve the quality of the provision of educational services, thereby increasing the competitiveness of a higher educational institution at the world level.
Keywords: *management accounting in HEI, expenses, cost accounting methods, cost calculation, cost rationing*

1. INTRODUCTION

Factors like establishment and functioning of transnational corporations, increased concentration of capital and competition, expansion of production have significantly changed the requirements for maintaining and organizing accounting. At present, the separation of such accounting subsystems as financial accounting, tax accounting and management accounting is already firmly entrenched in commercial accounting. Budget accounting, as an integral part of the national accounting system, cannot exist in isolation from modern trends in the development of accounting science. However, most government agencies are limited to budgetary accounting. The introduction of the principles of management accounting is still a fundamentally new element of the organization of accounting for them and requires a long preparatory process associated with the development of methodological recommendations, retraining of personnel and analysis of the experience of specialists who have taken the first steps in the formation of their own management accounting system. Building management accounting is a complex process related to solving a number of problems, both organizational (administrative) and problems linked to usage of accounting software. The adoption of adequate management decisions by the leadership of HEI in these conditions is largely associated with the efficient operation of the mechanism for planning, accounting, analysis and control of income, expenses and performance results.

2. RESEARCH

To determine the most effective method for calculating the cost of educational services and operational costs of the HEI (in the context of the forms of training and specialties) we examined the existing methods of accounting for costs.

The process-based costing method is used in the extractive industries, as well as in the energy sector. Also, the process-based approach can be applied in processing industries with a simple technological production cycle, for example, in asphalt plants, in the cement industry, etc. [1]. Thus, this method is characterized by a mass type of production, a limited range of services and products, a short production cycle, a single unit of calculation and measurement, the absence or small amount of work in progress. As a result, in the case of the process-based method, the service provided or the products produced acts as both a costing object and a cost accounting object simultaneously. In relation to the activities of universities, this method cannot be used, since the cycle of delivering the services in the field of education is long: from four to six years. One of the most common methods of cost accounting and costing is considered the normative method, which represents following mechanism: certain types of costs are accounted for at the current rates provided for by normative calculations. With the normative method of costing and costs accounting, the operational accounting of deviations of actual costs from current norms is carried out separately, indicating the place of formation of the causes, deviations and the executors of the formation. This method takes into account the changes that are made to the cost rates as a result of the introduction of technical and organizational measures, and also establishes the level of impact of such changes on the cost of the service [2, p. 177]. Rationing of costs of higher educational institutions is required for calculating the cost of educational services, determining deviations in standard and actual costs, as well as researching the reasons that resulted in such deviations. Crossover calculation as a costing and cost accounting method is used in industries with continuous and batch production, in which products go through all 4 stages of production sequentially. The object of calculation with the crossover method is the product of each completed production stage, including those in which several products are received simultaneously. The essence of crossover (line-by-line) calculation is that direct costs are reflected in the current accounting not by type of product, but by stages of production. Thus, the stage of production is considered the object of accounting. Regarding the use of this method for calculating the cost of educational services and accounting for costs in the HEI, it is worth noting that there are no production stages at the HEI. In the educational process, a stage is considered a half-year (semestr), according to the results of which students take exams. Thus, this method cannot be applied in HEIs to account for the costs of providing educational services. The next method of cost accounting and costing is the order method. With this method, the object of calculation and accounting is a separate production order, which is issued for a predetermined quantity of products. Accounting calculation is only made after receiving the order. Simply put, with the order method, the costs are attributed to each individual order. In the case when the order is represented by a single item, then its cost is determined by summing up the costs. As a rule, when using the order-based costing and cost accounting method, the product / service is manufactured for individual customers and in the quantity determined by the order of this customer. With regard to higher educational institutions, the use of a order - based method for cost accounting and costing of educational services is possible. In 1936, J. Harrison, an American economist, created the doctrine of "direct costing" for cost accounting. According to this method, only direct costs should be included in the cost price. With regards to this method, only variable costs are included in the cost of production, and fixed costs are written off to the operating result and accounted for separately. Applied to HEIs, this cost accounting method should be used in institutions where training is carried out in one specialty and several forms of training, or in one form of training and several specialties. The full costing method assumes that all production costs (both fixed and variable) are involved in calculating the cost of production. When using this method, only administrative, general and selling expenses are considered recurring. This method allows you to get an idea of all the costs that the university incurs in connection with the provision of educational services. But cost of educational services is calculated only at the end of the reporting period, which is why the use

of full costing does not allow timely and effective cost management. Another method for costing and costs accounting is ABC method - a method that is a two-stage method of allocating management and supporting costs of the organization. In universities, the use of this method is aimed at solving management accounting problems, where the share of direct costs is lower than indirect costs. The essence of the ABC-method consists in the distribution of the indirect costs of the educational institution for the business process, and then for the objects of calculation. In our opinion, the most effective method for solving these issues in the activities of higher educational institutions is cost regulation, i.e. development of progressive norms. When rationing the costs of the HEI, all structural divisions of the institution should be included in this process. For example, the management body of the university, represented by the rector or his deputy, will be in charge of the management and coordination of the process, as well as its organization and control; the accounting department will be responsible for monitoring compliance with established standards; the planning and economic department of the university will be engaged in the development and revision of the relevant standards. F.R. Khamidullina identified the following approaches and methods of rationing the costs of universities [3, p. 58]:

1) a structural approach, which represents the study of a phenomenon by means of its decomposition into its constituent structural elements, the study of their interaction;
2) a systematic approach, which consists in studying the phenomenon as a dynamically developing unit, analyzing it in all its dependencies;
3) calculation method, which is based on calculation data for all norm-forming elements.

The process of rationing the costs of educational institution has its own specific features, which depend on the nature of the services provided and the type of funds used. The rates of expenditure of funds of a higher educational institution will be attributed by:

- the methods of establishment - for estimated costs;
- the level of aggregation - for group and individual expenses;
- the level of detail - for aggregated and primary costs;
- the nature of the change in consumption - for absolute costs;
- validity period - for annual expenses.

The data on the available funds of the educational institution will serve as the basis for the rationing of indirect and direct costs. To determine the direct costs of the university, you can apply the methodology for calculating the cost of educational services. The following formula determines the rate of expenditure on wages of the professional-teaching staff of their specialty:

$$\Sigma P = T\text{ч} * n \,,$$

where n - is the number of hours of study load in accordance with the curriculum;
Tч - is the average hourly tariff rate;
ΣP - is the rate of expenditure on the salaries of the teaching staff in the specialty.

At the same time, the deviation of the normative-planned from actual consumption for this variable is influenced by such factors as:

1) Change in the average hourly rate of the professional teaching staff:
   - as a result of changes in the size of wages;
   - as a result of changes in the structure and composition of the professional- teaching staff.
2) Change in the number of hours of study load in the specialty.

As for the regulation of the indirect costs of the HEI, it is more laborious. If in its traditional form the normative method is aimed at reducing costs, then in HEI, an increase in costs is not always considered a negative trend. In higher educational institutions, it is worth adhering to the following rule: the higher the quality of costs, the more effective the result. Thus, there is a need to allocate productive costs, an increase in which is considered a positive trend, as well as the allocation of unproductive costs, an increase in which will be considered a negative trend. In this case, the productive costs include:

1) direct costs: costs of operating technical teaching aids and their maintenance, costs of maintaining technical and technological equipment, scholarships for students, costs of salaries of management and professional teaching personnel;

2) indirect costs: expenses for the implementation of sports and recreational activities and cultural events, educational expenses, expenses for lectures and the publication of scientific papers.

The unproductive costs include: transportation costs and the cost of maintaining the administrative staff. Rationing of costs of higher educational institutions is required for calculating the cost of educational services, determining deviations in standard and actual costs, as well as researching the reasons that resulted in such deviations. Based on the existing methods for determining the cost of educational services, we have developed a new methodology, which is based on the principle of calculating the cost of educational services by items: the costs of the university are classified into indirect and direct costs. The direct costs of the university include costs that can be immediately transferred to the cost price. In particular:

- expenses for the maintenance and operation of technical and technological equipment;
- scholarships;
- salaries of management personnel;
- salary of the teaching staff [4, p. 14].

Based on the proposed methodological approach, the direct costs of a higher educational institution will be determined by discipline blocks, forms of education, specialties, and types of occupation. The indirect costs of the university are related to the functioning of the infrastructure of the university, they include the cultural, household, social costs and costs for production services of the educational process; administrative expenses. As a result of the fact that the direct costs of universities can immediately be included in the cost price, this allows avoiding inaccuracies in their assignment to the object of calculation. As for the indirect costs for individual objects, such accuracy cannot be observed. Indirect costs are usually allocated to the costing object in proportion to the determined direct costs or to another distribution basis. Indirect costs are differentiated on the basis of percentages of costs for all forms of education and full-time education, due to the fact that indirect costs are different for different forms of education. Let us present the classification of the costs of a higher education institution depending on the form of education in Figure 1.

Figure following on the next page

Figure 1: Classification of expenses of universities depending on the form of education (compiled by the author of the study)
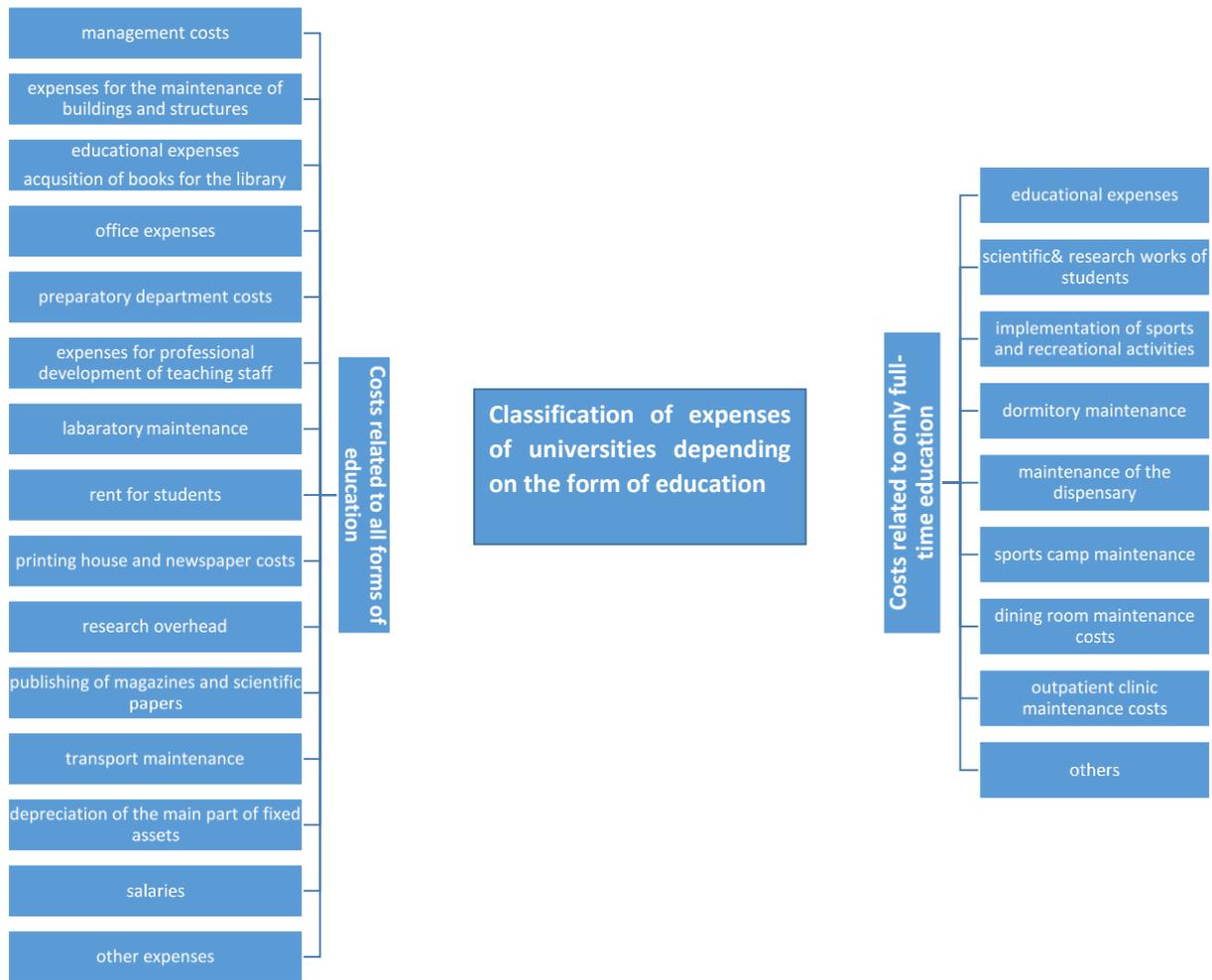
Consequently, a standardized approach to costs accounting and costing of educational services allows you to determine the cost in the context of specialties, forms of education and levels of education. It is important to emphasize that on the basis of the current standards and norms, the planned indicators of the activity of an educational institution, it is possible to determine the standard cost of educational services, while annual accounting data can help to determine actual cost. In our opinion, the standardized method of costs accounting and costing of educational services requires additions:

- in terms of determining the salary of the professional - teaching staff, which is due to the change in the salary system;
- in terms of determining the salary of management personnel. The salary of management personnel depends on the salary of the teaching staff, in particular, on the ratio of the number of management personnel to the number of professional - teaching staff and the ratio of management personnel's salary to the salary of the teaching staff;
- the percentage of overhead costs is of a normative nature. Basically, the indirect costs of the university are provided by extrabudgetary funds, as a result of which the level of interest and the structure of overhead costs in different universities are different. Consequently, the percentage of overhead costs is not of a normative nature, in each university it should be determined individually;
- in terms of determining the costs of operation and maintenance of technical training facilities.

The costs of technical training aids are determined as follows:

$$З_{TCO} = T_{TCO} * P_{TCO} / Qcp,$$

Where,

P_{TCO} - is the cost of 1 hour of operating time of technical teaching aids in a discipline;

T_{TCO} - is the number of hours of using technical teaching aids;

Qcp - is the average number of students in a class using technical teaching aids.

3. CONCLUSION

Since in HEI in the implementation of the educational process of a specific discipline there is no planning for the use of technical teaching aids, it is not possible to determine this indicator. In the course of the study, the optimal method of management accounting of expenses in universities was substantiated, which reflects the structure of expenses of an educational institution - a standardized method for recording income of a university. A standardized (normative) approach to costs accounting and costing of educational services allows you to determine the cost in the context of specialties, forms of education and levels of education. It is important to emphasize that on the basis of the current standards and norms, the planned indicators of the activity of an educational institution, it is possible to determine the standard cost of educational services, while annual accounting data can help to determine actual cost.

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APPLICATION OF THE BANCASSURANCE MODEL IN AZERBAIJAN: PROBLEMS AND PROSPECTS

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ABSTRACT

The article explains the essence of the bancassurance model, comments on the results of the analysis of the current state of the banking and insurance market in the context of world experience and notes the main trends in its development. The coverage of some problems of the Bancassurance model is of particular importance. The article examines the changes in the intersection of banking and insurance segments of the European financial market. The interaction of banks and insurers is important for modern financial markets. One of the modern forms of interaction between banks and insurance companies is bank-insurance synthesis, ie the process of integration of banks and insurers for the purpose of selling both insurance and banking products. At the same time, there is a merger of sales channels, insurance of banking risks, access to each other's internal financial resources. The type of bank insurance, which is quite widespread in the West, has not developed in Azerbaijani banks. There are several reasons for this. First, the relatively small size of the business of Azerbaijani banks makes such insurance very expensive for banks. Second, the lack of experience of Azerbaijani insurance companies severely limits the range of possible participants in such insurance by insurers. Finally, the lack of legislation and regulations for Azerbaijani banks to protect against risks, as well as relevant business traditions, does not force banking institutions to take out such insurance. Due to low demand from customers, the share of financial and commercial risk insurance contracts in the portfolios of insurance companies is also small. The main risk is the high level of dependence of insurance companies on the banking sector. The type of bank insurance, which is quite widespread in the West, has not developed in Azerbaijani banks. Today, the regulator is tasked to increase the share of insurance premiums in non-oil GDP by 1.8% (against the current 0.8%) by 2020. There is a need to create new insurance products in order to expand the insurance market, cover the uninsured population with insurance products, increase access to financial services and support the diversification of the economy. The share of insurance premiums is expected to reach 1.4% by the end of 2021. Another problem in the insurance market is the lack of services offered. While more than 300 insurance products are used in the world, only 40 insurance products are used in Azerbaijan. Thus, our research suggests that there are a number of serious problems that banks and insurance companies need to address in the application of the "bank insurance" model at the current stage of development. In our opinion, the effective development of the "bank insurance" model requires a common interaction of regulators, banks and insurance companies. We believe that raising the level of awareness about the need to apply the "bank insurance" model will significantly activate the "bank-insurance" model in Azerbaijan and raise it to a higher level of quality. The purpose of the article is to clarify the nature and principles of organization of the banking insurance market, to explain the interaction of its participants, to identify the advantages, disadvantages, modern trends and conditions necessary for the future development of this process in Azerbaijan. This topic is studied for the first time in the Azerbaijani economic literature.
Keywords: *Financial market, bank-insurance market, banks, insurance companies, sales channels of insurance products, problems of bank-insurance market*

1. INTRODUCTION

The interaction of banks and insurers is important for the modern financial market. But only those insurance companies that are ready for innovative types of cooperation and offering unique conditions for conducting joint business will be able to obtain advantages in building long-term relations with banks. It is also necessary to propose the creation of new, more profitable, types of financial corporations. For a mutually beneficial partnership, diversify the line of products that are profitable for both the insurer and the bank. One of the modern forms of interaction between banks and insurance companies is bank insurance - the process of integrating banks and insurers in order to sell both insurance and banking products. In this case, there are: combination of sales channels; bank risk insurance; access to internal financial resources of each other. This achieves a synergistic effect. Insurance mechanisms make it possible to transfer to the insurer almost all the risks that may arise in the course of banking activities. Comprehensive insurance of banking risks is widespread abroad, and sometimes even mandatory. This type of insurance allows you to "close" a significant part of the risks arising in the course of banking. It is an important component of a comprehensive risk management system for any bank focused on long-term development and caring for its image and reputation. For the Azerbaijani bank insurance market, this is becoming an urgent problem in the near future.

2. CONTENTS OF THE CONCEPT OF "BANK INSURANCE"

For the first time the term "bank insurance" appeared in France, where cooperation between commercial banks and insurance companies began earlier than in other European countries. It was originally used to refer to the simple distribution of insurance products through a banking network. Recently, the term has been used to describe all kinds of relationships between the banking and insurance industries [Бабенко (2016).p.12]. The process of providing insurance services and selling insurance products through banks is called bank insurance (the term "bancassurance" was introduced in France). This was facilitated by the adoption of regulations allowing banks and insurance companies to hold significant stakes in each other, subject to the preservation of legal independence [Басова, 2012]. In the scientific literature, the concept of "bank insurance" is considered in a narrow and broad sense. In the studies of the Expert RA rating agency, bank insurance is understood as the sale of insurance products through the bank sales channel, as well as insurance of the risks of the banks themselves. This is bank insurance in the narrow sense, from a functional point of view. In our opinion, this should also include specific services related to compulsory insurance of individual deposits that they have in commercial banks. It should not be forgotten that the very concept of "market" presupposes the presence of sellers and buyers, and not only insurance services, but also services offered by banks. Therefore, in the narrow sense of the term "bank insurance", from our point of view, it would be fair to include banking services, the consumers of which are insurance companies: settlement and cash services and services for the placement of temporarily free funds of an insurance company [Кудрявцев,2015]. In the work of N.V. Skvortsova and S.A. Urmatskikh notes that the term "bank insurance" should be understood as the process of integration of banks and insurance companies in order to sell both insurance and banking products, combining sales channels and the partner's client base, insurance of the banks' risks, as well as access to each other's internal financial resources [Скворцова, 2014]. In accordance with this classification, the following definitions are proposed: bank insurance in the narrow sense is a relationship associated with the implementation of banking and insurance services, in which banks and insurance companies can act as end consumers, and, accordingly, sellers, and as intermediaries in the sale these services; in a broad sense, bank insurance can be viewed not only as a relationship regarding the implementation of banking and insurance services, but also as a relationship between members of affiliated structures (business groups, financial and industrial

groups, etc.). "Bank insurance is a new organizational and functional structure in the modern financial market. The interpretation of the term "bank insurance" can be approached from two points of view. From an institutional point of view, bank insurance is a way of organizing cooperation between banks and insurance companies. From a functional point of view, bank insurance is the organization of a system of cross-selling of banking and insurance products through one point of sale, mainly through a network of bank branches and bank branches [Демченко, 2014]. Thus, the conducted research has shown that currently there is no common understanding of the term "bank insurance". At the same time, there are four main approaches to defining its content:

- insurance of risks of commercial banks;
- distribution of insurance products through the banking network;
- distribution of both banking and insurance products to one client base;
- integration of all relations between a commercial bank and an insurance company.

According to the authors, bank insurance should be understood as the process of integration of commercial banks and insurance companies in order to sell both insurance and banking products based on combining sales channels and the partner's client base, insuring the risks of the banks themselves, as well as access to the partner's internal financial resources. In addition, bank insurance should be based on the principles of strategic partnership:

- equality, respect and consideration of the interests of the parties;
- the parties' interest in participating in the contractual relationship;
- the unity of the structure and functions of management, etc.

3. BANK INSURANCE AS ONE OF THE MOST IMPORTANT COMPONENTS OF THE BANKING SYSTEM IN DEVELOPED COUNTRIES

Bank insurance is one of the most important components of the banking system in economically developed countries. The level of development of bank insurance in individual countries and geographic regions is due to:

- existing historical traditions of organizing financial relations;
- national legal restrictions;
- new conditions for the functioning of banks and insurance companies in a relevant external environment.

The modern centers of bank insurance are developed countries in such regions as Western Europe (France, Germany, Great Britain, Spain, Italy), certain Asian countries (Japan, Singapore, Hong Kong, Thailand, Malaysia). The last decade has been marked by the rapid spread of bank insurance models in South America, East Asia, Central and Eastern Europe, and South Africa. Over the past ten years, in France, Spain, Portugal, Italy and Belgium, the sale of insurance products through banks has become one of the most successful areas of the financial business. About 90% of European banks are involved in bank insurance. In France, almost 100% of banks carry out bank insurance operations. Most of the insurance products sold are related to the life insurance of bank customers. For example, in Spain, bank insurance provides more than 65% of collected life insurance premiums, in France - 60%, in Belgium and Italy - 50% each. It should be noted that bank insurance is not practiced in Germany and the USA due to legislative restrictions on the joint activities of banks and insurance organizations. In a number of developing countries, such as Argentina, Chile, Brazil, Mexico, bank insurance is developing through the interaction of foreign financial institutions and banks with an extensive branch network. In contrast to the countries of Europe and the United States, the domestic bank insurance model began its formation during the immaturity of the banking and insurance spheres, which determined the goals of this cooperation different from those in the West.

In 1985, British and French insurance companies formed the first strategic alliances with banks: the British insurance company Standard Life invested in the Bank of Scotland, and the French GAN acquired Credit Indastriel et Commercial. In addition, in 1980 in France, Banque Nationale de Paris Paribas created its own insurance company Natio Vie. This form of banking insurance integration has justified itself, which is evidenced by the efficiency of the Paribas group, which still occupies a dominant position in France. At this stage, there is an accelerated development of bank insurance in Western Europe: during 1986–2018. in France, the income of banks from the sale of life insurance products increased 12 times, an average of 28% annually. According to the European insurance and reinsurance federation, for 2008–2018. the most efficient concept of bank insurance functioned in the financial market of France, where the share of sales of insurance products through the banking network of branches and branches reached more than 60%. The development of bank insurance in the countries of Central and Eastern Europe takes into account the principles of the European model. However, with the gradual entry of foreign banks and insurance companies from the USA, Japan, China, Australia into this market, the basic conditions for organizing integration interaction between financial intermediaries are being transformed - the North American and Asian experience is increasingly taken into account. In most countries of Western and Northern Europe, the bank insurance market is underdeveloped or developing - the share of bank insurance in the total volume of life insurance premiums ranges from 10–47%. Only in France has the analyzed indicator over the past four years exceeded 60%. In the countries of Southern Europe, the bank insurance market is considered developed. The largest share of bank insurance in the total volume of life insurance premiums is noted in Portugal (74.1% in 2013), Spain (71.4%); Italy (71.9%). According to the European insurance and reinsurance federation, the largest share of non-life bank insurance is observed in Portugal (15.3%), France (12%) and Spain (10.2%). Thus, bank insurance in developed European countries is mostly aimed at combining life insurance banking services. In the United States, consumers generally do not associate banks with sales of insurance products, although there is a trend towards high rates of life insurance sales through the bank network. Collaboration is largely based on general sales agreements. The sphere of bank insurance is traditionally regulated in the United States: the Glass-Steagall Act has been in effect since 1933, and the 1956 restriction was supplemented by the Bank Holding Companies Act. The outlook for bank insurance has increased since the adoption of the Gramm-Leach-Bliley Act, which replaced the Glass-Steagall Act. The reasons for the underdevelopment of bank insurance in the United States are: a high degree of fragmentation of the financial industry; restriction in the use of a single information system by several financial intermediaries; significant role of insurance agents and brokers in the financial market. The Canadian national financial market is considered to be developed. Here banks are not allowed to officially sell insurance products to their clients. Only in 1992, the country entered into force regulations that allowed banks to invest in insurance companies with significant financial resources, modern information technology support, an extensive branch network in the world. However, banks became quite serious competitors for insurance companies, as they had the opportunity to serve consumers not only of banking, but also of insurance products. This fact led to the emergence of enhanced control over the activities of financial institutions. Since 2006, banks in Canada have been prohibited from carrying out any transactions related to the sale of life and non-life insurance products. Summing up some of the results, it should be noted that the main models for organizing bank insurance are European (continental) and North American. Despite the theoretical feasibility of financial convergence and financial integration of banks and insurance companies, the extent to which the concept of bank insurance differs from country to country. This concept is being implemented at an accelerated pace in the countries of the European regions. Collaboration between banks and insurance companies in European countries is mainly aimed at consolidating life insurance banking services.

4. ANALYSIS OF THE GENERAL SITUATION IN THE FINANCIAL SECTOR OF AZERBAIJAN

Considering the development of the banking system of Azerbaijan since the early 1990s, five stages can be distinguished:

1) 1990-1992 - the period of formation of the national banking system;
2) 1992 - 1994 - a period of rapid growth in the number of commercial banks in conditions of hyperinflation;
3) 1995-2003 - optimization and restructuring of the banking system in the context of macroeconomic stabilization.
4) 2003-2014 - The transformation of the country's large foreign exchange earnings into public investment as a result of business and consumer demand, as well as optimistic expectations associated with economic growth, further increased the demand for banking services. During this period, the financial depth (GDP of assets / non-oil sector) reached 77%, and the loan portfolio increased 30 times.
5) "Since 2014, as a result of a sharp decline in oil prices and the economic crisis faced by trading partners, against the background of processes taking place in the country, in particular, a decrease in the rate of economic growth, institutional and structural reforms, a deficit in the balance of payments and the non-oil budget, changes in the financial and banking sectors, in Azerbaijan there was a need for a new approach to innovation and economic development of the financial services sector "[Mamedov, Abbasbeyli, 2020].

Considering the need to improve the banking sector, amendments were made to the laws in the country: "On the Central Bank of the Republic of Azerbaijan", "On banks", "On insurance of bank deposits". Thanks to the new laws, the possibility of banking control was realized, based on the Basel principles, a favorable atmosphere was created for depositors and creditors in order to strengthen the protection of their rights and interests. The use of these forms and methods had a positive impact on the banking system of the Azerbaijani state, showing its stability in times of global economic turmoil. Based on the data on the banking system for 2020, the average level of capital adequacy in Azerbaijan was 18%, while, according to the Basel methodology, the minimum level is 8%, and according to the CBA's terms, it is 12%. As of the end of May 2020, 26 banks were actively operating in the country. Of these, 2 are state-owned and 24 are private banks. Twelve banks have foreign capital. There are seven banks with foreign capital ranging from 50% to 100%. In the remaining five banks, the share is up to 50%. The country also has two local branches of the NB of Iran and the NB of Pakistan. Among the domestic banking system, based on the size of assets, three fundamental credit and financial institutions can be distinguished, these are the International Bank of Azerbaijan, Pasha Bank and Kapital Bank. The loan portfolio is distributed as follows: legal entities - 60%; consumer loans - 30%; mortgage loans - 10%. International experts note that "including the IMF and rating agencies, they believe that there is still insufficient capitalization in the banking system in Azerbaijan." The share of banks and non-bank credit organizations in the total assets of the Azerbaijani financial system in 2019 was 88 percent and 9.7 percent, respectively, and the share of insurance companies in total assets was 2.3 percent. The average annual growth rate in the insurance market, a segment of the Azerbaijani financial system, in 2010-2015 was 20 percent. In 2015, the volume of insurance premiums in Azerbaijan increased and amounted to 444 million manat [Мамедов З.Ф., Vugar Namazov. 2020]. However, the share of insurance premiums in GDP is only 0.8%. High interest rates in the banking sector are a major risk for insurance companies. The effective functioning of the insurance market in Azerbaijan depends primarily on the availability of the necessary regulatory framework. Insurance activity in Azerbaijan is quite numerous: Civil Code of the Republic of Azerbaijan, laws ("On insurance activity", "On medical insurance of citizens in Azerbaijan", "On compulsory personal insurance

of passengers"), decisions and orders of the Government of Azerbaijan, Ministry of Finance, Economic It is regulated by normative-legal acts of the Ministry of Development, as well as orders and instructions of the Central Bank of Azerbaijan. At present, 20 insurance and one reinsurance companies operate in the insurance market of Azerbaijan. 4 of them are life insurance companies and 16 are non-life insurance companies. At present, 73% (414.9 million manat) of all fees in the market fall to voluntary insurance and 27% (153.6 million manat) to compulsory insurance. The share of voluntary insurance on payments was 73.5% (137.3 million manat), and the share of compulsory insurance was 26.5% (49.6 million manat). At the same time, the fees of the ten leading insurance companies in Azerbaijan amounted to 508.99 million manat (89.54% of total insurance premiums). Supervision of the insurance sector in accordance with a risk-based approach can be beneficial in terms of building a sound financial system. The purpose of state regulation and control of insurance activity in Azerbaijan is to ensure the formation and development of an effective market of insurance services, to create the necessary conditions for the activities of insurance organizations of various organizational and legal forms, to protect the rights and legitimate interests of all subjects [Мамедов З.Ф., Vugar Namazov. 2020].

5. PROBLEMS IN THE BANK INSURANCE MARKET
We have identified and systematized the following main problems in the bank insurance market:
- costs of time and resources for the sale of bank insurance products;
- lack of desire among banks to consider new projects;
- high commission fees of banks;
- "imposing" of bank insurance products;
- inconsistency of performance indicators of insurance companies;
- inconsistency of the staffing;

We will characterize each of the listed problems and suggest ways to solve it.

5.1. Cost of time and resources for the sale of bank insurance products
Today there are a lot of financial products that are of interest to insurance companies. However, from the point of view of the bank, they are not interesting, due to the fact that it takes many times more time to sell this product than to sell one banking product. To interact with banks with insurance firms, insurance firms need to offer banks simple and technological projects. Banks cannot effectively sell the products of insurance companies, so it is necessary that insurers offer them innovative projects that only a bank can sell on the market.

5.2. Lack of interest among banks to consider new insurance projects
All insurance projects can be divided into three groups:
1) projects that protect the loan portfolio;
2) projects on which the bank can earn;
3) "new projects" that banks can try.

The first two groups include the most well-known types of insurance in banks - auto hull insurance, insurance of pledges of legal entities and individuals, mortgages and partnership programs. Banks do not bear risks with these projects. The "new projects" include insurance programs such as D&O, BBB (comprehensive bank insurance), insurance of crops, animals and land, Profitshare. Because of this, insurance firms need to expand the product line of bank insurance products by offering banks simple, profitable and high-tech projects.

5.3. High commissions

Banks charge insurance firms high commissions, and therefore, banks' commission income increases. The high commission is justified by the fact that bank employees do not have a sufficient level of knowledge and experience in the field of sales. Thus, the commission received is directed to cover the costs of conducting special trainings for specialists. Increasing sales is impossible without properly structured work with personnel. A bank specialist must adhere to the following principles: a clear understanding of goals, the amount of income, transparency and openness of the organization, as well as the development of professional and personal skills. Also, for the successful sale of insurance products by banks, you need to properly motivate your employees, conduct special trainings on the sale of bank insurance products.

5.4. "Imposing" of bank insurance products

When drawing up a loan agreement, bank employees often not only recommend life and health insurance, but impose the purchase of an insurance policy, while giving out a positive decision of the bank to issue a loan. However, insurance significantly increases the cost of the loan and thus reimburses the eliminated bank charges for the client. The imposition of additional services is a violation of the law, but the banks systematically neglect it. To solve this problem, it is necessary to carry out inspections more often by the Federal Antimonopoly Service.

5.5. Inconsistency of performance indicators of insurance companies

The consequences of the financial crisis have forced banks to tighten requirements for the accreditation of insurance companies. During the crisis, banks often faced defaults by some insurers. Banks began to analyze their financial stability more thoroughly, develop and implement their own methods for assessing financial stability. To analyze reliability, banks request financial statements from insurers, after which they calculate indicators that characterize the real financial condition of insurance companies. On this basis, many insurance firms question the quality of the reliability assessment methods used by banks.

5.6. Lack of standard reporting of bank insurance groups

We found that at present, there is no standard reporting of bank insurance groups, which reduces the information content about the bank insurance market. We consider it expedient to form an official website "Bank insurance in Azerbaijan", displaying the performance indicators of bank insurance groups in accordance with the regular unified reporting form for the mega-regulator in terms of sales of bank insurance products. The solution to the problem of banks' overstated requirements for accreditation and the lack of a single base for assessing insurance companies is seen in the development of a unified methodology for assessing insurance companies.

5.7. Incompatibility of technologies of banks and insurance companies

The close interaction of banks and insurance companies is hindered by weak technology, large transaction costs of establishing and modernizing IT systems. The presence of the proper software allows for the semi-automatic issuance of policies and in real time to provide information on the concluded contracts, premiums and sums insured to the insurer. It is very important to take into account the technical component so that the above cooperation is carried out without interruptions. If some information is lost, or it is assimilated incorrectly, then problems arise for all parties to the partnership. High manufacturability organizes comfortable working conditions for the bank's sellers and ensures the timely creation of reports of the insurance company.

5.8. High risks of interaction

It is important for banks and insurance companies to take into account all the risks associated with the counterparty (reputational, financial, legal, etc.). First, the separation of the legislative base from the real situation on the market is important, which causes the prompt adoption of the law "On bank insurance". On the part of the insurance company, there are risks associated with competition, pricing policy, with the risk of increased unprofitability, and even there is a risk of the bank leaving the partnership through the establishment of a captive insurer or simply an alliance with another insurance company. Banks are faced with the problem of having significant overdue debt on loans issued. To reduce the risks of banks and insurance companies, it is necessary to constantly improve the product line of bank insurance, applying a co-oriented approach to the development of new products.

5.9. Low demand of the population for insurance products

In the emerging economically unstable situation in the financial market, it is important to take into account the interests of the client. Banks are currently marketing simple bank insurance products, in particular as insurance for borrowers in consumer lending.

Strengthened development of the bank insurance market can be subject to an increase in the efficiency and quality of sales. Cross-selling must be optimized and made available to the customer. Business must be scaled up, coupled with the various interests of the bank's client: borrower, depositor, investor, etc. Research has shown that social protection of the population in Russia is at a weak level, therefore, increasing insurance coverage of citizens through bank insurance will benefit the entire society.

5.10. Low level of financial literacy of the population

The development of the bank insurance market is hampered by the low degree of development of the financial culture of the population. insurance is often perceived in lending as a load on the loan, a surplus obligation that must be fulfilled in order to purchase a loan. However, overseas borrowers seek to hedge against the potential risks of default on a loan through an insurance program offered at a bank, or independently of a bank at an insurance firm. We consider it expedient, regularly under the control of the FAS, to consult clients in banks on the need, role and essence of insurance products.

6. CONCLUSION

Thus, our research indicates the active development of bank insurance at the present stage of development, and the presence of a number of serious problems that banks and insurance companies must solve together. In our opinion, for the effective development of bank insurance directions, common interactions of regulatory bodies, banks and insurance companies are needed. We believe that the decrease in the price of bank insurance products is mainly due to the bank commission; increasing and diversifying insurance coverage for the proposed programs; increasing customer awareness of the essence and necessity of insurance programs - all this will significantly intensify bank insurance in Azerbaijan and raise it to a higher quality level.

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IMPACT OF NATURAL RESOURCE ENDOWMENT ON THE ECONOMIC DEVELOPMENT OF AZERBAIJAN

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ABSTRACT

The purpose of the research is to study the relationship between the endowment of natural resources and the economic development of the country using the example of Azerbaijan. The presence of rich oil and gas fields and the involvement of Azerbaijan in global projects for the transportation of oil and gas led to the dominance of the gross domestic product of the oil and gas sector. Thanks to the measures taken by the government of the Republic of Azerbaijan in the 2010s to diversify the economy, the non – oil sector began to develop. The study carried out a correlation analysis and linear regression multiple analysis of empirical data, reflecting the impact of oil production, investment, employment and other indicators on the Gross Domestic Product. It was found that the availability of natural resources does not have a predominant effect on economic growth in Azerbaijan. For natural resources to be of great benefit to citizens, efficient management of natural resource export revenues is essential. The research results show that the abundance of natural resources should not impede successful economic development. The problems associated with the country's increased vulnerability to external shocks, the risk of "Dutch disease", often associated with a strong dependence on natural resources, are quite serious, but they can be solved with the help of appropriate institutions and policies.
Keywords: *Azerbaijan, economic development, Gross Domestic Product, natural resource endowment, oil production*

1. INTRODUCTION

It seems clear that a country endowed with natural resources has natural advantages and should, other things being equal, develop faster than countries without natural resources. However, this is not fully supported by the actual data. From 1970 to 1990, the per capita income of countries lacking significant natural resources grew 2-3 times faster than in resource rich countries (Venables, 2016). In practice, there are examples of countries where hydrocarbon wealth has not led to economic growth (Nigeria, Sierra Leone, Zambia, Angola) and examples of countries that have fully benefited from their wealth (Norway, UK, Canada) (Barma, Minh, Vinuela, 2012, p.68). The presence of a large amount of natural resources is a competitive advantage, but it is important to understand that under certain circumstances the oil and gas industry turns from a locomotive of the economy into its curse (Cameron, Stanley, 2017, p.24). In Azerbaijan, the numbers of explored and industrial reserves, which are registered in the State Balance of Mineral Reserves, numerous underground water deposits, deposits of various ores of ferrous, non-ferrous and precious metals, non-metallic raw materials, construction materials, are over 450, not taking into account oil deposits and gas (Shekinski, 1995). This means that in our country there are 5.2 deposits of natural resources for every 1000 sq. km of territory. The main natural resources of Azerbaijan are oil and gas. On the territory of Azerbaijan there are some of the oldest oil fields in the world. Historically, the oil sector has traditionally been dominant in Azerbaijan. According to British Petroleum, at the end of 2019, Azerbaijan's proven hydrocarbon reserves reached 1 billion tons of oil and 2.8 trillion cubic meters of gas (World Energy, 2020). The purpose of this study is to identify patterns between the provision of natural resources, primarily hydrocarbon resources, and the economic development of the country.

The methodology was based on the correlation and regression analysis of seven independent variables, reflecting the impact of these indicators on the gross domestic product. As a result of econometric analysis, it was found that the endowment of natural resources does not greatly affect the economic growth in Azerbaijan. For natural resources to become even more beneficial to citizens, more efficient and transparent government management of revenues from the sale of natural resources is needed.

2. LITERATURE REVIEW

Jeffrey Sachs and Andrew Warner, in their article "Natural Resource Abundance and Economic Growth," noted that between the 1970s and 1990s, economic growth rates were lower in countries that had a higher share of natural resources in their exports (Sachs, Warner, 1995). This work was one of the first to include in the study the relationship between resource dependence and some institutional elements of the economy. The theory of the negative impact of natural wealth on economic growth has been called the resource curse, or the paradox of abundance. In principle, this concept applies to all minerals, but most often they talk about the problems of countries rich in hydrocarbons (oil curse), since trade in hydrocarbons accounts for 90% of all trade in minerals (Kaznacheev, 2017). It should be noted that the concept of resource curse does not apply to renewable natural resources. For the first time, the term "resource curse" was used by Richard Auty in his work "Sustaining Development In Mineral Economies: The Resource Curse" to describe the relationship between a decrease in economic growth and an increase in resource dependence, which is expressed in an increase in the importance of a certain natural resource in the economy country (Auty, 1993). It is this position that has been discussed, rethought, criticized many times over the past 25 years. The inverse relationship between the volume of natural resources and economic growth in a country, which is clearly observed in the experience of most countries, is explained in different ways. Of course, such a contradictory situation as the deepening crisis in countries, despite the fact that the availability of rich natural resources should bring great economic benefits, could not and did not escape the attention of international organizations, large research centers and researchers. Beginning in the 1990s, a number of international organizations, major research centers and individual researchers began to investigate this contrasting situation in most resource rich countries, and such research continues today (Ploeg, 2011). However, in most cases, researchers come to the conclusion that the impact of income from rich natural (mineral) resources on the socio-economic situation of the country depends, first of all, on the quality of institutions formed in society (i.e., the effectiveness of public administration, the level of development of the judicial system, civil society, etc.), effective government performance and the level of human capital stock (Acosta, 2013). These studies show that among countries with rich mineral resources, only a few (for example, Norway and Canada) have been able to demonstrate the efficiency of using the revenues from these resources. This is due to the fact that these countries have well-established institutions (Gelb, 2010). In the 90s of the last century, the predominant version of the answer to the question of how the resource curse can negatively affect the economy became the explanation, called the Dutch disease. The Dutch disease is a negative effect exerted by the influence of the strengthening of the real exchange rate of the national currency on economic development as a result of a boom in a particular sector of the economy (Magud, Sosa, 2011). In theory, the reason for the boom is irrelevant, but in practice, the effect is usually associated with the discovery of mineral deposits or higher prices for the export of extractive industries. However, a number of studies have argued that the manifestations of the Dutch disease – the redistribution of factors of production and a decrease in the pace of technological development - are more likely to manifest themselves in comparatively developed economies. In less developed countries, where the stocks of physical and human capital, the quality of institutions, the level of infrastructure, employment remain low, income from natural resources can have a

positive effect if converted into capital accumulation, solving the institutional and infrastructural problems of the economy (Bhattacharyya, Roland, 2010). While many emerging market economies do "depend" on raw materials to varying degrees, some evidence suggests that natural resource abundance does not necessarily negatively impact economic growth and development, and indeed, it can actually contribute to growth and development (Alexeev, Conrad, 2009; Jalloh, 2013). The skyrocketing cost of a country's raw materials can boost its development if the revenues generated from this are channeled into productive savings and efficient investment (Dakshina, McComb, Schiller, 2020). As numerous historical examples show, natural resources can thus be transformed into domestic investments and, as a result, into the accumulation of physical capital, into obtaining advanced technologies, as well as into higher qualifications of specialists, thanks to the lack of opportunities for diversification of the economy, the entry of new industries into the international market, and, as a result, sustainable economic development, significantly increase (Ahmadova, Hamidova, Hajiyeva, 2020).

3. METHODOLOGY

The analysis that reveals the dependence of economic growth on the extraction of natural resources (primarily oil), employment and investment was based on the econometric model used by Balavac & Pugh (2016). This model was developed jointly with the UNEC teacher Esmira Ahmadova. According to this empirical model, GDP is used to measure economic growth. Data analysis covers the period from 2000 to 2018. The choice of this period is justified by the fact that in 2000, full – scale production and transportation of Azerbaijani oil to the world market begins. Thus, oil production from the Azeri – Chirag – Guneshli field began in 1997, and in December 1999 the first two tankers filled with Azerbaijani oil entered the world markets (Energy Charter, 2011).

The proposed model provides seven independent indicators:
- $x1$ – oil production, in thousands of tons;
- $x2$ – oil price, in dollars per barrel;
- $x3$ – internal investments, in million manats;
- $x4$ – foreign investments, in million manats;
- $x5$ – employment, a thousand people;
- $x6$ – GDP per capita, in manats;
- $x7$ – fruit exports, in thousands of dollars.

The choice of these variables is justified as follows: oil was taken as the main natural resource in Azerbaijan, since this resource was the basis of the country's economy for decades. To determine the dependence of GDP on world oil prices, the indicator x2 was selected. Proceeding from the fact that in the structure of the non-oil sector, most of it is accounted for by fruit exports, this indicator was also taken into account when constructing the model. According to the State Statistics Committee of the Republic of Azerbaijan, in 2018 the share of mineral fuels, mineral soil sand products in exports amounted to 90.6%, and from the non-oil sector, a large part - 3.0% - accounted for the export of fresh fruits. The analysis also examined the relationship between GDP and governance effectiveness. To calculate governance effectiveness, data from the World Bank the World wide Governance Indicators were used. However, this indicator was not adopted in the model, since the analysis showed a weak relationship between GDP and governance effectiveness, which indicates the weakness of institutions.

4. RESULTS

Correlation analysis of empirical data is shown in Table 1.

Table 1: Indicators of socio-economic development of Azerbaijan

Years	GDP, million manat*	Oil production, thousand tons	Oil price, in dollars per barrel	Domestic investments, million manats	Foreign investments, million manats	Employment, thousand people	GDP per capita, manat	Fruit export, thousand dollars
	Y	x1	x2	x3	x4	x5	x6	x7
2000	4718,1	14 017	28,3	460,3	829,5	3855,5	593,2	21782,2
2001	5315,6	14 909	24,4	437,7	1016,8	3891,4	661,7	11884,6
2002	6062,5	15 334	25,0	546,0	2172,8	3931,1	747,5	22903,4
2003	7146,5	15 381	28,9	938,3	3311,0	3972,6	872,7	43190,0
2004	8530,2	15 549	38,3	1324,0	4496,3	4016,9	1030,4	33633,3
2005	12522,5	22 214	54,4	2 104,9	4 628,5	4062,3	1494,3	146266,0
2006	18746,2	32 268	65,4	2 901,4	4 514,2	4110,8	2208,2	98412,1
2007	28360,5	42 598	72,7	4 626,7	5 727,2	4162,2	3296,6	124253,6
2008	40137,2	44 514	97,7	7 702,2	5 625,8	4215,5	4603,7	151583,6
2009	35601,5	50 416	61,9	6079,9	4 395,1	4271,7	4033,2	142032,5
2010	42465,0	50 838	79,6	7499,2	6 619,7	4329,1	4753,0	112272,6
2011	52082,0	45626	111,0	10199,0	6849,8	4375,2	5752,9	152561,2
2012	54743,7	43375	111,4	12148,4	8102,7	4445,3	5966,1	207735,3
2013	58182,0	43457	108,8	13178,9	8269,3	4521,2	6258,3	173311,6
2014	59014,1	42076	98,9	12715,0	9175,7	4602,9	6268,0	191952,5
2015	54380,0	41628	52,4	9058,5	10998,9	4671,6	5706,6	220087,2
2016	60425,2	41050	44,0	6652,4	16216,1	4759,9	6269,6	243434,9
2017	70337,8	38688	55,5	8765,2	15697,3	4822,1	7226,0	291965,9
2018	79797,3	38814	71,4	11874,9	14002,1	4879,3	8126,2	325571,8

* US/manat (1$= manat): 2000-2004 – 0.98 manat; 2005 – 0.94; 2006 – 0.89; 2007- 0.86; 2008 – 0.82; 2009-2010 – 0.80; 2011-2014 – 0.78; 2015 – 1.03; 2016 – 1.60; 2017-2018 – 1.7 manat.
Source: The State Statistical Committee of Azerbaijan Republic

The calculations were performed using the statistical environment R. Pearson's correlation analysis is as follows (table 2):

Table 2: Pearson's product-moment correlation

	x1	x2	x3	x4	x5	x6	x7
R	0.7800	0.6263	0.9223	0.8874	0.9697	0.9982	0.8351
p-value	8.176e-05	8.176e-05	0.004111	4.04e-07	7.65e-12	7.65e-12	4.438e-09
t-statistics df	5.1405	3.3133	9.8445	7.9405	7.9405	16.374	10.88
Df	17	17	17	17	17	17	17

Source: Author`s calculations using R software

As we see from Table 2, the minimum calculated Pearson's correlation coefficient has turned out to be 0.6263. Despite the fact that it is not very high, difference of this coefficient from zero is statistically significant (p-value<8.176e-05). There is a linear relationship between Azerbaijan's GDP and oil production, according to the Chaddock table.

But this dependence is not so significant compared to other indicators. A strong correlation positive relationship is observed between GDP and employment, GDP per capita, which is obvious. These indicators are statistically significant. A noticeable, but not strong, significant correlation dependence is also observed between GDP and the price of oil. A significant relationship was revealed between GDP and export of fruits. As a result of the correlation analysis, it was revealed that domestic investment has a greater impact on Azerbaijan's GDP compared to foreign investment. The results of correlation analysis make it possible to apply linear regression multiple analysis to find regression coefficients reflecting the dependence of Azerbaijan's GDP on the factors considered. As a result of the regression analysis performed in the R medium, the following regression model has been obtained:

$$Y = 91.10384 + 0.006*x3 + 0.791*x5 + 1.003*x6 \quad (I)$$
$$(0{,}160) \quad (0{,}003) \quad (0{,}021) \quad (0{,}005)$$

Model (I) reflects dependence of Azerbaijan's GDP on indicators such as domestic investment (x3), employment (x5), and GDP per capita (x6). Based on the model, we can see that with an increase in domestic investment by AZN 1, Azerbaijan's GDP increases by AZN 6,000. With an increase in employment by 1 thousand people, GDP increases by AZN 791 thousand. With an increase in per capita GDP by 1 manat, the model shows an increase in GDP by AZN 1.003 mln. t-statistics, which test the hypothesis of the insignificance of each coefficient, have automatically been calculated. And here we see that the hypothesis that the free coefficient b_1 is equal to zero is rejected; the hypothesis that the coefficient b_2 is equal to zero is rejected; the hypothesis that b_3 is equal to zero is not rejected; and the hypothesis that b_4 is equal to zero is rejected. All coefficients are significant, which means they can be interpreted. The econometric characteristics of the model are presented in Table 3.

Table 3: Econometric characteristics of the model (I)

Parameters and quarterly data	Test results	Parameters and quarterly data	Test results
R- squared	1	DW	0,8
Adjusted R-squared	1	Akaike info criterion	-172.3
F-statistic	1.155e+06	Schwarz criterion	-167.6
p-value	2.2e-16	Residual standard error	0.002248
Skewness	-0.244411	Kurtosis	-1.054026

Source: Author`s calculations using R software

The coefficient of determination of the model is quite high and is 100%. This indicates availability of functional dependence and 100% dispersion is explained by the observed independent parameters x3, x5 and x6. Using the Fisher criterion, we check the found regression model for adequacy to the initial data. The calculated value of the Fisher criterion in model II (see table 3) is greater than the table value, at all levels of significance, which corresponds to the condition $F_{est.} > F_{table}$. Let us carry out a Jarque-Bera normality test with the null hypothesis H0: the distribution is normal. The result is shown below:

Table 4: Jarque-Bera Normality Test

Parameters and quarterly data	Test results
X-squared:	0.7702
p-value:	0.6804

Source: Author`s calculations using R software

Jarque-Bera statistics is close to zero, which means the hypothesis of a normal distribution of residues is accepted. As a result of the study, a positive autocorrelation equal to 0.8 and multicollinearity has been found in the model residues. In this regard, dependence of per capita GDP on independent indicators has been constructed, according to the data in Table 1. As a result of the modelling, the following multiple-factor regression model has been built:

$$x6 = 6.869369e\text{-}24 + 0{,}73922* \ x1 + 0{,}3632*x2 + 6{,}2387*x5 \quad (II)$$

Where x6 is GDP per capita of Azerbaijan, x1 is oil production, in thousand tons, x2 is oil price, and x5 is employment. All coefficients of model (II) are significant. It turns out from the model that with an increase in oil production by 1 thousand tons, GDP per capita of Azerbaijan rises by AZN 0.74, with an increase in oil prices by USD 1 per barrel, GDP per capita rises by AZN 0.36, and with an increase in employment per 1 thousand people, GDP per capita rises by AZN 6.24. The characteristics of this model are presented in Table 5.

Table 5: Econometric characteristics of model (II)

Parameters and quarterly data	Test results	Parameters and quarterly data	Test results
R-squared	0,9969	DW	1,6
Adjusted R-squared	0,9963	Akaike info criterion	-50
F-statistic	1607	BIC	-45.3
p-value	2,2e-16	Residual standard error	0,000
Skewness	0,4992	Kurtosis	0,0087
Heteroscedasticity p-value:	0.2763 0.5991	VIF	6.11 3.9 2.4

Source: Author`s calculations using R software

It should be noted that when analyzing time series, the problem of multicollinearity often arises, which is considered a frequent occurrence. This assumption requires verification. To quantify multicollinearity, we calculate VIF. Calculations showed that none of the VIFs exceeds 8, which means that multicollinearity is not observed in the model. The p-value for heteroscedasticity testing is greater than 0.5. This indicates that heteroscedasticity is absent, and homoscedasticity takes place. The results of testing for availability of autocorrelation in the model residues have showed that the model residues have a normal distribution and the Durbin-Watson statistics is 1.6. This indicates absence of autocorrelation in the model (II). As a result of the econometric analysis, a multiple regression model was built that fully satisfies the Gauss - Markov assumptions. Therefore, the estimates obtained using the model are unbiased, consistent and effective. The constructed three-factor regression model is quite adequate to the modern development of Azerbaijan and can be used to analyze and forecast the GDP of Azerbaijan.

5. CONCLUSION
An econometric analysis based on a multiple regression model has showed the relationship between Azerbaijan's GDP and employment, GDP per capita, and domestic investment. From an economic point of view, this is justified by the fact that achieving full and effective employment is inseparable from formation of human capital, therefore, from investments in education, healthcare, and vocational training (Gylfason, 2001). Thanks to government measures, the unemployment rate is reduced, and the conditions for formation of human capital are ensured, that contributes to the fullest disclosure of the country's labour potential. The positive impact of domestic investment on GDP dynamics is explained by the fact that they are directed mainly to the non-oil sector, while foreign investors are interested in oil and gas

production (Aliyev, Dehning, Nadirov, 2016; Hamidova, 2019). The analysis showed a positive, but not predominant effect of natural resource endowment on the level of GDP per capita. In accordance with the obtained result, it can be noted that natural resources themselves do not bring harm or benefit to economic development. The result of their use depends on complementary factors, the level of education and the quality of institutions that reliably protect property rights. In the case of insufficient protection of property rights, the efforts and costs of over diversifying the economy may be ineffective. However, despite investments in infrastructure and human capital, a diversification strategy that ignores institutional issues is likely to fail. Investing in infrastructure can help companies reduce costs, but does not guarantee ownership of the profits earned. Therefore, if the development of infrastructure is not complemented by an improvement in the institutional environment, the result of infrastructure costs may be the emergence of infrastructure facilities alone, without the expected increase in investment in the creation and development of modern companies. Investing in infrastructure can help company's lower costs, but does not guarantee ownership of the profits earned. Therefore, if the development of infrastructure is not complemented by an improvement in the institutional environment, the result of infrastructure costs may be the emergence of infrastructure facilities alone, without the expected increase in investment in the creation and development of modern companies.

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PROBLEMS OF FORMATION AND DEVELOPMENT OF ECOLOGICAL TAXATION

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ABSTRACT

Currently, there is no unity of approaches to the definition of the concept of environmental tax, the modern understanding of the essence of this type of payment does not have uniform, clearly formed semantic boundaries. This means that the formation of such borders is the task of every state. The purpose of the study is to study the formation and development of an effective ecological taxation. Because, an effective system of environmental taxation is one of the main instruments of public policy, which has many advantages compared to traditional methods of environmental regulation and other instruments of environmental policy. The main advantage of taxes and other market instruments in comparison with traditional methods of environmental regulation, such as standards, quotas, prohibitions, is efficiency. In general, efficiency means that the taxpayer can achieve the same environmental effect at a lower level of his costs or achieve a greater environmental effect at the same cost level. It is primarily about establishing a different tax burden depending on the extent of environmental damage caused by the activities of the taxpayer. Taxation becomes objective when the one who pollutes the most and pays the most. It is also important to note that the transition to environmental criteria in the taxation of transport does not eliminate the need to take into account the wear of the roadway, which actually takes place. Abroad, this is the purpose of the heavy vehicle tax, which is usually calculated depending on the indicators of the weight of the car, as well as the number of axles of rotation
Keywords: *taxes, government, economy, finance*

1. INTRODUCTION

The development of the tax system should be carried out in the direction of its greening based on the recognition of taxes as significant instruments of economic and environmental policy. This, in turn, requires the development and adoption of measures necessary for the implementation of the functions of the tax system, which contribute to the protection of the environment and the preservation of the health of the population and therefore are of great socio-economic importance for the state. Environmental taxes also have such inherent features as: flexibility, fiscal capacity, impact on consumption, transparency and price predictability. These features provide the advantages of environmental taxes over other environmental policy instruments.

2. THE ESSENCE AND PURPOSE OF THE ENVIRONMENTAL TAX AND ITS RELATIONSHIP WITH THE ENVIRONMENTAL POLICY OF THE STATE

The environment affects how people live and how society develops. It follows from this that an environmental impact can be considered negative if it worsens the living conditions of people. Accordingly, the ecological problem is not the loss of nature in itself, but the loss of man arising from the violation of the quality of ecology. Environmental payments are diverse, but, despite the differences, they have common features, which makes it possible to speak of a particular payment as environmental. In world practice, the concept of environmental tax is usually disclosed through the definition developed by Eurostat for the purpose of international statistical accounting.

In accordance with this definition, an environmental tax is a tax, the tax base of which is the physical characteristic of an object recognized as having a negative impact on the environment, or another object associated with it. Such a tax base can be, for example, the volume of emissions of pollutants. The purpose of the tax, its relationship with the environmental policy of the state and, accordingly, the direction of spending its revenues also today play an important role in answering the question of whether a particular tax is environmental. In addition, in modern conditions, the environmental tax is not considered as compensation paid to those who suffered from pollution, and its size does not correlate with the losses of the victims. An environmental tax is a tax, the amount of which depends on the level of environmental damage caused by the use consumption of the object of taxation and accounted for through individual elements of the tax or their combination. This definition brings environmental taxes closer to their original economic meaning, since it is based on the rule: who pollutes more, pays more tax. If this rule is not observed, then the tax, in our opinion, cannot be considered truly ecological. In order for a tax to be considered environmentally friendly, it must pursue objectives related to environmental protection. And for this it is necessary that it fulfill its not only fiscal, but also regulatory function, which is manifested in the creation of incentives for taxpayers to use those taxable objects that are distinguished by the best environmental indicators. This effect is achieved by differentiating the tax burden in proportion to the level of pollution, which in turn can be achieved only when the amount of the tax depends on the amount of environmental damage caused by the taxpayer. Thus, the original, or classical, concept of an environmental tax is based on the fact that such a tax is intended to:

- in monetary terms, reflect the damage caused by the taxpayer to a person or a set of persons as a result of environmental pollution;
- to compensate for the losses of these persons, that is, to perform the function of monetary compensation for damage.

If we go back to the modern definition of an environmental tax given by Eurostat, then there is only one condition that is sufficient for the tax to be recognized as an environmental tax - it is the presence of an object of taxation that negatively affects the environment. That is, it is enough to introduce a tax on any source of pollution, and such a payment will be considered environmental, regardless of the order of its calculation and the direction of spending its proceeds. A situation arises when the essence of the environmental tax is extremely simplified. Environmental taxes related to road transport include excise taxes on fuel, excise taxes on vehicles and transport taxes. But it is precisely excise and transport taxation that is now the main source of increasing the environmental significance of the tax system. Excise taxes on transport and fuel, transport tax form a field for tax transformations. These transformations may initially have different goals, but their main essence is to have an economic impact on the behavior of the taxpayer. And in terms of fuel and vehicle taxes, this is about creating incentives for the taxpayer to use clean fuels and clean vehicles. Summing up, it should be noted that the reform of taxes on an environmental basis is the greening of the tax system, when the same taxes are given a new purpose - to be an instrument of environmental policy. In this case, the socio-economic role of the tax in the country's economy increases. It helps society to eliminate unwanted production methods and reduce the consumption of environmentally unsafe products. Distinguishing environmental taxes from the total set of tax payments is important for a better understanding of the directions for further reforming the tax system, identifying taxes that should become environmental, addressing the need to introduce new taxes and changing existing ones, more fully implementing the country's environmental policy, and working out ways to spend tax revenues and finally, to ensure the correctness of international comparisons.

3. PROBLEMS OF ORGANIZING AN EFFECTIVE SYSTEM OF ENVIRONMENTAL TAXATION

An effective system of environmental taxation is one of the main instruments of state policy, which has many advantages over traditional methods of environmental regulation and other instruments of environmental policy. In the classical form, environmental taxes reflect the magnitude of negative external costs caused by environmental pollution. Their peculiarity lies in the fact that they express in monetary form the losses for society that arise as a result of the taxpayer's activities, but are usually not taken into account by the taxpayer himself, since they do not directly relate to his production costs. In this regard, environmental taxes are based on the "polluter pays" principle, according to which the named losses must be compensated by the one who caused these losses. However, in practice, for a number of reasons, it is rather difficult to implement such a concept in its pure form. Currently, a tax can be considered environmental if there is a connection between its size and the negative impact on the environment of the object of taxation. These impacts can be different, and therefore a wide variety of environmental charges can be observed. The main advantage of taxes and other market-based instruments over traditional methods of environmental regulation, such as standards, quotas, bans, is efficiency. In general, efficiency means that a taxpayer can achieve the same environmental effect at a lower level of its costs, or achieve a greater environmental effect at the same level of costs. First of all, we are talking about the establishment of a different tax burden depending on the scale of environmental damage caused by the taxpayer's activities. Taxation becomes objective when the polluter pays more. From an economic point of view, the introduction of environmental taxes is due to the objective need to express in monetary terms those losses for society that are created by the activities of the taxpayer due to its negative impact on the environment. The latter possesses the properties of a social good in the sense that any number of people can be its consumer and no one can be excluded from consumption. Since the environment does not have an owner, the price is not assigned to it in the market, as a result of which the losses for some, arising from the impact on the environment by others, are not taken into account. And that part of production and consumption, which takes the form of environmental degradation, loss of environmental quality and sometimes irreversible damage to vital environmental processes, remains unpaid by the taxpayer. But environmental taxes, burdening the taxpayer, make him pay for this damage and further reduce its level. The concept of taxation, in which the amount of the tax should pay off the losses of society, was formed by Pigou, who said that a tax that corrects negative externalities should be equal to the marginal social cost. Indeed, it is impossible, for example, to establish a specific number of people who have been contaminated by vehicles, as well as to determine how much the health of each of them has deteriorated, and even more so to express these losses in monetary form, given the large number of cars themselves, each of which is a source of pollution. At the same time, environmental taxes can be returned to the population in the form of a public good if their revenues are spent on the development of the health care system. Or, for example, tax revenues can be used to finance specific environmental protection measures and programs to eliminate environmental damage caused by the taxpayer's activities, and then the amount of the tax is set depending on the funds that must be collected for this. In these cases, the tax can be considered as compensation, but not direct, but indirect action.

4. MEASURES TO REFORM ENVIRONMENTAL TAXATION

In our opinion, the reform of taxes on an ecological basis is the greening of the tax system, when the same taxes are given a new purpose - to be an instrument of environmental policy. In this case, the socio-economic role of the tax in the country's economy increases. He begins to adjust the ways of production that are undesirable for society and reduce the consumption of environmentally unsafe products.

And proposals to change the procedure for calculating the transport tax, making it an ecological payment, is an integral part of the global trends in the development of taxation along the path of greening. Distinguishing environmental taxes from the total set of tax payments is important for a better understanding of the directions for further reforming the tax system, identifying taxes that should become environmental, addressing the need to introduce new taxes and changing existing ones, more fully implementing the country's environmental policy, and working out ways to spend tax revenues and finally, to ensure the correctness of international comparisons. Despite the conceptuality of the described theoretical views, certain difficulties arise in their implementation in practice. The first problem that will have to be faced when establishing taxes for air pollution is the lack of an objective opportunity to assess the losses of society from harmful emissions, taking into account the number of pollution sources and the number of those who are negatively affected. Even if we take one object of exposure to harmful emissions - the health of the population, it is impossible to accurately determine under the influence of which particular factor it has worsened. Revenues from environmental taxes, including taxes on air emissions, may form trust funds and be used solely to fund environmental and / or health programs. For example, in Sweden, revenues from environmental taxes are used to create technologies that help reduce harmful emissions into the atmosphere. In some cases, due to their collection, the rates on other taxes, usually social taxes, are reduced. From the above, it follows that countries, when establishing legal responsibility for committing offenses in the field of taxation of air emissions, should first of all analyze the relationship between the amount of the fine and the economic benefit that is obtained as a result of the violation, as well as environmental damage caused by illegal actions. Another equally attractive direction in the development of taxation of harmful emissions into the atmosphere is tax incentives for environmentally efficient technologies. The advanced foreign experience demonstrates a whole arsenal of tax instruments to stimulate innovative developments in the field of ecology. One of the main goals of such support is to attract private business to actively participate in financing priority projects in the field of environmental protection. Measures to reform the taxation of air emissions can only have a tangible effect if all countries of the world join efforts to save the environment. In this regard, an integrated approach is required, tax instruments should be combined with other environmental mechanisms. Only a systematic approach and rationality of actions on the part of the leaderships of the countries can change the current situation for the better.

5. CONCLUSIONS
Environmental taxes are an important tool for greening the country's economy. They are based on the theory of negative external costs, developed by A. Pigou, which arise in society when an economic entity has a negative impact on the environment. According to the scientist, the rate of the environmental tax should be set per unit of pollutant and be equal to the marginal social costs in order to achieve a balance between the volume of production of the taxpayer and the losses to society arising from this production. As foreign experience shows, the following can contribute to enhancing the positive effect of reforming environmental taxation:
- The introduction of additional and the increase in the amount of existing environmental taxes should be carried out in compliance with the principle of budget neutrality, which is that if environmental taxes increase, taxes on labor and capital decrease and, accordingly, the tax burden of payers does not change in general.
- Incentive taxes should prevail over fiscal ones. In this case, we are talking not only about the quantitative predominance of taxes that encourage the introduction of environmentally friendly technologies and the creation of environmentally friendly products or limit "dirty", resource-intensive and waste-intensive production.

Of the funds received by budgets of different levels from the collection of fiscal energy, transport and resource taxes, a sufficient share should be allocated for the implementation of environmental programs.

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DIAGNOSTIC ANALYSIS OF THE DEVELOPMENT OF THE RECREATION AND TOURISM SECTOR

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ABSTRACT

The article discusses recreational and tourist areas from the point of view of a systematic approach. The principles of diagnosing the development of recreational and tourist areas are outlined. The main groups of factors influencing the development of the recreational and tourist system are identified: statistical (natural, cultural-historical) and dynamic (demographic, socio- economic, material and technical, political). The economic aspect of recreational and tourist activities is revealed, the multiplicative effect of recreational and tourist activities in the region is shown. The role of recreation and tourism in terms of social and environmental factors of development of individual territories and the country as a whole is disclosed. Diagnostics of the development of the recreational-tourist system in the structure of the general system of the region helps to identify positive and negative socio-economic processes occurring within the recreational-tourist system, and indicates the advantages and disadvantages of a particular region in the development of the tourism industry. Thus, the purpose of diagnosing the development of the recreational-tourist territory is to study the state of the recreational-tourist system, determine the level of development and use of the recreational-tourist potential and its impact on socio-economic regional processes. The object of the study is the recreational-tourist system, as a set of economic sectors involved in the production of recreational-tourist services. According to the point of view of some scientists, the tourism object includes three main components - a tourist region (place), a tourist organization and a tourist enterprise. A tourist uses a range of services that are provided to him in a specific place (or region) where tourist activities take place. Due to its attractive factors, this place becomes a tourist center. Tourist places differ in features that interest the tourist and determine his choice. This definition is given from the point of view of the user (tourist, vacationer). When a tourist chooses his travel destination, he compares among themselves the various places and the level of service that are provided there. Therefore, the diagnosis should be made taking into account the assessment of the satisfaction of the needs of tourists. However, one should not forget that the recreational-tourist system should contribute to the development of the region with minimal damage and discomfort to the local population, therefore a second aspect of diagnosis arises, from the point of view of the need to develop the region and the cultural and historical traditions of the local population. Only an integrated approach to the diagnosis of the recreational and tourist system will allow us to assess the potential and development opportunities of the region, as well as reveal the needs of tourists who determine the range of tourist services in a particular region.
Keywords: *tourism, recreation, recreational-tourist territories, recreational-tourist systems, economics*

1. INTRODUCTION

The tourism industry in modern conditions significantly affects the development of the global economy. In most countries of the world, a significant part of the welfare of the state is based on income from the organization of tourism activities. Due to economic growth, increasing the cultural and material level of the population, increasing free time, tourism claims to be the leading export industry in the world. For the successful development of the tourism industry, it is necessary to create a competitive tourism industry that provides growing consumer demand and makes a significant contribution to the socio-economic development of countries [1,2,3].

In many countries of the world, tourism is developing as a system that provides all the opportunitiesto get acquainted with the history, culture, customs, spiritual and religious values of a given countryand its people, and gives income to the treasury. Not to mention the fact that this system "feeds" a lot of individuals and legal entities, one way or another connected with the provision of tourism services. In addition to a significant income item, tourism is also one of the powerful factors in enhancing the country's prestige and its importance in the eyes of the world community andordinary citizens. Today, tourism has become a phenomenon that has entered the daily life ofalmost a third of the world's population. World tourism in the XX - early XXI century acquired extremely rapid development ... Such a trip to the tourism sector requires comprehensive and fundamental research on various aspects of its development [2, p. 76; 3, p 213]. Tourism is one of the prerequisites for economic growth in Azerbaijan. It is worth noting that tourism is in great demand. Because here an important factor is human service, health and cultural development. The range of services offered to tourists, the structure of its value is the main investment in the development and implementation of infrastructure, projects and facilitates the identification of investment sources. The main sources of financing: efficient use of resources and rationalization of relevant resources based on the state budget and credit resources. There are three approaches to the tourism market:
a) The fundamental principle and area of economic development.
b) As an integral part of the global integration system.
c) The economy of the interaction of sales and sales of tourism products, acting as a mechanism [4,5,6].

The monograph of the senior researcher of the Institute of Economics of ANAS, Doctor of Philosophy, is devoted to studying the current state of the tourism sector in Azerbaijan and identifying opportunities for the formation of competitive tourism in the country. Leyli Allahverdiyeva. A correlation analysis of the tourism competitiveness index and per capita GDPshowed a link between tourism development and the country's economic development. At the sametime, an analysis of the relationship between some tourism indicators of the countries of the worldand the degree of state regulation of foreign trade allowed us to put forward some considerations about the impact of foreign trade liberalization on tourism development [6,7].

2. FORMULATION OF THE PROBLEM
In modern business conditions, the tourism industry is one of the main driving forces of economic recovery. World experience shows that in order to effectively manage the tourism development process in countries, diagnostics of recreational and tourist territories is necessary. The diagnostic methodology is based on two approaches: integrated and systemic. Each approach can be represented by a set of methods, and each method is specified by the methods of its implementation in different situations and conditions. In addition, the methodology uses the methods of analysis and modeling to a greater extent in the process of research and the selection of alternative ways to improve the economic system. The diagnostic methodology organically includes a system analysis of complex business systems. Asystematic approach requires taking into account the specific features of regional situations, the use of appropriate tools and the real possibilities of making appropriate tools and the real possibilities ofmaking managerial decisions to change them (regulation). It is necessary to determine what is included in the basic properties of the recreational- tourist system, which ensures the formation and satisfaction of the needs of the vacationer, what factors affect this process. What constitutes a recreational and tourist service, what features it has. With the improvement and market transformation of the economic structure of recreational and tourist activities, it becomes one of the most important sectors in the economy.

The industry requires significant funds necessary to create the infrastructure components of the reaction and tourism sectors: roads, vehicles, water supply, sewage and other units. Promotion of recreation and tourism to the rank of priority sectors, based on modern natural, labor and financial opportunities, isextremely necessary. But not only investments are needed, but also time, and, most importantly, a well-thought-out promising program for the development of the recreational complex and stable conditions for its implementation. It should be noted that the diagnosis of the development of the recreational-tourist territory requires a thorough development of the methodological base, in the process of studying which the theory of diagnostics of the recreational-tourist territory is developed. Recreational and tourist development is a form of private, sectoral and territorial development, reflecting only one aspect (recreation and tourism), which can be adequately described on a fundamental basis. All thisdictates the need in the research process to find answers to such questions: what are the initial resources and dynamic qualities of the recreational and tourist territory, what is the capacity of the local services market, will the investment climate for recreational territories be formed in the coming years.

3. RECREATIONAL AND TOURIST AREA AS A TERRITORY

Recreational-tourist area as a territory in structure is a combination of land and watersurfaces in the areas of regions with specific climatic conditions (land, water, forest, mountains). They are necessary for the development of recreational and tourist activities in this territory, taking into account the demographic, social, historical features of the region and its geographical location. The main properties of the recreational and tourist territory are the development and saturation of its recreational and tourist facilities, which determine the development of the territory. At the same time, development, on the basis of which the processes of growth and development of recreation and tourism are taking place, determines the degree of saturation of the recreational and tourist territory with the infrastructural elements (objects) of recreational and tourist activities and their connections. Since the saturation processes depend on the level of intensity of development of therecreational and tourist territory in the region, the processes of development of the territory by the recreational and tourist elements of the productive forces in different recreational territories will have different degrees of saturation (development), which will entail an increase in the differentiation of the quality and standard of living of the population [7,8]. A saturated recreational territory is a territory that accommodates many objects of recreational and tourist activity (sanatoriums, boarding houses, recreation centers) and the organization of other industries (hotels, restaurants, cafes, water parks, etc.) that accompany recreational activities. They are in a certain set of economic interests and relations between participants in the production of recreational and tourist services. The more such objects on the recreational and tourist territory and the closer the connection between them, the more developed and mastered it seems. The development of the recreational-tourist territory is due to the systematic organization of the reproduction of resources in this region of the region – labor, natural, material, organizational, informational, etc. In this context, the recreational-tourist territory becomes a connecting component of the interaction of individual elements of the productive forces of recreation and tourism. The interaction of resource elements of recreation increases reproductive potential, ensuresthe development of recreational and tourist areas in the region. The main feature of the recreational and tourist territory is the attraction of local and foreign vacationers and tourists, the involvement of recreation and tourism in public production as:

- recreational industry of material and intangible production of the region (economic activity for the production of recreational services);
- recreational production and social infrastructure facilities;

- creation of new and expansion (development) of recreational objects of natural and artificial origin within the region (creation of new jobs);
- the formation of new ties and relations for the development of recreation and tourismin the country and region. That is, the involvement of the recreational and tourist territory in the processes of public organization of the reproduction of the productive forces of the region and the country [9,10].

The main feature that characterizes a recreational and tourist territory can be its location, which shows where it is located in the region and how the productive forces of recreation and tourism are combined with each other and with the productive forces of the region. As a measure (means of measurement), indicators (indicators) about the depth and nature of the processes occurring in the recreational and tourist area are used. The groups of such indicators should include: indicators reflecting the scale of the recreational and tourist territory; indicators showing the effectiveness of recreational and tourist activities in the economy of the region;indicators that convey the state and reproduction of recreational potential; indicators for assessing the development of recreational and tourist areas; indicators expressing the level of cooperative relations of the recreational and tourist industry in the economic sphere of the region and the country, as well as financial indicators of recreational and tourist activities and their relationship with indicators of the financial system of the region; indicators for assessing the saturation of the recreational and tourist territory of the region with elements of productive forces.

4. RECREATIONAL AND TOURIST AREA – AS A SYSTEM
Recreational and tourist territory is a system of elements of the productive forces of recreation and tourism, which are the material carriers of each element separately and at the same time represent some integrity of interrelated elements: natural potential, material (recreational) potential, labor potential (people employed in the field of recreation and tourism), etc. The successful functioning of the recreational-tourist system directly depends on the level of productivity of its elements, the variability of the territorial structure of the recreational-tourist territory, the increasing role and volume of the recreational-tourist resource component in the recreational-tourist territory, the significance of the administrative impact in the region on the development of recreational-tourist activities. The development of a regional recreational and tourist system should not violate its resistance to external and internal factors. The main properties of the recreational and tourist territory as a system are stability, integrity, complexity and vitality, self-regulation, hierarchy. Thus, the recreational and tourism sector is a complex system in the structure of the region's economy. As a system, it functionallyacts in three aspects: recreational and tourist activities, the social component, and the environmental component [10,11]. Signs allow us to judge the state of the recreational and tourist industry in the economy ofthe region. They can be distinguished in relation to the system properties of the recreational-tourist system, for example, in relation to:
- to sustainability – as a share of the recreational industry in the structure of the region's economy, as a place of the organizational structure of the management of recreational and tourist activities in the regional economy's management system;
- to integrity – maintaining and building up recreational potentials (natural, industrial, labor) within the regional system;
- to complexity – placement on the recreational and tourist territory of other sectors of the economy of the region to participate in the development of recreational and tourist activities (multiplier effect);
- to vitality – signs of simple and expanded reproduction of the elements of the productive forces of the recreational and tourist area.

The main feature of the recreational-tourist system is the interconnectedness of its elements among themselves and with the elements of the regional system. In addition, with all the variety of tourist services in the recreational and tourist system, they all have four common characteristics: intangibility, the continuity of production and consumption, variability of quality, and inability to store. The intangibility or intangible nature of tourism services means that it is impossible to demonstrate, see, try or study before receiving. The continuity of the production and consumption of tourism services means that the service can only be provided when an order arrives or a client appears. As a measure (means of measurement), indicators are used that characterize the depth and nature of the processes occurring in the recreational-tourist system associated with the involvement of individual elements of recreational production in the social production of the region. Such indicators may include: indicators of the stability of the recreational-tourist system; indicators of its integrity; indicators characterizing the recreational and tourist potential of the region, indicators characterizing the use of the natural resource potential of the region; indicators characterizing the viability (reproduction) of the recreational-tourist system [12,13]. In different regions, recreational and tourist systems are developing in their own way. Thisis due to the presence of recreational and tourist potentials in the regions (natural resource, recreational and infrastructural, industrial, investment, informational, etc.), which form recreation and tourist systems in the region with individual signs of attractiveness. Therefore, for each recreational and tourist system in a particular region, a specific goal of diagnosing its development should be formulated. Nevertheless, a more general goal can be formulated as identifying the problems of aparticular region (they can be typical and atypical for other regions) and developing recommendations. And also the goal of economic diagnostics of the development of regions (territories) should be the realization of the possibilities of obtaining an objective assessment of regional situations and problems (processes and phenomena) necessary to ensure (through appropriate decisions) the effective development of regions. Proceeding from this, the goal of diagnosing the development of recreational and tourist territory should be to study the state of the recreational and tourist system and develop a system of parameters for the level of development and use of recreational and tourist potential for the formation of scientific tools for diagnosing the development of the territory and the impact of regional processes on it. The object of the study is a recreational-tourist system, understood as a set of industries involved in the production of recreational-tourist services, as well as emerging industrial relations. The subject of the study is a set of theoretical, methodological and practical issues related to the process of diagnosing the development of a recreational-tourist system, identifying its general condition, detecting "recreational pathologies", bottlenecks. Diagnostics of recreational and tourist areas should be based on a set of principles. Underthe principle in scientific theory is understood the most abstract definition of an idea (the initialform of systematization of knowledge). A principle is a rule that has arisen as a result of subjectively conscious experience of people. In this case, the general principles of the development of the territory must be observed: objectivity, multi-aspect, hierarchical and constructive [14,15]. Objectivity means that the general territorial characteristics should reflect the specific characteristics of the recreational and tourist industry. The multidimensionality (complexity of the assessment) is due to the variety of types of recreational and tourist services included in the recreational and tourist industry. Hierarchy allows you to divide the territory into zones, subzones, areas, subareas that are in clear mutual communication and subordination. Constructiveness is determined by the clarity of the tasks set during the development of recreational and tourist areas. The principles for diagnosing the development of recreational and tourist territories constitute the fundamental starting points obtained as a result of studying the state of recreational and tourist systems, identifying territorial "diseases", "pathologies", "pain points and bottlenecks", which guide the establishment of relations in developing elements of recreational and tourism resources in the

future. Based on them, taking into account specific factors and conditions, the development of recreational and tourist systems should be improved. The principle of science implies that the diagnosis of regional recreational and touristsystems is a system of forms, methods and tools for using objective economic laws, as well as away to coordinate and balance the economic interests of the region. The principle of consistency requires that, when studying and analyzing the recreational and tourist system within the framework of the region's economy, the integrity of the economic complex as an object of management be ensured in order to identify various types of ties with the region, country, and internationally.

Since the study justified three aspects of the development of the recreational and tourist area, three more groups of principles were identified:

1) Production aspect – directly the production of recreational and tourist services with the parameters of the existing infrastructure, indicators of its development and load. The first group of principles includes:

- the principle of unity determines consideration of the problems of recreational activities in combination with the problems of the regional economy;
- degree of openness of the territory;
- –degree of recreational and tourist development of the territory (developed, medium and underdeveloped area);
- structure of recreational and tourist functions, depending on the prevalence of the use of recreational and tourist resources (medical, tourism, sports, etc.);
- the principle of production (provision) of recreational and tourist services and other types of economic activity, which are designed to provide the necessary level of life, not only for permanent residents in this territory, but also for vacationers;
- the principle of approximation of the recreational and tourist system to natural and recreational resources, to areas and centers of production and consumption of finished products (recreational and tourist services);
- the principle of rational concentration (agglomeration) in the form of territorial-productioncomplexes and recreational-tourist sectors, linked accordingly to the main specialization of the region, their location;
- the principle of cooperation in the production of recreational and tourist services with various enterprises with a comprehensive reduction in inefficient transport, subject to the maximum possible comprehensive development of the economy of the region of accommodation;
- perspective development of the territory.

2) Social aspect, which allows the analysis of tourist flows, the degree of satisfaction of tourist demand, the compliance of effective demand with offers on the marke. The second group of principles is formed by the foundations that flow from the social aspect of the recreational area. Themain ones are:

- the principle of ensuring an expanded recreation of the physical and spiritual forces of the population of countries, their recovery, recreation, entertainment and raising the cultural level of development;
- the principle of solving the unity of socio-economic problems of permanent residents of the recreational area and vacationers;
- the principle of using financial resources received from recreational and tourist activitiesin this territory to solve social problems in the region;
- the principle of solving the problem of local employment in the field of recreation and tourism.
- There are several principles that apply to the first two groups.

- The principle of complexity requires interconnection and interdependence in the study, measurement and generalization of the influence of individual factors on the formation of indicatorsof the functioning and development of recreational and tourist systems in the region.
- The principle of dynamism is the timely identification and prevention of the reasons for the decline in economic (quantitative) and social (qualitative) indicators of the development of recreational and tourist systems, as well as the study of ways to eliminate negatively acting factors on the functioning of systems and consolidate the action of positive factors.

3) Ecological aspect, which allows the analysis of the capacity of the recreational and tourist territory and the determination of permissible anthropogenic loads on this territory. The third group of principles is determined by the rational combination of nature and economics:

- the principle of using the natural resources of recreational and tourist areas to renew the vitality of the population;
- the principle of preventing the negative impact of the production of recreational and touristservices and the harmful effects of recreants on the environment.

The listed principles cannot be considered in isolation from one another, they interact with each other, complementing or replacing each other. To determine the prospects for the development of recreation and tourism in the region and their impact on the regional economic and social system, it is advisable to identify the main groups of factors of influence on the development of the recreational and tourist system. These are statistical factors, which include a combination of natural and cultural-historical factors and which have stable, unchanging values. A person only adapts them to tourist needs, makes them more accessible for use [15,16]. Natural factors are expressed in an ecologically clean natural environment, comfortable climate, terrain, underground riches (healing and mineral waters, caves and the like). Cultural and historical factors - monuments of architecture, history, culture, etc.). A group of statistical factors plays a major role and significantly affects the subsequent development of recreation and tourism, and, consequently, the regional economic system. The second group is dynamic factors, which include demographic, socio-economic, material, technical and political factors. They can have different estimates, meanings and can change in time and in space. But only a combination of static and dynamic factors lead to the economic effect of recreational and tourist activities in the region. In addition, the factors that influence the development of recreation and tourism in theregion are divided into external (exogenous) and internal (endogenous). An important point in the development of the recreational and tourist system is the identification and elimination of the negative impact of external and internal factors on the development processes of recreation and tourism in the region, which is possible by conducting diagnostics of the development of the territory. External (exogenous) factors are influenced by demographic and social changes. These factors to one degree or another affect the structure of the free time of the population, which creates objective socio-democratic conditions for the development of recreation and tourism. The external factors that influence the development of recreation and tourism also include economic and financial factors: improvement (worsening) of the economic and financial situation; increase (decrease) in personal income; higher (low) tourist activity, depending on the part of the income allocated for the rest; growth (decrease) of the part of funds allocated by social insurance funds and other organizations to cover the costs of treatment, recreation, tourism and travel. In addition, external factors also include changes in political and legal regulation; technological changes; development of transport infrastructure and trade, as well as changing conditions for the safety of travel and leisure. Internal (endogenous) factors are primarily material and technical factors associated with thedevelopment of accommodation

facilities, vehicles, recreational catering, retail, etc. Internal factors also include tourism market factors. These are the processes of supply and demand, the growing role of market segmentation, the increasing role of coordination of activitiesin tourism and the processes of monopolization, the growing role of the media and public relations in the promotion, advertising and implementation of tourism services, the increasing role of personnel in tourism, etc. In addition, there are some other factors specific to the field of recreation and tourism that significantly affect the creation of a quality tourism product.

1) Discreteness (discontinuity) in the production of tourism services and the integrity of their consumption, manifested as a certain contradiction in solving the problems of managing the quality of tourism products.
2) The possibility of re-production of tourism services at an equally high level, or the duration of quality. The solution to this problem for many tour product manufacturers is an impossible task, which, in turn, often causes a sharp decline in the competitiveness of the entire enterprise.
3) Since the tourism sector refers to a type of activity where the manufactured product, being intangible, is consumed simultaneously with its production, the personnel of the company working in the tourism sector have no chance of correcting the marriage and, as a result (given the fierce competition in the tourism market), there is no chance of a customer return.

The recreational-tourist system is social in nature and the final product (service) education, providing expanded reproduction of the physical and spiritual forces of the population, leisure, entertainment, and consumers of this kind of services are people. Since the development of the recreational-tourist system, like any other, is characterized by qualitative and quantitative changes in individual characteristics: the economic, social and environmental component, we consider the development of the recreational-tourist system as a triune process: recreational-tourist activity, the social orientation of recreation and tourism, environmental stability recreational and tourist system.

5. RECREATIONAL AND TOURIST ACTIVITIES (ECONOMIC ASPECT)

Like any regional complex, a recreational-tourist system functions not as an isolated phenomenon, but as a set of interconnected elements, within which each element has a clearly defined place and function. "The economic complex of a region is a functioning system, and, therefore, possessing a certain stability and at the same time a developing and changing system. The recreational and tourist system of the region should also be considered as one of the economic complexes. To ensure its functioning and development, it is forced to attract land fromthe environment as a natural source of mineral, biological and recreational resources for the production of various kinds of consumer goods and services. Functioning, the recreational economic system of the region uses these resources to create the necessary social benefits for recreation and health. The recreational and tourist industry is becoming increasingly important for the development of the economy and social sphere of countries, is rapidly integrating into the global tourism industry. Today, the development of the recreational and tourism industry is extremely important for states, since it significantly affects such sectors of the economy as transport, hotels and restaurants, retail, communications, construction, food processing, agriculture, consumer goods,insurance, financial mediation, activities in the field of culture and sports. The recreational and tourist industry is one of the most promising areas of structural adjustment of the economy. It is an important factor in overcoming the crisis in the economy, revitalizing the local economy, stable and dynamic increase in budget revenues, and one of the mainsources of foreign exchange, increasing employment, and developing market relations.

Recreation and tourism is a complex object of economic activity. It is the core of a highly aggregated complex of industries involved in the creation and implementation of a tourism product. It is characterized by a high degree of multiplicative influence on a wide range of economic areas; itcan really act as a locomotive of regional development (Fig. 1). The tourism multiplier is a numerical coefficient characterizing its indirect impact on the development of related sectors and showing how many times the internal regional product will change as a result of changes in tourist spending. Due to the multiplicative recreational and tourist effect, generating a wave of cycles of economic activity in the industries involved in tourist services, the socio-economic benefits of recreational and tourist activities significantly exceed the revenues of the industry itself. A well-developed recreational and tourist industry contributes to the influx of significant amounts of foreign currency, ensures the stabilization and increase in foreign exchange earnings in the country and regions. At the same time, the receipt of foreign currency occurs not only in the form of payment for tourist services, but also as an exchange of currency for the daily needs of tourists. Recreation and tourism is the only branch of the country's economy in which dynamic growth is currently being observed, thereby increasing its investment attractiveness. Tourism business in the whole world is one of the most promising areas of entrepreneurship.Since the beginning of the 60s, tourism has been developing very dynamically. Profits from it amount to tens of billions of US dollars. The importance of recreational and tourist activities for the economy of the region is diverse and very significant. The creation of travel companies and the development of their business brings great benefits: to customers – products, services; working staff – salary, businessmen – profit; the region – money at the expense of taxes and fees. Any enterprise or institution can make a profitfrom direct industrial and commercial activities, or maybe by investing profits (capital) in other enterprises. It is travel companies that can be very beneficial investors because of the rapid turnoverof capital goods and high profitability. From an economic point of view, the effect of tourism in the form of additional demand for goods and services is of great importance. Therefore, tourism has a certain impact on the development of regional industries producing consumer goods. The increase in tourist flows significantly increases the demand for souvenirs, local handicrafts, and has a beneficial effect on therevival of folk crafts, traditions and folklore.

Figure following on the next page

Figure 1: The mutual influence of recreational and tourist activities and the economy of the region

The peculiarity of tourism lies in the fact that it brings to life a new form of consumer demand – the demand for tourists coming for vacation, for a variety of goods and services that regional industry can offer. An increase in sales of local industry products naturally increases the revenues of the region in which it is located. Demand for a complex of goods and services formed by the tourist movement requires the expansion of their production. In addition to additional income, the sale of such products can serve as an advertisement for a tourist center. Thanks to this, the production of consumer goods is developing intensively, benefiting its region and raising the standard of living of the population.

6. RECREATION AND TOURISM ARE A SOCIAL FACTOR
The role of recreation and tourism in economic activity is determined primarily by the fact that it is part of both the social and economic spheres. The main functions of the social sphere in the recreational-tourist system are as follows:
- bringing tangible and intangible benefits of the recreational and tourist area to the consumer; maintenance of the consumption process;
- creating conditions in the recreational and tourist area for changing activities and recreation; health promotion;
- the formation of the general educational and cultural-technical level of the population.

Currently, the need for rest takes a leading place in the social needs of the population. In areas with favorable natural and socio-economic conditions, recreation areas are being created, sanatoriums, boarding houses and rest houses, children's health camps are being built, tourist routes are being laid, which contributes to the formation of recreational resort complexes in the regions. In addition to recreation, the result of recreational and tourist use of the natural resources of the territory is a healing effect, which is manifested in an increase in working capacity, restorationof psychophysiological resources, rational use of free time, reduction in morbidity, mortality, and other social indicators. Recreation and tourism, occupying an important place in society, take on a significant part of the most important social functions in the region: they help to ensure employment of thepopulation and increase their income, focus on maintaining and restoring the recreational and touristresources of the region. Recreational and tourist activities must be socially oriented. It can combine two principles: serving the interests of man, society as a whole and generating income at micro- and macroeconomic territorial levels. Then the main concepts of the social recreational and tourist industry should be self-development, self-financing and self-government. In this regard, it is advisable to note the social aspects of the impact of tourism in the region and on the recreational and tourist territory, i.e. the influence that the development of recreational and tourist activities has on the regional social structure, relations in society, as well as on social strata and institutions. Tourism and recreation can and should become an effective means of rationaluse of free time, spending substantial leisure time, studying the history of the native land. If in other types of use of resources we get a direct economic effect from their use, then the social effect during recreational and tourist use turns into other areas – into an economic one (the achieved increase in working capacity increases labor productivity, the time of illness is reduced, healthcare costs are reduced, etc.). The difficulty of collecting information related to the remotenessof the results of rehabilitation from the place of its receipt (both in time and territorially), the lack ofclear methods for determining the economic effect of recovery do not allow to reliably determine the economic efficiency of natural resources in recreational use.

7. THE ECOLOGICAL SIGNIFICANCE OF THE DEVELOPMENT OF RECREATION AND TOURISM (ENVIRONMENTAL ASPECT)

Tourism cannot develop without interaction with the environment. The restoration of vitality occurs on the basis of the use of natural resources of the recreational and tourist area. The development of natural recreational resources is a necessary condition for the effectiveness of the healing process leading to an improvement in the state of health, an increase in life expectancy, and the prevention of a number of diseases. In other words, natural recreational resources are capable of exerting a certain physiological, mental, and at the same time restoring strength and health effect onpeople. Consequently, the natural environment of a recreational and tourist area under certain conditions may constitute a place for the restoration of human strength, i.e. resort and recreational potential. In the process of recreational and tourist activities, an environmental change will inevitably occur as natural resources are the "main means of production." Therefore, the objects of ecotourism are nature monuments, nature reserves, wildlife sanctuaries, speleotourism, parks of landscape gardening art, arboretums, forests, etc. The expanding recreational and tourist activities are faced with the problem of resolving the contradiction and continuously searching for the correlation between the development of natural resources and the preservation of their quality, the preservation of untouched unique natural sites and the satisfaction of the recreational needs of the population. With the development of recreation and tourism, the environmental impact increases dramatically and can become negative.Consequently, for the use of recreational and tourist resources, a fee similar to that in other areas of management should be established. Of great importance are measures to prevent the negative consequences of the technogenic activities of enterprises,

which is the basis of the modern innovation policy of forming an appropriate market for the development of mass recreation and tourism. The environmental impact of recreation and tourism can be direct, indirect and incentive, as well as positive and negative. However, by managing its development and clear planning, it is possible to reduce the negative impact and increase the positive. The positive impact of recreation and tourism includes the following factors: the protection and restoration of historical monuments, the creation of national parks and reserves, the protection of coastlines, the conservation of forests, etc. The negative effects of recreation and tourism, unfortunately, often prevail over the positive impact. In particular, this impact on the quality of water in rivers, seas, lakes and on air quality due to the use of vehicles with internal combustion engines; noise from the activities of various entertainment venues; the destruction of local and wild flora by tourists making fires; destruction of historical monuments by vandals, leaving inscriptions on them, etc. These are examples of only minor damage to the environment. It should be noted that environmental protection is a simpler and cheaper measure than correcting the harm done in the future. Environmental policy should be aimed at a long-term period to ensure long-term recreational and tourist activities. However, many countries, especially developing ones, ignore this,preferring commercial and financial momentary benefits. The needs of the population in leisure and tourism are growing so fast that the state does not have time to create new recreation areas. As a result, the current needs in recreational and tourist areas exceed the possibilities of satisfying them. This leads to an overload of existing recreational and resort areas, which has a negative impact on natural resources. The needs of the tourist, the sequence and measure of their satisfaction are significantly different from the constant human needs of life. The desire to move, to change their usual locationto a new place is caused, first of all, by intangible needs. The need to acquire new knowledge about previously unfamiliar places and visit favorite places is one of the basic needs of a tourist. Hence, a tourist's need is a need for a cultural, cognitive, social, moral or physiological good that a person or group of people experiences and which can be satisfied only as a result of a real, comfortable movement to places of non-daily stay or residence. The need for a kind of rest or recreation, in a tourist service is formed by the condition of theindividual, the community of people, the environment and depends on the condition of the person, his character, health, age, financial capabilities, the surrounding community, the level of general, religious, economic, physical and other types of culture. Needs awaken motives for their satisfaction, which can only happen by real movement to places of rest. Based on the definition of tourist needs, the concept of tourist services can be defined as assistance in meeting the diverse needs of the individual by comfortable moving to non-daily placesof stay or residence. The need for a kind of rest or recreation, in a tourist service is formed by the condition of the individual, the community of people, the environment and depends on the condition of the person, his character, health, age, financial capabilities, the surrounding community, the level of general religious, economic, physical and other types of culture. Needs motivate them to meet, which can only happen by real movement to places of rest. Based on the definition of tourist needs, the concept of tourist services can be defined as assistance in meeting the diverse needs of the individual by comfortable moving to non-daily placesof stay. According to F. Kotler, "services are objects of sale in the form of actions, benefits or gratifications" [16]. From this definition it follows that the services are not saved and the client is offered something that does not have material forms. Firstly, the service does not exist until its provision, i.e. the product is created in the process of providing the service. Secondly, very often the provision of services requires special knowledge and skill, which is difficult for the buyer not only to evaluate, but often to understand. Involving the buyer in the process of production and consumption of the service means that the seller must take care not only about what to produce, but also how to produce it. Therefore, the correct selection and training of personnel in contact with customers is necessary to ensure the quality of services and the formation of customer

loyalty to a particular company. All this makesthe perception of the quality of a tourist product in many ways subjective, depending on the individual characteristics of each tourist. The recreation and tourism industry is characterized in that the main attention in it when creating a product quality system is drawn to the quality of service. Quality of service is the key to commercial success. Hotels and restaurants, travel agencies and travel agencies often with absolutely identical material base and orientation differ from each other only in the quality of service, which for some is the main trump card in the competition.

8. CONCLUSION

Diagnostics of the development of the recreational-tourist system in the structure of the general system of the region helps to identify positive and negative socio-economic processes occurring within the recreational-tourist system, and indicates the advantages and disadvantages ofa particular region in the development of the tourism industry. Thus, the purpose of diagnosing the development of the recreational-tourist territory is to study the state of the recreational-tourist system, determine the level of development and use of the recreational-tourist potential and its impact on socio-economic regional processes. The object of thestudy is the recreational-tourist system, as a set of economic sectors involved in the production of recreational-tourist services. According to the point of view of some scientists, the tourism object includes three main components - a tourist region (place), a tourist organization and a tourist enterprise. A tourist uses a range of services that are provided to him in a specific place (or region) where tourist activities take place. Due to its attractive factors, this place becomes a tourist center. Tourist places differ in features that interest the tourist and determine his choice. This definition is given from the point of view of the user (tourist, vacationer). When a tourist chooses his travel destination, he compares among themselves the various places and the level of service that are provided there. Therefore, the diagnosis should be made taking into account the assessment of the satisfaction of the needs of tourists. However, one should not forget that the recreational-tourist system should contribute to thedevelopment of the region with minimal damage and discomfort to the local population, therefore a second aspect of diagnosis arises, from the point of view of the need to develop the region and the cultural and historical traditions of the local population. Only an integrated approach to the diagnosis of the recreational and tourist system willallow us to assess the potential and development opportunities of the region, as well as reveal the needs of tourists who determine the range of tourist services in a particular region.

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RISK MANAGEMENT IN INTERNATIONAL BUSINESS

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ABSTRACT

The whole of strategies and methods constitutes a special risk management mechanism, which is risk management. Risk management incorporates a part of financial management. Duties such as purposeful search performed on the reduction of the risk level and organization of works, obtaining an income and its increasing are based the risk-management. The ultimate purpose of risk-management is the same with the purpose of entrepreneurship. It is closely connected with maximum reduction of risks and obtaining an income. Risk-management incorporates a system of management of the risk, which arises from entrepreneurial activity, with financial relations. The main purpose of management of economic risks in enterprise consists of minimizing of financial losses. This management process is regard to valuation of the level of separate economic risks, their prophylactics and insurance. The calculation of the level of economic risks is carried out on the following stages: identification of the types of separate economic risks related to the activity of enterprise; valuation of the degree of probability for occurrence of separate economic risks; determination of possible financial losses related to separate economic risks. The valuation of bankruptcy probability takes a special place in diagnostics of risks and management of production-sale activity. So, management of other aspects of assets, capital, investments, risks and financial activity of the enterprises must have mutual related character. Such mutual relations are provided in the process of complex management of financial condition of trade enterprise and in its optimizing. The optimizing of financial condition of enterprise is one of the main terms of successful economic development in its future perspective. Also, the financial crisis of enterprise creates strong danger for its bankruptcy. Therefore, the distribution of risk factors on commodity production in industrial enterprises to ranks in marketing researches is an important direction.
Keywords: international markets, risk management, strategic marketing, marketing researches, processing industry enterprises

1. INTRODUCTION

The work of managers on marketing in modern economy becomes complicated gradually. It regards not to complication of external environment of business, but also development of marketing and transition from fulfillment of marketing functions in enterprise to strategic marketing. Though marketing functions are investigated in appropriate literature, its place and role in strategic management system is not disclosed in detail. The existence of marketing service in enterprise doesn't show the existence of efficient strategy. The connection of marketing and strategy, its mutual influence and its difference with management shall be investigated. The practice shows that, marketing is not stable and doesn't stop in one point, it is a science being in dynamic development.

2. RISKS FACED BY INDUSTRIAL ENTERPRISES IN INTERNATIONAL BUSINESS

The emergence of commercial situations when industrial enterprises enter the international market is accompanied by certain risks. It is considered one stage of marketing researches. At this stage of Marketing Research, the commercial situation (event) in food production enterprises should be determined and the ratio of domestic and foreign trade turnover of

products in international business should be investigated. The indicators on separate activities of processing industry enterprises don't always overlap with their general indicators. So, the decrease of their number from 534 up to 393 is observed in enterprises on production of food products (see, table 1).

	2005	2010	2014	2015	2020
Number of acting enterprises - total	534	409	389	382	393
governmental	31	14	18	18	16
non-governmental	503	395	371	364	375
Number of individual entrepreneurs recorded to engage in industrial activity, persons	2 362	2 431	3 752	4 079	4 290
Capacity of industrial product (works, services),with current prices of appropriate years, million manat	1 095	1 925	2 597	2 547	3 257
Physical capacity index of industrial product, in comparison with previous year, by percentage	102.7	102.3	102.0	102.9	104.8
The part of area in general capacity of industrial product made in the country, by percentage	2.4	1.5	2.0	2.5	4.3
The part of non-governmental sector of area in non-governmental sector of country industry, by percentage	16.6	8.6	10.2	12.6	12.5
Average list number of workers, thousand persons	13.0	15.1	20.6	18.8	18.8
In comparison with previous year, by percentage	113.0	86.8	109.6	91.3	100.0
The part of area workers in general number of persons working in industry, by percentage	6.7	8.3	10.5	10.0	10.1
Average monthly salary of a worker, manat	46.1	224.0	337.2	352.6	371.6
Existence of main funds for the end of the year, million manat	371.7	779.9	857.7	884.2	910.4
In comparison with previous year, by percentage	107.8	106.3	108.5	103.1	103.0
Investments to the main capital, million manat	28.0	27.1	92.4	87.9	63.6
The part of investments put to the area in total capacity of investments oriented to industrial sector, by percentage	0.67	0.63	1.2	1.0	0.6
Price index of manufacturers of industrial products, , in comparison with previous year, by percentage, by percentage	96.7	106.9	98.8	102.9	102.9

Table 1: Main indicators in the activity of enterprises engaged in production of food products (Source: www.stat.gov.az)

Price indexes of producers in enterprises on production of food products were 102,9% in 2015 and 102,9% in 2020 (see, table 1). Here, the assumed situation may be indicated in the following form:

$$P(A/H) = \frac{1,029}{1,316} = 0,781$$

Schematically, this process may be described as follows (see, figure 1).
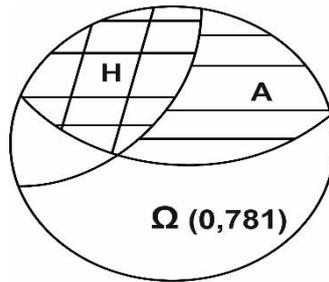
Figure 1: Determination of commercial situations (event) in food industrial enterprises by means of Bays method

Naturally, the expansion of the probability of occurrence of commercial situations is accompanied by certain risks. Modern trends in the functioning and development of firms in the consumer market are formed in conditions of uncertainty of both external and internal environment. This requires trade managers to be proficient in managing farm risks. Risk-management as a system consists of two half-systems: controllable half-system (control object), controlling half-system (control subject). The impact of the control subject on the control object, i.e control process itself may be only performed at the moment of the exchange of information fixed between the controlled and controlling half-systems. Regardless of its full meaning, the control process always seeks to receive, transmit, process and use information. Formation of an effective risk management system in companies is a serious step towards ensuring its effectiveness, by meeting the interests of all interested persons of the company. Risk-management is a process for taking and carrying out management decisions aimed at minimizing the probability for formation of adverse results and minimizing potential losses in decision-making. The application of risk management system allows to ensure stability and improve the financial situation. In this regard, the risk management system should be integrated into the daily management system of the company. Risk management depends on the effective interaction between risk-management participants. The process of Risk management takes place both in the internal and external environment of the company. In order to ensure perfect risk management, first of all, it is necessary to organize an effective system of interaction within the company. The division of risk factors for the production of consumer goods in industrial enterprises into ranks often creates conditions for their successfully putting on the international market. Therefore, the development of technology and factors for selecting the firm's organizational and production activities acts as an important problem. A detailed analysis of these factors allows for a reasonable choice of the most effective organizational and legal form of the enterprise's activity, taking into account the specific intentions and preferences of the founders. The sale of goods to buyers is carried out through certain points of sale, and their whole form the retail network of a particular region.

3. DOMESTIC AND FOREIGN TRADE TURNOVER IN INTERNATIONAL BUSINESS

The essence of marketing is to follow the whole path of the movement of goods from producer to consumer. The nature of foreign marketing is to explore both domestic and foreign markets. We have tried to determine the export turnover of enterprises explored for prospective in the foreign marketing market. The forecast period for the study covers 2015-2020s. It is observed as a result of studies that foreign marketing on food products has risen from 5% up to 25% in 2015-2020. Investigation of commercial situations and risks when putting on the foreign market shows that local enterprises making various products can significantly expand the foreign marketing. In particular, it is observed that enterprises making food products have risen the export turnover from 5% up to 25%.

4. CONCLUSION

As a management system, risk-management incorporates the determination of the purpose of risks and risk capital investments, the probability of an event that may occur, arising out of risk degree and level, the analysis of environment, identification of risk management strategy, selection of those required for risk and its reduction strategies, purposeful management of risks. The highlighted procedures are the stages of risk-management organization. The first stage in the organization of risk-management is to identify the purpose of risk and risk capital investment. The purpose of the risk is to achieve the desired result. It can be success, interest, income and so on. The purpose of risk capital investment is to obtain maximum income. The second important thing in the organization of risk-management is the availability of environmental information, which is important for any decision-making. There are many types of risks that companies can face at every moment. Any area of the economy, including trade, service and production areas exposes to the risks associated with its own operating mechanism and environment. Each company should be created a system of risk assessment and control over them to prevent such risks and minimize the volume of their negative impact. When entering the international market, it is necessary to identify the main advantages and disadvantages of the enterprise. Enterprises producing consumer goods should be based on both domestic and foreign trade turnover indicators when putting on the foreign market.

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UNIQUENESS OF RECOVERY OF THE DIFFUSION OPERATOR FROM THE SPECTRAL DATA

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ABSTRACT
The theory of inverse spectral problems attracts the attention of many researchers interested in the theory itself and in its applications. Research in the field of inverse problems of spectral analysis includes finding spectral data that uniquely define an operator, proof of the corresponding uniqueness theorems, constructing an algorithm of recovery of the operator from the spectral data and finding conditions for the solvability of inverse problems. One takes for the main spectral data, for instance, one, two, or more spectra, the spectral function, the spectrum and the normalizing constants, the Weyl function, sequence of signs, scattering data. Depending on the choice of spectral data, the inverse problems differ in their formulations. By now, the problems of reconstructing the Sturm-Liouville and diffusion operators with separated and nonseparated boundary conditions without a spectral parameter have been well studied. Research related to boundary value problems with a spectral parameter in boundary conditions plays a very important role in many theoretical and applied problems of mathematical physics. Application of the method of separation of variables to mixed type partial differential equations, in which differentiation with respect to time is included in the boundary conditions, leads to such problems. Similar problems often arise when studying a number of problems - the construction of systems for protecting devices from shock, vibrations of a string with a load at the end of the string, torsional vibrations of a shaft, vibrations of antennas loaded with lumped capacitors and inductances, etc. In this paper we consider the diffusion operator with real coefficients. The boundary conditions are nonseparated. One of these boundary conditions depends quadratically on the spectral parameter. Some spectral properties of the operator are studied. An asymptotic formula for the spectrum is given. The problem of recovering the coefficients of the diffusion equation and boundary conditions is researched. The spectra of two boundary value problems and a certain sequence of signs are used as spectral data.
Keywords: Diffusion operator, Inverse problem, Non-separated boundary conditions, Solution algorithm, Uniqueness theorem

1. INTRODUCTION
Many applied problems from the field of mathematical physics lead to the consideration of boundary value problems with a spectral parameter in boundary conditions (see [1-3]). A large number of works are devoted to the study of such problems. Direct and inverse problems of spectral analysis for the Sturm - Liouville operator with separated boundary conditions and with a spectral parameter in the boundary conditions have been completely solved in many works (see [4-13]). The problems of recovering problems with nonseparated boundary conditions depending on the spectral parameter are considered in [14-18], in which at least two spectra and some additional spectral data are used to recover the unknown coefficients of the differential equation and boundary conditions. Note that the main results and methods related to inverse problems for Sturm-Liouville and diffusion operators with nonseparated (including periodic and quasiperiodic) boundary conditions are presented in [14]. In this paper we study the inverse spectral problem of reconstructing the diffusion operator with nonseparated boundary conditions, one of which depends quadratically on the spectral parameter. A uniqueness theorem is proved and an algorithm for solving the inverse problem is obtained.

The spectrum of two boundary value problems and a certain sequence of signs are taken as spectral data. We denote by $W_2^n[0, \pi]$ the Sobolev space of functions $v(x)$ $(0 \le x \le \pi)$, equipped with the usual definition of norm

$$\|v\|_{W_2^n} = \left(\sum_{k=0}^{n} \int_0^{\pi} |v^{(k)}(x)|^2 \, dx \right)^{\frac{1}{2}}.$$

Note, that $W_2^0[0, \pi] = L_2[0, \pi]$.

We consider the boundary value problem generated by the diffusion differential equation

$$y''(x) + (\lambda^2 - 2\lambda p(x) - q(x))y(x) = 0 \qquad (0 \le x \le \pi) \qquad (1)$$

And boundary conditions

$$\begin{aligned} y(0) - y(\pi) &= 0, \\ y'(0) - m\lambda^2 y(\pi) - y'(\pi) &= 0, \end{aligned} \qquad (2)$$

where $p(x) \in W_2^1[0, \pi]$, $q(x) \in L_2[0, \pi]$ are real functions, λ is the spectral parameter, m is a real number. We denote this problem by $B(m)$.

Note, that $B(0)$ is a periodic boundary value problem. Direct and inverse spectral problems in this case (as well as in the cases of antiperiodic and quasi-periodic boundary conditions) are completely solved by different methods. (see [19-26]). Note that inverse problems in case of $m \ne 0$ have not been studied previously.

2. ON SPECTRUM OF THE BOUNDARY VALUE PROBLEM

A number λ_0 is called an eigenvalue of a boundary value problem $B(m)$ if equation (1) has a nontrivial solution at $\lambda = \lambda_0$ that satisfies boundary conditions (2); in this case $y_0(x)$ is called the eigenfunction of the problem $B(m)$ which corresponds to the eigenvalue λ_0. The set of eigenvalues is called the spectrum of the problem $B(m)$. The spectrum of the problem $B(m)$ coincides with the set of zeros of an entire function of exponential type

$$\Delta(\lambda) = c(\pi, \lambda) + m\lambda^2 s(\pi, \lambda) + s'(\pi, \lambda) - 2, \qquad (3)$$

which is called the characteristic function of the boundary value problem $B(m)$. Let $c(x, \lambda)$, $s(x, \lambda)$ be the solutions of the equation, (1), satisfying the initial conditions

$$c(0, \lambda) = s'(0, \lambda) = 1, \quad c'(0, \lambda) = s(0, \lambda) = 0.$$

It is known [6] that the following representations are valid for functions $c(\pi, \lambda)$, $s(\pi, \lambda)$ and $s'(\pi, \lambda)$:

$$c(\pi,\lambda)=\cos \pi(\lambda-a)-c_1 \frac{\cos \pi(\lambda-a)}{\lambda}+\pi a_1 \frac{\sin \pi(\lambda-a)}{\lambda}+\frac{1}{\lambda}\int_{-\pi}^{\pi}\psi_1(t)e^{i\lambda t}dt, \qquad (4)$$

$$s(\pi,\lambda)=\frac{\sin \pi(\lambda-a)}{\lambda}+c_0 \frac{\sin \pi(\lambda-a)}{\lambda^2}-\pi a_1 \frac{\cos \pi(\lambda-a)}{\lambda^2}+\frac{1}{\lambda^2}\int_{-\pi}^{\pi}\psi_2(t)e^{i\lambda t}dt, \qquad (5)$$

$$s'(\pi,\lambda)=\cos \pi(\lambda-a)+c_1 \frac{\cos \pi(\lambda-a)}{\lambda}+\pi a_1 \frac{\sin \pi(\lambda-a)}{\lambda}+\frac{1}{\lambda}\int_{-\pi}^{\pi}\psi_3(t)e^{i\lambda t}dt, \qquad (6)$$

Where

$$a=\frac{1}{\pi}\int_0^{\pi}p(t)dt, \quad a_1=\frac{1}{2\pi}\int_0^{\pi}\left[q(t)+p^2(t)\right]dt,$$

$$c_0=\frac{1}{2}\left[p(0)+p(\pi)\right], \quad c_1=\frac{1}{2}\left[p(0)-p(\pi)\right],$$

and the function $\psi_j(t)$ $(j=1,2,3)$ belongs to $L_2[-\pi,\pi]$. Taking into account these representations and using the Paley-Wiener theorem [19, p. 47], from (3) we obtain the formula

$$\Delta(\lambda)=m\lambda \sin \pi(\lambda-a)+(2-ma_1\pi)\cos \pi(\lambda-a)+$$
$$+mc_0 \sin \pi(\lambda-a)+f(\lambda)-2, \qquad (7)$$

where $f(\lambda)=\int_{-\pi}^{\pi}\tilde{f}(t)e^{i\lambda t}dt$, $\tilde{f}(t)\in L_2[-\pi,\pi]$.

Using representation (7) and Rouche's theorem, it is easy to establish by the standard method (see, for example, [17]) that the boundary value problem $B(m)$ has a countable set of eigenvalues μ_k $(k=\pm 0,\pm 1,\pm 2,...)$ and we get the following asymptotic formula for $|k|\to\infty$:

$$\mu_k=k+a+\frac{a_1}{k}+\frac{2\left[(-1)^k-1\right]}{\pi mk}+\frac{\tau_k}{k}, \quad \{\tau_k\}\in l_2. \qquad (8)$$

In what follows, we will suppose that $m<0$ and the following condition is satisfied: for all functions $y(x)\in W_2^2[0,\pi]$, $y(x)\not\equiv 0$, satisfying conditions (2), the inequality

$$\int_0^{\pi}\left(\left|y'(x)\right|^2+q(x)\left|y(x)\right|^2\right)dx>0$$

holds (this inequality is satisfied if $q(x)>0$). When this condition is satisfied, the eigenvalues of the boundary value problem $B(m)$ are real and nonzero.

3. INVERSE PROBLEM. UNIQUENESS THEOREM

We denote

$$\sigma_n = \text{sign}\left[1 - \left| s'(\pi, \lambda_n)\right|\right], \quad n = \pm 1, \pm 2, \ldots, \tag{9}$$

where λ_n are the zeros of the function $s(\pi, \lambda)$, i.e. the eigenvalues of the boundary-value problem generated by the equation (1) and the boundary conditions

$$y(0) = y(\pi) = 0. \tag{10}$$

According to the formula (8) the spectrum $\left\{\mu_k^{(j)}\right\}$ of a boundary value problem $B(m_j)$ $(m_1 \neq m_2)$ can be represented as

$$\mu_k^{(j)} = k + a + \frac{a_1}{k} + \frac{2\left[(-1)^k - 1\right]}{\pi m_j k} + \frac{\tau_k^{(j)}}{k}, \quad \left\{\tau_k^{(j)}\right\} \in l_2, \quad j = 1, 2. \tag{11}$$

The inverse problem is formulated as follows.

Inverse problem - Recover the boundary value problems $B(m_1), B(m_2)$ knowing the sequences $\left\{\mu_k^{(1)}\right\}, \left\{\mu_k^{(2)}\right\}$ and $\left\{\sigma_n\right\}$.

Theorem - If $p(0) = p(\pi)$, then the boundary-value problems $B(m_1), B(m_2)$ are uniquely determined by their spectra $\left\{\mu_k^{(1)}\right\}, \left\{\mu_k^{(2)}\right\}$ and sequence of signs $\left\{\sigma_n\right\}$.

Proof - According to the asymptotic formula (11) we have

$$\mu_{2k}^{(j)} = 2k + a + \frac{a_1}{2k} + \frac{\tau_{2k}^{(j)}}{2k},$$

$$\mu_{2k+1}^{(j)} = 2k + 1 + a + \frac{a_1}{2k+1} - \frac{4}{(2k+1)\pi m_j} + \frac{\tau_{2k+1}^{(j)}}{2k+1}.$$

Hence, the parameter m_j can be determined by the formula

$$m_j = \frac{2}{\pi} \lim_{k \to \infty} \frac{1}{k\left(\mu_{2k}^{(j)} - \mu_{2k+1}^{(j)} + 1\right)}, \tag{12}$$

as $\lim_{k \to \infty} \tau_k^{(j)} = 0.$ The characteristic function $\Delta_j(\lambda)$ (as an entire function of exponential type) can be recovered as an infinite product.

According to (3) we get

$$\Delta_1(\lambda) = c(\pi, \lambda) + m_1 \lambda^2 s(\pi, \lambda) + s'(\pi, \lambda) - 2,$$
$$\Delta_2(\lambda) = c(\pi, \lambda) + m_2 \lambda^2 s(\pi, \lambda) + s'(\pi, \lambda) - 2. \tag{13}$$

Therefore the characteristic function $s(\pi,\lambda)$ of the boundary value problem (1), (9) can be defined as

$$s(\pi,\lambda) = \frac{\Delta_1(\lambda) - \Delta_2(\lambda)}{(m_1 - m_2)\lambda^2}.$$ (14)

Hence we obtain the zeros λ_n, $n = \pm 1, \pm 2, \ldots$ of the function $s(\pi,\lambda)$.

Consider the function

$$u_+(\lambda) = c(\pi,\lambda) + s'(\pi,\lambda),$$ (15)

$$u_-(\lambda) = c(\pi,\lambda) - s'(\pi,\lambda).$$ (16)

According to (13) the function $u_+(\lambda)$ is recovered by the formula

$$u_+(\lambda) = \Delta_1(\lambda) - m_1\lambda^2 s(\pi,\lambda) + 2.$$ (17)

Now we will show that in addition to the spectra (from which, as was shown above, functions $u_+(\lambda)$, $s(\pi,\lambda)$ and parameters m_1, m_2 are uniquely reconstructed), it suffices to specify another sequence $\{\sigma_n\}$ in order to reconstruct the function $u_-(\lambda)$ and the function

$$s'(\pi,\lambda) = \frac{1}{2}[u_+(\lambda) - u_-(\lambda)].$$ (18)

As λ_n, $n = \pm 1, \pm 2, \ldots$ are the zeros of the function $s(\pi,\lambda)$, then putting $\lambda = \lambda_n$ in the equality $c(\pi,\lambda)s'(\pi,\lambda) - c'(\pi,\lambda)s(\pi,\lambda) = 1$, we get

$$c(\pi,\lambda_n)s'(\pi,\lambda_n) = 1.$$ (19)

Squaring both sides of each of the relations (15) and (16) and subtracting the resulting equalities, we have

$$u_-^2(\lambda) - u_+^2(\lambda) = -4c(\pi,\lambda)s'(\pi,\lambda).$$

Putting $\lambda = \lambda_n$ in this equality and taking into account (19), we get

$$u_-^2(\lambda_n) - u_+^2(\lambda_n) = -4.$$

Therefore

$$u_-(\lambda_n) = \operatorname{sign} u_-(\lambda_n)\sqrt{u_+^2(\lambda_n) - 4}.$$ (20)

Taking into account intermittency of zeros of functions $s(\pi, \lambda)$ and $s'(\pi, \lambda)$ and the representation (6) of the function $s'(\pi, \lambda)$, we infer that

$$\operatorname{sign} s'(\pi, \lambda_n) = (-1)^n.$$

Hence by (9), (16) and (19) we have

$$\operatorname{sign} u_-(\lambda_n) = \operatorname{sign} \left[c(\pi, \lambda_n) - s'(\pi, \lambda_n) \right] =$$
$$= \operatorname{sign} \left[\frac{1}{s'(\pi, \lambda_n)} - s'(\pi, \lambda_n) \right] = \operatorname{sign} \frac{1 - \left[s'(\pi, \lambda_n) \right]^2}{s'(\pi, \lambda_n)} =$$
$$= \operatorname{sign} \frac{1 - \left| s'(\pi, \lambda_n) \right|}{(-1)^n} = (-1)^n \sigma_n.$$

Putting it in (20), we get

$$u_-(\lambda_n) = (-1)^n \sigma_n \sqrt{u_+^2(\lambda_n) - 4}. \tag{21}$$

According to (5) we have

$$\lambda s(\pi, \lambda) = \sin \pi(\lambda - a) + o\left(\frac{1}{|\lambda|} e^{\pi |\operatorname{Im} \lambda|} \right), \quad \lambda \to \infty.$$

Since $p(0) = p(\pi)$, then from representations (4) and (6) it is clear that the function $u_-(\lambda)$ is an entire function of exponential type not exceeding π and

$$\lambda u_-(\lambda) = \int_{-\pi}^{\pi} \left[\psi_1(t) - \psi_3(t) \right] e^{i\lambda t} dt \in L_2(-\infty, \infty).$$

Then according to the theorem 28 (see [16]) the function is uniquely determined by the sequences $\{\lambda_n\}$, $\{\sigma_n\}$, $\{u_+(\lambda_n)\}$ by the interpolation formula

$$u_-(\lambda) = 2s(\pi, \lambda) \sum_{n=1}^{\infty} \frac{(-1)^n \lambda_n \sigma_n \sqrt{u_+^2(\lambda_n) - 4}}{(\lambda^2 - \lambda_n^2) \dot{s}(\pi, \lambda_n)}, \tag{22}$$

where the dot above the function means differentiation with respect to λ. Uniqueness of the constructed function $u_-(\lambda)$ follows from the fact that formula (22) sets up a bijection between l_2 and the space of entire functions of exponential type not exceeding π belonging to $L_2(-\infty, \infty)$. Hence the characteristic function $s'(\pi, \lambda)$ of the boundary value problem generated by the equation (1) and boundary conditions

$$y(0) = y'(\pi) = 0 \tag{23}$$

is reconstructed by formula (18),in which functions $u_+(\lambda)$ and $u_-(\lambda)$ and are determined by relations (17) and (22) respectively. The coefficients $p(x)$, $q(x)$ of equation (1) are uniquely determined by the zeros v_n, $n = \pm 1, \pm 2, ...$ of the function $s'(\pi, \lambda)$ and the sequence $\{\lambda_n\}$ [7]. Thus, according to the given sequences $\{\mu_k^{(1)}\}$, $\{\mu_k^{(2)}\}$ and $\{\sigma_n\}$ both coefficients $p(x)$, $q(x)$ of equation (1) and the parameters m_1, m_2 of the boundary conditions are uniquely determined, i.e. boundary value problems are completely recovered. Q.E.D.

4. SOLUTION ALGORITHM FOR THE INVERSE PROBLEM
Bearing in mind the proof of the uniqueness theorem we arrive at the following solution algorithm for the inverse problem.

Algorithm - Let the sequences $\{\mu_k^{(1)}\}$, $\{\mu_k^{(2)}\}$ (spectra of the problems $B(m_1)$, $B(m_2)$) and $\{\sigma_n\}$ be given (see. (9)) .

1) Using asymptotic formula (11), the parameter m_j $(j = 1, 2)$ is found by formula (12).
2) With the help of the sequence $\{\mu_k^{(j)}\}$ and the number m_j, construct the function $\Delta_j(\lambda)$ in the form of an infinite product.
3) Reconstruct the function $s(\pi, \lambda)$ (the characteristic function of the boundary value problem (1),(10)) using (14) and find the zeros λ_n of this function.
4) Construct the function (15) using (17).
5) Find the value of function (16) at points λ_n from (21).
6) Reconstruct the characteristic function (16) using the interpolation formula (22).
7) Define the characteristic function $s'(\pi, \lambda)$ of the boundary value problem (1), (23) by (18).
8) Determine the coefficients $p(x)$, $q(x)$ from the sequences of zeros of the functions $s(\pi, \lambda)$ and $s'(\lambda, \pi)$ by a well-known procedure (see [7]).

5. CONCLUSION
The paper investigates the problem of reconstructing the diffusion equation (which is a generalization of the Sturm-Liouville equation) with nonseparated boundary conditions, one of which depends quadratically on the spectral parameter. A pair of dissimilar boundary value problems is considered (boundary value problems are called similar if their characteristic functions differ by a constant). A uniqueness theorem for recovering the coefficients of the diffusion equation and boundary conditions from spectral data is proved. In addition, using the proof of the uniqueness theorem, an algorithm for solving the inverse problem is compiled. The obtained results can be used to solve various classes of inverse problems of spectral analysis for differential operators. Note that the research can be continued to recover boundary value problems with more general boundary conditions.

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THE ROLE OF AIR TRANSPORT IN INTERNATIONAL TRADE AND ITS IMPORTANCE IN THE DEVELOPMENT OF THE AGRICULTURAL SECTOR

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ABSTRACT

The basis of economic growth in modern global economic development is the transport, especially, air transport. Air transport eliminates political and economic limit problems in strengthening international economic relations. The economically and socially beneficial air transport industry creates potential opportunities for economic growth by coordinating national economies. The influence of air transport on the development of world trade is an indisputable fact that leads to the prosperity of agriculture and the development of inaccessible territories. The role of agriculture in world trade. Impact of the pandemic on agriculture.
Keywords: *air transport, transport industry, economic growth, air transport in agriculture, agriculture in world trade*

1. INTRODUCTION

When analyzing the national economy of a country, first of all, its macroeconomic indicators are considered. Only then can we determine that these indicators are formed depending on the economic policy of the state, political and economic processes in the world market, especially the factors affecting international trade. Economic growth is one of these important indicators, as well as one of the main goals of the country's economy. An economically and socially profitable air transport industry creates the potential for economic growth through the coordination of national economies. The influence of air transport on the development of world trade is an indisputable fact leading to the prosperity of agriculture and the development of hard-to-reach territories. The role of agriculture in world trade is both the main source of food and agricultural raw materials in the world. It is designed to meet the growing needs of the population for food, and the needs of industry for raw materials. Food and its production, distribution, exchange, and consumption are an integral part of the functioning of the world system and have a special place in the world economy and politics. Food is directly related to people's livelihoods, its scarcity is perceived as a disaster. The food market determines the state of the economy and the social stability of society, therefore its development is controlled in all countries. Today, the world's agriculture employs over 1 billion economically active population. World agriculture accounts for about 5% of the world's products. The impact of the pandemic on agriculture has become a clear example of the need to innovate in the agricultural industry. Air transport can be counted as one of the types of innovations in agriculture. Aircraft have had and continue to influence agriculture. The role of aircraft in agriculture is irreplaceable, whether it be in sowing fields, disinfection, as well as in irrigation, this is a small of the listed benefits of aircraft in agriculture. Airplanes have contributed to the development of inaccessible landscapes, thereby alleviating the burden of farmers and benefiting the whole world, because the growth of agriculture leads to the growth of the economy as a whole.

2. THE AIR TRANSPORT IN THE INTERNATIONAL ECONOMIC RELATIONS

Crossing the borders of the national economy, international economic relations, internationalization, integration of production, exchange of specialists, creation of conditions for import and export of factors of production and goods, in short, open and free economy are considered important factors leading to economic growth. It is theoretically based on the theory of comparative advantage of the English economist David Ricardo. The theory deals with the advantages of the international division of labor and specialization in the example of two countries. There is also a trade link between the UK, which specializes in better clothing, and Portugal, which produces cheaper wine. International trade, which is beneficial to the world economy and national economies and has a direct impact on economic growth, is also highly dependent on transport. The development and improvement of transport contribute to international economic development, diversification of international economic relations, and increased integration. Air transport differs from other modes of transport due to its impact on international trade relations, integration opportunities, and the development of interstate economic relations. This difference depends on the speed, elasticity, reliability, safety, etc. of the mode of transport. is to have the main distinguishing features such as. Air transport is the only means of transportation for geographically, politically, and economically limited areas, for high-value products, and for people who want to travel long distances in less time.

2.1. The role of air transport in the economy of Republic of Azerbaijan

Air transport also plays an important role in the economy of the Republic of Azerbaijan. Diagram No. 1 below shows the revenues of the Republic of Azerbaijan from transportation in 2018 by modes of transport. Revenues from transportation in the general transport sector of the country amounted to 6,231.9 million manats (about 3,665.8 million US dollars). 33% of these revenues or 2,066.9 million manats (about $ 1,215.8 million) are related to air transport. Air transport performance is leading compared to other modes of transport, except for pipeline transport.
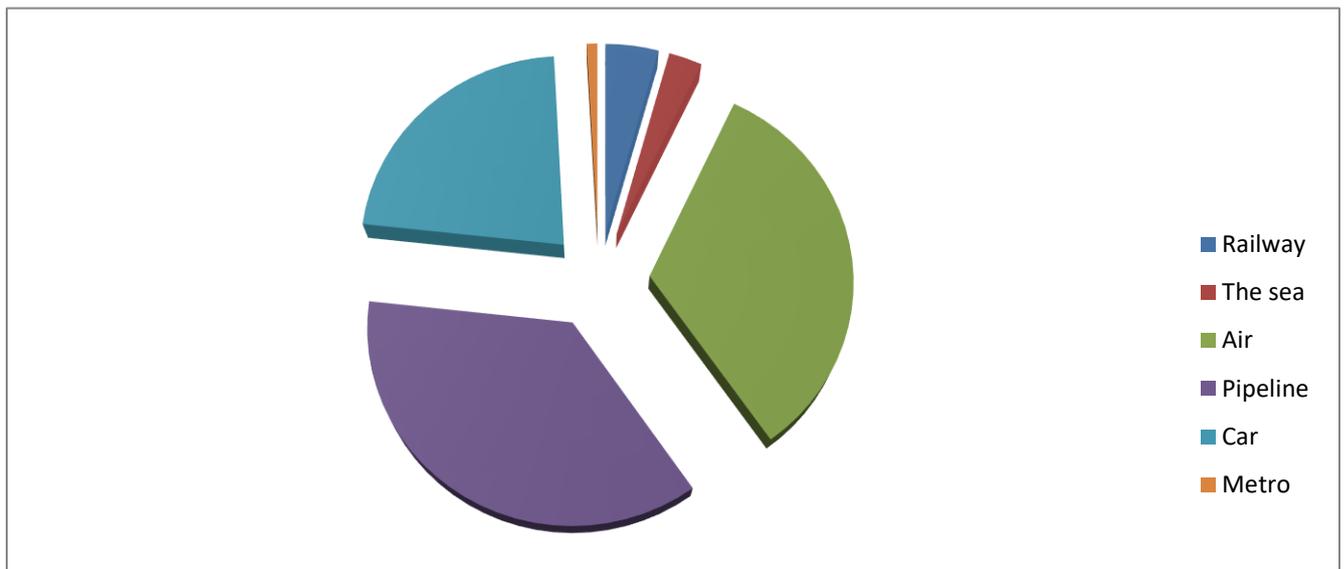
Figure 1: Revenues from transportation in the transport sector (in thousands of manats)

2.2."ASAN Visa"

Like other countries, the Republic of Azerbaijan pays special attention to economic growth. To achieve economic growth, the state has implemented several measures and projects in the field of air transport.

These measures and projects include:
- Strategic Roadmap for the development of logistics and trade in the Republic of Azerbaijan - approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016, No. 1138. The decree assesses the participation of the private sector in the work to be done in the field of airlines, the improvement of airport infrastructure, the establishment of a low-cost airline, etc.
- Strategic targets for airlines such as the "ASAN Visa" system - this system was established by the Decree of the President of the Republic of Azerbaijan No. 923 of June 1, 2016 "On simplification of the procedure for issuing electronic visas and establishment of" ASAN Visa "system." Currently, foreigners and stateless persons from 95 countries' e-visas are issued at airports. It is possible to get an accelerated visa within 3 hours through the "Easy Visa" system.

Construction of a new terminal at the Haydar Aliyev International Airport began in 2011 and a new airport complex was commissioned in 2014. There are potential opportunities to increase international freight and passenger traffic. As a result of this work, international passenger and international cargo transportation by air have developed over the years (Figure 2). Thus, in 2018, 1,785,000 international passengers and 206,000 tons of international cargo were transported. The indicators of international passenger and international cargo transportation by years are as follows:
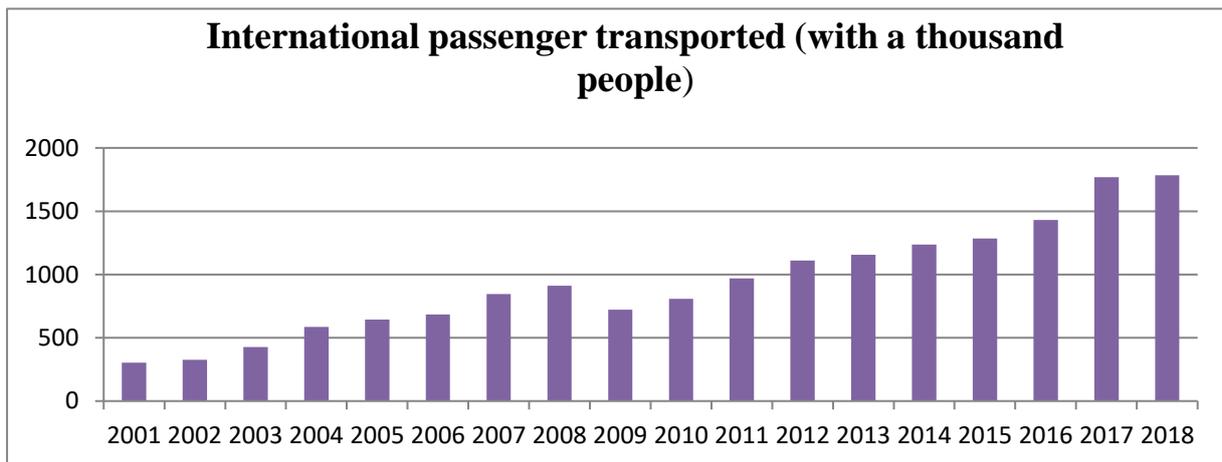
Figure 2: International passengers transported (thousands of people)
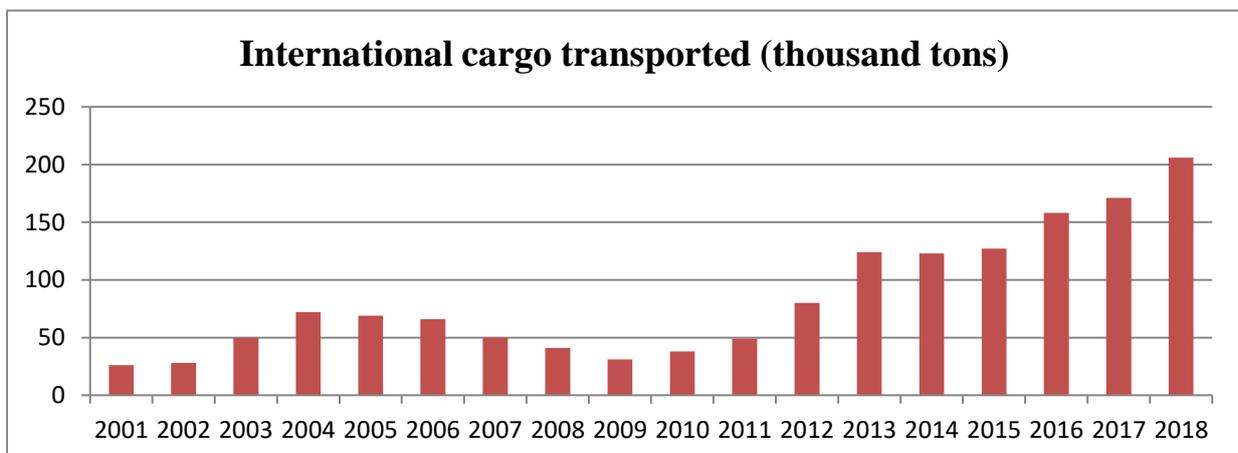
Figure 3: International cargo transported (thousands of tons)

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Aviation is one of the most important industries in the modern world economy. Due to its economic and social impact, this industry is showing significant positive results in the rapidly growing transport network and the global economy. According to the Air Transport Action Group, a non-profit organization of which the World Bank and international aviation organizations are members, the share of the aviation industry in GDP, which has fluctuated around $ 75-80 trillion in the world economy over the past five years, is about $ 2.7 trillion, or 3.4-3.6% (Figure 4). According to the report, more than 60 million jobs are currently created in the global aviation industry. Thus, in terms of economic benefits, economic effects can be grouped as direct, indirect, and forced effects.

Aviation industry ($ 2.7 trillion)
Share in GDP ($ 75-80 trillion)
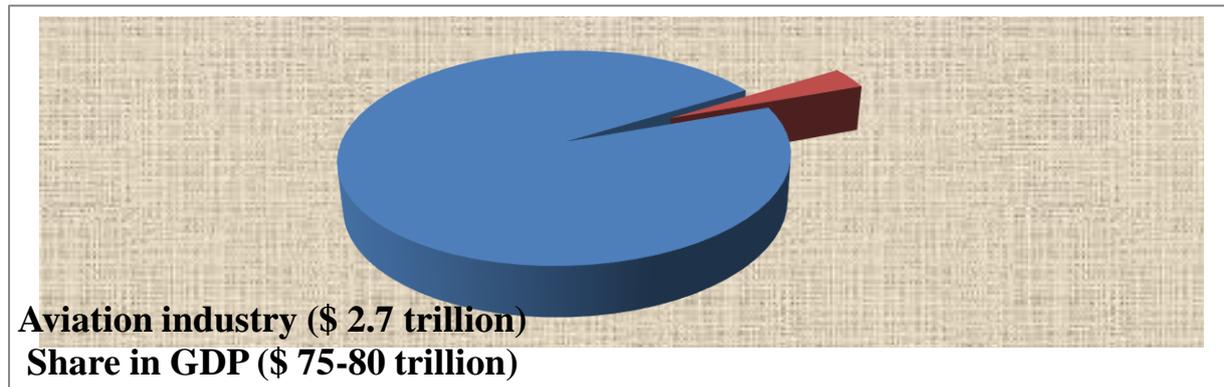
Figure 4: Aviation industry ($ 2.7 trillion); Share in GDP ($ 75-80 trillion)

Direct impact means that airports, cargo, ground services, etc. are involved in the transportation of goods and passengers by air. areas of economic activity. In figures, the world spends an average of 4 billion a year. passengers and about 62 million tons of cargo. 10.2 million people are involved in these services. In terms of economic value, the direct impact on world GDP is $ 704.4 billion, or about 0.88%.

2.3. Air transport in the tourism
Air transport also plays an important role in the tourism industry, which has become one of the leading economic sectors in modern times and is an important area in terms of economic growth. Air transport in this area accounted for 897 billion US dollars or about 1.12% of GDP. More than half of passenger traffic for tourism purposes is carried by air. The second place in passenger transportation is road transport, the other places are water and railway transport. Based on the above information, it can be noted that the benefits of air transport to GDP, economic growth, employment, and development of the world economy are significant. Unlike other modes of transport, air transport depends on the level of development of international economic relations, political and economic policies of countries, trade openness. Air transport also plays an important role in the development of economic relations between countries. Given this, the development of air transport has always been a priority for all countries. Because air transport is the most important mode of transport leading to economic growth.

3. AIR TRANSPORT ROLE IN THE DEVELOPMENT OF THE AGRICULTURAL SECTOR
The role of air transport in economic growth is undoubtedly indisputable, as evidenced by their role in the agricultural sector. Growth rates in the agricultural sector affect economic growth in general. Air transport plays a significant role in the development and growth of modern agriculture. Today, in agriculture, air transport is not a luxury, and therefore widespread introduction and use of agricultural aircraft and helicopters. They are mainly used for spraying liquid chemicals that contribute to control pests, weeds, diseases of crops and help farmers to

maximize crop yields. Agricultural aircraft are used for insecticides and fungicides and are also used for planting fields, fertilizing crops, and even irrigating areas. Modern agriculture uses advanced aerial technology and global positioning systems (GPS) and geographic information data (GIS) to help aerial applicators deliver a product with incredible accuracy, minimizing product drift to surrounding areas. As agricultural aircraft can handle large areas of it. mainly used in open fields. Recently, UAVs have been used for small croplands. The air tractor, which is one of the leading manufacturers of specialized aircraft for agriculture, whose aircraft can operate in hard-to-reach positions.

3.1. Agriculture in the modern world economy

Agriculture is one of the most important structures in the modern world economy, which ensures the satisfaction of the population in nutrition and industrial raw materials. Global agricultural exports have more than tripled in value and doubled in value since about 1995 to exceed $ 1.8 trillion in 2018.
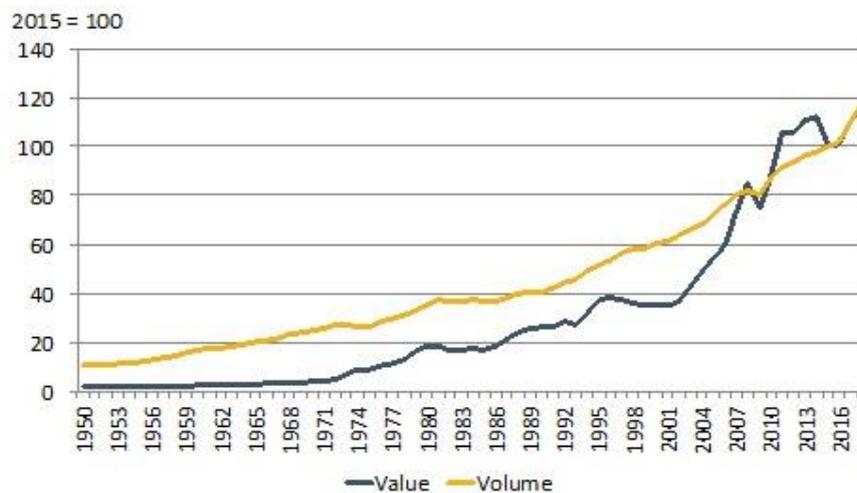
Figure 5: Global agricultural 1995 to exceed $ 1.8 trillion in 2018

3.2. Food crises and the pandemic

While total trade fell sharply in the first half of 2020, agricultural and food exports increased 2.5% in the first quarter compared to the same period in 2019, with further increases in March and April. But the crisis has seen upward pressure on food prices and, consequently, on producer incomes. Besides, global food supplies and production levels for widely consumed staple foods such as rice, corn, wheat are at an all-time high. for the impact of the pandemic on jobs and productivity has increased the number of hungry people in the world. The State of Agricultural Commodity Markets 2020 (SOCO 2020) argues that global trade and well-functioning markets are at the heart of the development process, as they can stimulate inclusive economic growth and sustainable development, and increase resilience to shocks. "We need to rely on markets as an integral part of the global food system. This is all the more important in the face of serious shocks, whether caused by COVID-19, locust outbreaks, or climate change, "wrote the FAO Director-General. Qu Dongyu in the introduction to the report. According to Dr. Glauber's forecasts, the WTO predicts the impact of COVID-19 on global trade in 2020 under three recovery scenarios, namely:

- Agricultural trade-in value terms in 2020 will fall 6.5% in a V-shaped recovery, 11.2% in a U-shaped recovery, and 12.7% in an L-shaped recovery.
- In 2020, the underlying value of processed food trade is projected to fall 7.4% in a V-shaped recovery, 12.6% in a U-shaped recovery, and 13.4% in an L-shaped recovery.

The food crises of past years have made the world more prepared for today. Chart 5 shows that in 2019, global stock-to-consumption ratios for staple foods were much higher than in 2008, under tough conditions for these foods. Stocks of only rice and wheat in China were enough for 13 months for domestic consumption.
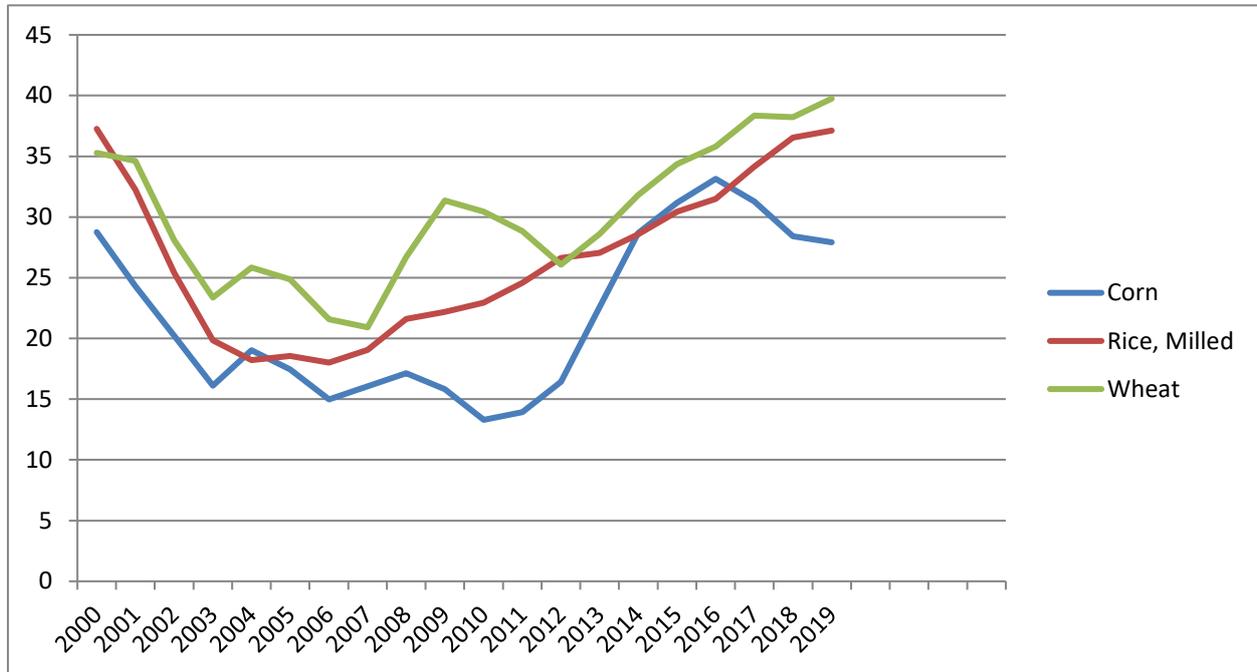
Figure 6: World stock-to-use ratio of select food commodities (Percentage)

Given these facts, it can be argued that food supplies cannot be called a strategy to be followed at present; instead, one of the most significant measures to tackle food insecurity is keeping open channels for international trade (International Food Policy Research Institute, 2020). Food security requires a transition to a new type of agriculture. There is increasing attention from international organizations and national governments for the transition to precision farming. Precision farming includes precision farming and precision livestock farming. Mainly air transport is used in Precision farming. In addition to air transport, the latest technologies are also used. Precision farming elements can be represented in diagram 6. These elements are used and will be used in the future.

Figure following on the next page

determination of field boundaries using a self-propelled tracked ferry
remote sounding (aerial or satellite photography)
parallel driving systems
local sampling in coordinate system
mapping of soil conductivity
yield monitoring
harvest quality monitoring
Mapping and yield planning
monitoring of the phytosanitary state of crops
differentiated technologies
machine management
robotics
farm management

Figure 7: Precision farming

Analysis of global trends in the development of agricultural production is proof that the Agro-Industrial Complex in recent years has been based on a wider application of information and telecommunication technologies, electronic automated systems, as well as air transport.

4. CONCLUSION

Taking into account these facts, we can say that air transport has made and continues to contribute to the development of the agricultural sector, which in turn leads to economic growth. Today, air transport provides international connections, thereby making the concept of a "global village" real, connecting more than 220 countries with regular flights. More than 36,000 airport pairs operate non-stop. World Bank studies have shown that 80% of cities in the world, large and small, can be communicated through a maximum of two transfer points. It is clear that the aviation aspects and interdependencies of sustainable development in agriculture are neither intuitive nor easy to understand or manage effectively. As well as the problems of agricultural development facing aviation itself, it is not limited to the harmful effects on the environment, which define the traditional territory of aviation "environmental" interests. Collectively, aviation may need to move to a "sustainable development platform" to offer a well-founded case to maintain its license to operate and develop sustainably in agriculture. It is imperative and imperative to seize every opportunity to enhance the focus on aviation's aggregate contribution to overall sustainable development goals Balanced consideration of economic, social, and environmental interests and concerns in both public and individual decision making. Overall, aviation can play a useful role in sustainable development.

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"QUALITY - AS THE MAIN RESULT OF A CONTINUOUS EDUCATIONAL PROCESS"

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ABSTRACT

In the modern world, in a tough competitive environment, quality factor is of more importance. The process of quality management should have a finished look only after achieving high results in the field of quality. This article has conducted a study on quality management in an educational institution, on identifying tools that influence the achievement of quality indicators of the main directions of an enterprise management system approach. A system of factors influencing product quality has been developed in four directions: quality planning, quality assurance, quality control, quality improvement. In order to determine the effectiveness of the formed quality management system of an educational institution, the main components are proposed that are combined into the following groups: quality of the planning, analysis and control system; the quality of the organization of the educational process; the quality of the process management ; the quality of the final product and the positioning of the institution.The optimal management styles of higher education institutions are analyzed and justified. At the same time, world-class authors' development was used in the field of analysis of the quality of management processes. The author's definitions were given to consumers and the result - the end product of the educational process. The achieved results of the research can be used by higher institutions in the course of determining the main directions of the organization's quality management process.
Keywords: quality, quality management, process efficiency, quality management, complex indicator

1. INTRODUCTION

The first researcher of quality is considered the Greek philosopher Aristotle. Back in the IV century BC in his work "Metaphysics", he defined the quality as follows: "quality, on one hand, refers to the species difference of an entity; for example, a person is a certain qualitatively defined animal, because this animal is two-legged, and the horse is four-legged; and the circle is a certain qualitatively defined figure, for this figure is without corners, so the quality is the distinctive aspect of the essence"[1]. Quality is a complex category that can be viewed from different positions such as philosophical, social, technical, legal, economic [2](see pic. 1.).

2. METHOD

Using the methods of observation, grouping, induction, deduction and classification, a system of factors influencing product quality in different directions was analyzed and developed.

3. THEORY AND ANALYSIS

One of the pressing issues of modern production process is product quality management. The study of quality issues and its impact on consumer demand all times were in the field of view

of scientists. The history of the development of research in the field of quality in the times of Soviet Russia was accounted for the 20-30-th years of the last century. In 1921, the Central Labor Institute was created, headed by A. K. Gastev. The works of A. K. Gastev still have not lost their scientific and practical significance, and his book How to Work, being an introduction to science of the system of work organization, is of particular interest from the point of view of developing the theory and practice of quality management in Russia [3]. A significant contribution to the formation and development of the theory and practice of quality management was made by such domestic scientists as G. G. Azgaldov [4], O.K.Antonov, A.V.Glichyov[6], B.V.Gnedenko, K.I.Klimenko, M.I.Kruglov[7], D.S.Lvov, V.I.Sedov, V.I.Siskov, A.I.Subetto[8], V.P.Panov, D.L.Tomashevich, Ya.B.Shor[9], L.Ya.Shukhgalter and others [10]. One of the outstanding Russian scientists who made a great contribution to the development of the theory and practice of quality management both in Russia and abroad was Vasily Vasilyevich Boytsov. He formulated the theoretical and methodological foundations of quality management of all elements of the life cycle of technical objects. V.Boytsov was at the origin of the creation of a modern domestic state standardization system, the reference base of the country, which occupies an important place in solving issues of production organization and improving product quality. From 1963 to 1984 he headed the State Standard of the USSR. His scientific developments were reflected in numerous publications ("Problems of automation and mechanization of small-scale production", "Complex normalization of elements of the production process", "Engineering methods for quality assurance in mechanical engineering" and others). In the Soviet Union, a schematic diagram of the mechanism for managing the quality of products was developed at AUSRIS (All-Union Scientific Research Institute of Standardization) Glicev and M.P. Babin in the second half of the 1960s [11]. Simultaneously with the concept of the mechanism of product quality control in the 1960s, a model was introduced on the pages of the Russian translation of a brochure by Dutch experts J. Ettinger, J. Sittig, later called the "quality loop". Nowadays, other approaches to the system quality issues solution proposed by quality specialists in different years, currently referred to as "patriarchs" or "mentors" in quality - J. Juran[12]., A. Feigenbaum[13], Chris Felix Brandon, Robert I. Cole, Tito Conti, Jens J. Dulgaard, Edward Fuchs, Soo Mi Pak Dalgaard, Yoshio Kondo, Gregory Watson, William Edwards Deming[14]., Schuhart Walter Andrew[15]., etc. Currently, the concept of "quality" is a complex indicator. The quality management process has become an integrated systems approach. Today, the first step towards the integration of quality management systems into integrated enterprise management systems has become the formalization of the body of knowledge in the field of quality and the complex of methods and means of its provision. In the future, it is expected to use TQM models and ISO 9000: 2000 standards as the basis for the creation of integrated management systems, taking into account the specific features of a particular enterprise. But for the organization of effective quality management, it is necessary to follow four basic procedures:
1) quality planning;
2) quality assurance;
3) quality control;
4) quality improvement.

Quality planning is an action involving the definition of the necessary characteristics of the object and the establishment of their target values. Quality management calls such actions the setting of quality objectives. Also, quality planning includes defining the processes and resources needed to achieve goals. Quality assurance is a systematic (regular) activity, through which you can fulfill the established requirements. It includes works on production, management, material support, maintenance, etc. Quality control is an activity to assess the compliance of a control object with the established requirements.

Assessment activities may include measurements, tests, observations, monitoring, verification, calibration, and other measures that result in a comparison of the values of the observed characteristics with the specified ones. Quality improvement is the implementation of actions by which you can increase the ability of the organization to meet the requirements for the object. Under the notion of "object", quality management considers products, processes, a management system and the organization as a whole [16]. In order to determine the effectiveness of the formed quality management system, it is possible to combine the main components into the following groups (see pic.2):

1) The quality of the system of planning, analysis and control;
2) The quality of the organization of the educational process
3) The quality of process management;
4) The quality of the final product and the positioning of the university

Let's consider and analyze in detail the quality management of each of the selected groups. The quality of the planning system depends on the following factors: the reliability of the initial information, the time spent on planning, the qualifications and skills of the workers. What is the weak link in this top three? Why is it considered that quality planning in companies is lame? Maybe the problem is in the principles of planning, and maybe in the management of the planning process itself. According to my numerous observations, often the management of the enterprise sees a problem in the workers involved in planning, i.e. question the qualifications, abilities and competencies of the performers themselves. I disagree with this, for the simple reason that not all performers can be unqualified; this calls into question the quality of the work of the personnel management service. Sometimes executors do not have specific final source data and are limited by the time for processing this information. The reason for improper planning is incorrect formulation of tasks, poor quality management of the planning process, and lack of specificity in decision making. Analyzing the effectiveness of processes is even harder to assess. Why the results of the analysis may be poor quality? Because the data being analyzed is obsolete, not true, the analysis is belated. The collection of necessary information is often lost in the department institute segment; it is possible that it is falsified in this final point. But the question is, do we need such an analysis? In order for the analysis to be effective it is necessary to observe the following principles: transparency, simplicity of perception, target character, necessity. Observance of these minimum necessary principles will give us the opportunity to get a qualitative and capacious analysis, without excesses. Qualitative analysis should give a truthful result, identify the causes of deviations, and contribute to the elimination of comments. What about the quality of control in higher educational institutions? Often, the leadership of a higher education institution, being overly focused on control, even forget about the importance of continuity of the educational process. Total control, and unsystematic – is the "calling card" of Russian higher educational institutions. The observation of the author shows that annually the number of controlling and controlled indicators in educational institutions is growing exponentially. In this regard, the existing management approach in higher educational institutions expresses the well-known law of the dialectic of the transition of quantity to quality. Thinking that the preparation of a larger number of documents, maximum request for requirements will lead to a qualitative result in the field of control, in fact, in the pursuit of quantity, the company does not receive the required minimum tasks. Hence the opposite effect: a formal approach to the performance of tasks. The periodic appearance of new forms of reporting and analysis that are not properly coordinated, inconsistent with the usual requirements for documenting management activities and organizing work with documents that contradict economic concepts and the existing regulations at the enterprise, leads to a complete dampening of the work of the performers. It turns out that the company is not able to systematize these requirements and actually carry out quality control of the implementation of tasks and

processes. The second section covers the issue of the quality of educational process. Here we must take into account at least three quality components: the level of preparation of work programs of disciplines, the quality of staffing the educational process, the quality of the organization of educational process. The first of these components relates to the formal factor, and the quality control of this document is carried out by incompetent workers in this field. The quality of the preparation of these documents greatly influences the final result of the educational process. Own departments having qualified personnel in the field of checking work programs could have a significant role to play in solving this issue. The quality check of the work programs of the disciplines should be carried out by these departments before the formation of the educational process. At present time, in many higher educational institutions, the departments themselves have to understand, analyze, and identify shortcomings of work programs, as well as determine the feasibility of teaching a particular discipline in courses. Such a superficial assessment often goes against the goal of institution. Therefore, the quality of preparation of work programs of disciplines must be at the proper level. And this question is one of the most important and an indicator of the quality of the educational process. The quality of staffing of the educational process, the question of an internal nature depends on the management skills of the staff of the institution itself. The factors affecting quality are: level of education, practical work experience, oratorical skills, words and training of an employee, etc. The quality of staffing a higher education institution depends not only on the qualifications of the potential applicant, but also on the internal factors and employee loyalty, stress resistance etc. However, it is not possible to verify these characteristics of the applicant, since the process of admission to work takes place by voting on the academic councils of the institute and the university consistently. In order not to be mistaken with the choice of the school security service, it is necessary to collect information about each applicant. Although everything is already known about one's own employees who have been working in the institution for more than one year, it's not easy to gather information about external contestants. The quality of work of the labor collective cannot be assessed in the conditions of mistrust of them. Competitive struggle for power and efforts to increase its significance - its "I", leads to ignoring alternative views, to totalitarianism, the authoritarian style of managing the organization. Opinions of middle management, top managers of managed societies can make a significant contribution to improving the quality of various processes. A clear distribution of functions and powers, compliance with regulations, the immutability of the rules of behavior - these are the main components of ensuring high-quality work of labor resources. Currently, in many road-building companies there is no record of such parameters. Providing an enterprise with financial resources is one of the significant tasks. The company must have a stock of financial resources, both own and borrowed. In the conditions of "expensive money" it is inappropriate to keep large balances on current accounts, money must work. The stock of open credit lines is a pledge of success; is a job ahead of time and a competitive advantage of a company over its competitors. Due to this reserve, you can fearlessly participate in various auctions and contests; make a worthy competition to opponents. Another issue is the price of borrowing. Undoubtedly, any company wants to get loans and loans at the lowest possible rate. However, this is not always the case. Experience shows that interest rates on attracted funds depend on the market situation: the prices of money in the interbank market, in the deposit market, the key rate of the central bank, the importance of the borrower for the credit institution, the company's reputation in the market, personal relations of the company management of the borrower and the lender, etc. The current uncertainty in the economic policy of the state leaves a negative imprint in the relations between borrowers and creditors and has already led to the freezing of the lending process, lengthening the time for consideration of applications, to an increase in interest rates to 19% due to risk premiums. These and other factors lead to a decrease in the quality of financial support of the enterprise.

The quality of the organization of the educational process directly depends on the above factors: well-prepared work programs of disciplines, timely provision of resources, and high-quality organization of the educational process. Evaluation of the quality of the final result is given by the customer. Therefore, the fact of recognition of diplomas, and the recruitment of graduates of an educational institution by the customer can be considered as a sign of the quality organization of the educational process. The third section for a comprehensive quality assessment includes the group "quality of management of an educational institution". The most important component in this group is process management. In many higher educational organizations, an algorithm of business processes has been formed. However, it did not work at full capacity. The role of the Board of Trustees, as well as the President in the management of many educational institutions is minimal; in fact, these bodies do not perform their basic functions. Control by the Board of Trustees on various issues is a mechanism of success of an educational institution proven by international experience. Members of the Council need to attract qualified, interested people from enterprises of different industries. To improve the quality of the work of the Board of Trustees, the participation of independent directors is also necessary; this will give an additional impetus due to an alternative view on existing problems. The choice of a predominantly authoritarian management style by many Russian companies (other management styles: democratic (collegial) and liberal (permissive)) does not mean that this style has some negative sides. But at the same time, one should not forget that the head with this style is a supporter of centralized management, has sufficient power, rigidly dictates his will to the performers and most often addresses the needs of lower levels based on the concept that people are by nature lazy, avoid work and responsibility, and to make them work, you need to use coercion, control, and threat. He makes decisions alone, based on personal experience and intuition; directivity determines the functions of subordinates, preventing them from taking the initiative; strictly controls their actions, stops all criticism, and gives the performers a minimum of information; only he knows the actual state of affairs in the team and prospects for further development. Formally, such a manager relies on the established management hierarchy, the current management structure and the system of rights and obligations of employees. However, an authoritarian power that does not know compassion and compromise is not necessarily characteristic of a strong personality. More often, this leadership style is preferred by weak and primitive bosses, who are striving to become "indispensable" [17]. With a liberal management style, a liberal leader should master the principle of delegation of authority, maintain good relations with informal leaders, be able to set tasks correctly and determine main areas of work, coordinate staff interaction to achieve common goals. The most dangerous test for a liberal management style is the emergence of conflict situations, a kind of battle of ambitions, the likelihood of which is very high in a team of gifted, extraordinary personalities. To improve the quality of management cannot be content with only one management style. It is necessary to obtain a synergistic effect from the use of the different possibilities of each management style using administrative, economic and socio-psychological methods. An employee who is not interested in his work will not stay long in the company. The loss of skilled experienced personnel who are still able to work and generate income for the company will, in time, adversely affect efficiency. This will be the result of poor-quality management of all processes of the enterprise. The last group of quality assessment includes the quality of the final product, the quality after-sales service, the quality of trusting relationships. The final product of an educational institution is a high-quality construction and installation work for the construction, repair and reconstruction of highways that satisfies the customer and consumers. We would call such a product a "product to meet consumer requirements of stakeholders'' (PMCRS). But at the same time, another characteristic feature of the PMCRS is the satisfaction of the personal needs of producers, through the material, moral, and other benefits created in the course of performing work and services.

The quality of after-sales service is manifested through the fulfillment of warranty obligations. The better the final PMCRS, the less the need for warranty work and post-warranty service.

The quality of trusting relationships is assessed between the enterprise and its employees, suppliers, customers, credit and financial organizations, and other counterparties. The tense situation in the team, creates an atmosphere of mistrust between managers and managed. Constant pressure, the search for "extreme", humiliation, underestimation, and sometimes frank insult to the feelings of subordinates - an erroneous management approach, the purpose of which is to increase the efficiency of the company as a whole. This can lead to the division of the team into groups, a decrease in productivity, work output and, ultimately, a drop in the quality of work, participation rates, and work discipline. A similar attitude towards suppliers of various goods and services is fraught with a decline in the company's reputation.

4. CONCLUSION

In conclusion, I will cite the words of E. Deming: "The problem is not quality improvement. Quality improvement is the solution to the problem." Companies need to analyze, identify, and find solutions to existing problems of the enterprise. He noted that "interfering with a stable process (i.e. making changes in response to("common causes") only worsens the system's performance." Two of the 14 key principles of E. Deming sound like this: "put an end to the dependence on mass control, give workers the opportunity to be proud of their work" [18]. Only in this way it is possible to achieve high-quality implementation of the stages of the production process.

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APPENDIX

Quality as a difficult category

From a philosophical position	A quality category means a significant certainty of an object, according to which it is different from another object. In turn, the certainty of the object is formed on the basis of individual properties or their combination. The property is understood as a way of manifestation of a certain aspect of the quality of an object in relation to other objects with which it can interact.
From social positions	The category of quality means the attitude of individual subjects and / or the whole of society to the object. At the same time, quality can be considered as a category depending on the level of culture, religious and demographic characteristics of individuals and society as a whole (for example, consumers' perception of fashion trends in clothing)
From technical positions	The quality category is determined by technical laws in the formation and manifestation of physical, electromechanical and other technical characteristics of objects of the same
On the legal positions	A quality category is defined as a set of object properties that meets the requirements set forth in regulatory documents
With the economic position	The quality category is considered as a result of satisfying needs

Picture 1: Quality as a difficult category
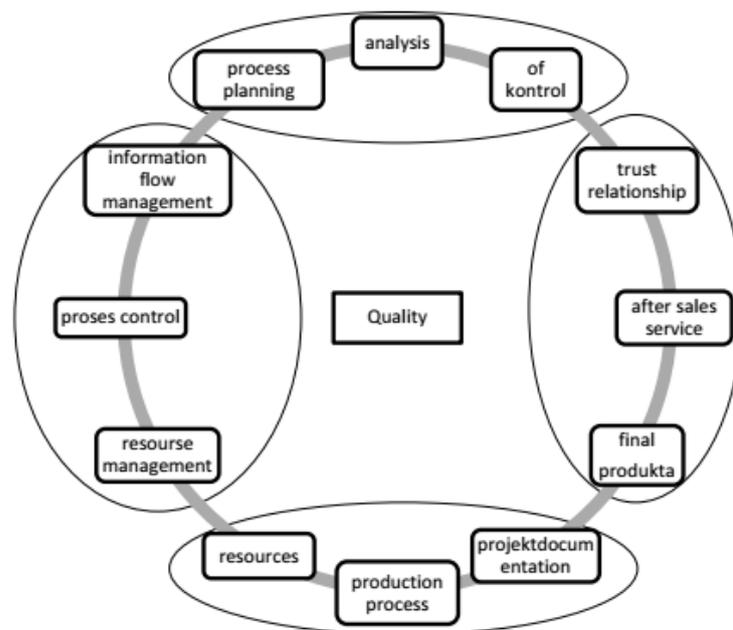
Picture 2: Majr quality assessment teams

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THE PROBLEMS OF FORECASTING OF THE SELECTION OF SOURCE OF FINANCING OF OIL AND GAS PROJECTS

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ABSTRACT

The oil and gas complex is the most important structural element of the economy, one of the key factors in overcoming crisis phenomena. Revenues of oil and gas companies form a significant part of the state budget, provide more than half of the country's export potential. The oil and gas complex is a capital-intensive industry requiring significant investments in both the exploration and production and refining sectors. In the exploration and production sector due to the depletion of the resource base of traditional hydrocarbon production areas, subsoil users are forced to develop more inaccessible deposits in the northern latitudes or on the shelfs of the seas, which is associated with an additional amount of capital investment. Firstly, at present, the oil and gas complex, which determines the development of the national economy, is faced with a number of problems, the main solution of which is the introduction of high-tech technologies, the development of innovative activities. Secondly, statistical data show that in terms of their level of innovative development, significantly behind the foreign one due to insufficient funding. At present, the main source of financing the innovative activity of oil and gas companies is their own and state funds, while in world practice the implementation of innovative activity is due to the developed financial support process based on the interaction of science, business and the state. Thirdly, in addition to their own funds, foreign oil and gas companies use external sources of financing.
Keywords: state, oil and gas sector, tax incentives

1. INTRODUCTION

The oil and gas market was extremely volatile and is characterized by a number of price shocks. Moreover, each period in which price shocks were observed requires its own interpretation. Market volatility can be explained by the presence of many factors, among which the main ones are the shock of supply and demand, as well as shocks in the financial markets, oil and gas revenues play a leading role in the formation of the national financial system, as it is a powerful source of new economic growth and stimulation of the financial platform for business development. However, along with budget financing, modern mechanisms to support the real sector of the economy require a more progressive method of financial support. In this regard, let us consider the existing practice of project financing of the real economy. The oil and gas complex is the most important structural element of the economy, one of the key factors in overcoming the crisis. The revenues of oil and gas companies form a significant part of the state budget and provide more than half of the country's export potential.

2. INVESTMENT PROJECTS IN THE OIL AND GAS SECTOR OF THE ECONOMY: TERMS OF IMPLEMENTATION AND A HIGH DEGREE OF RISK

The oil and gas business is significantly influenced by the conjuncture of the world oil market, which, in turn, is characterized by a high degree of instability and uncertainty due to situational crisis phenomena on a global scale. It should be noted that a significant drop in world oil prices worsens the profitability of Russian companies and forces them to look for other sources for financing and subsequent development of domestic oil refining capacities. The oil and gas complex is a capital-intensive industry requiring significant investments in both the exploration

and production and refining sectors. In the exploration and production sector, due to the depletion of the resource base of traditional regions for hydrocarbon production, subsoil users are forced to develop more difficult-to-reach deposits in the northern latitudes, or on the shelf of the seas, which is associated with an additional volume of capital investments. The volume and availability of financing for an investment project directly affects the development and successful implementation of the project. Investment projects in the oil and gas sector of the economy have long implementation periods and a high degree of risk; therefore, it is important to determine the most profitable sources of project financing and their rational combination. Thus, the problem of choosing a source of financing is relevant today for capital-intensive and capital-intensive industries. The aim of the study is to develop and substantiate a methodological approach to the assessment of investment projects, taking into account financing options in the oil and gas industry under conditions of uncertainty and risk. In accordance with the set goal, the following tasks were formulated:

- improving the methodological approach to the assessment of investment projects, taking into account financing options in conditions of uncertainty and risk;
- approbation of the developed methodological approach in the study of the effectiveness of the development of an oil field, depending on the choice of the source of funding;
- sensitivity analysis of project performance criteria to key parameters of funding sources.

The accumulated financial potential will make it possible to carry out the necessary capital investments. Intellectual potential will make it possible to most effectively use the knowledge and experience of workers in the oil and gas industry in the design and development of both oil and gas fields and unconventional sources of hydrocarbons, management experience - to plan the systematic development of the surveyed area. Small oil companies do not always have the ability to finance oil projects from their own resources. In addition, a feature of small oil companies is a high level of proceeds from the sale of raw materials, which makes it difficult to classify them as small or medium-sized businesses. Therefore, small oil companies in most cases cannot qualify for state support, which the state guarantees to small and medium-sized businesses. In this regard, the problem arises of attracting external resources and efficient allocation of financial resources. In order to consider the influence of the choice of various sources of financing on the final indicators of the effectiveness of the development of an oil field, the following options were selected: financing of the project at the expense of its own funds; debt financing, taking into account reinvestment; financing the project only by attracting borrowed capital. In world practice, the implementation of innovative activities, the creation and implementation of new technologies of oil and gas complex occur due to a developed process of financial support based on the interaction of science, business and the state. As a rule, the state finances not only targeted socially significant programs, but also by creating favorable competitive conditions in the form of indirect financing of innovative activities of enterprises stimulates them to increase research costs, increases their innovative activity.

3. ORGANIZATIONAL AND ECONOMIC MECHANISM FOR FINANCING COMPANIES IN THE OIL AND GAS INDUSTRY

The public sector, by participating in the financing of targeted projects, contributes to an increase in their innovative activity, diversification and the creation of a competitive environment through tax incentives. Therefore, in the interests of implementing strategic national priorities, measures are proposed to optimize the financing of innovative activities of NGP.

It is expected that venture financing through the creation of corporate funds, joint and state financing through tax incentives will allow the oil and gas complex to become the main consumer of innovations and increase the competitiveness of the industry in the world market:

- Revise methods of indirect financing, introduce tax incentives for organizations engaged in innovative activities in the production, processing and transportation of oil and gas, differentiation of tax depending on profitability.
- Creation and development of financing for innovative projects on the basis of a corporate venture fund.
- Creation of a competitive environment in the oil and gas complex, conditions allowing the development of natural minerals in the most efficient way; attracting external direct and venture investors.
- Create a corporate venture fund, defining its main parameters, potential sources of projects (internal and / or external), the role of the fund in the company.
- Increase co-financing; provision of innovative projects to third-party organizations; increased demand for external developments.
- Reducing the duration of the technological cycle; improving the efficiency of financial support for innovative activities of companies.

It is quite obvious that the key sources of financing for NGP companies are concentrated in a single organizational and economic mechanism: forecasting targeted budget financing, organizing the attraction of external borrowed sources and corporate management of investments, capital and profits. Taking into account the adaptation of this mechanism to the practice of the operation of the oil and gas complex, it is advisable to develop a strategy for the long-term selection of targeted sources of financing and prevention of external risk factors: negative inflationary processes, unfavorable political decisions, deterioration of monetary policy. However, the companies of the studied branch of the economy should pay the greatest attention to the assessment of internal factors: the adequacy of equity capital, break-even and profitability, the effectiveness of management decisions, including in terms of ongoing investment projects. Thus, the methodology for forecasting the socio-economic development of regions is based on a combination of three principles:

- coordination of prospective values of indicators that determine the economic development of both the country as a whole and its regions;
- taking into account the trends that have developed in retrospect in the dynamics of the regional structure of the country's economy, determined by changes in the sectoral structure of the regional economy;
- taking into account large investment projects accepted for implementation, which in the forecast period determine qualitative changes in the sectoral structure of the economy of individual regions and the regional structure of the country's economy as a whole.

The expected qualitative changes in the regional and sectoral structure of the economy in the future depend on the consequences of the implementation of large investment projects, which are forecasted for implementation in various sectors of the economy. Forecasting and planning the development of energy systems is impossible without long-term and reliable forecasting of the development of the economy and social sphere of states, regions and municipalities. The territorial infrastructure, the basis of which, along with the transport, is the fuel and energy complex, largely determines the success of the implementation of long-term regional programs and strategies. The effectiveness of decisions on the development of infrastructure and improving the energy security of the region is determined by the objectivity and validity of the information obtained from the forecasts. The problem of forecasting the development of individual economic complexes acquires significant difficulties in the context of global

economic and political instability, as well as the ongoing restructuring of individual industries and enterprises. The dynamics of development and structural shifts in the economic complexes of the regions are determined, on the one hand, by the general strategic directions of economic development. To substantiate forecasts for the development of regional energy, theoretical approaches, methods and models are required that correctly and fairly fully reflect the specificity of forecasting territorial economic systems. In addition, a reliable informational justification for the forecast is required, including programs of socio-economic development, investment programs for energy development, strategies for restructuring and modernizing energy-intensive industries.

4. CONCLUSION

Thus, as a result of a comparative analysis of the specifics of financing oil and gas projects, the following conclusions were drawn. First, at present, the oil and gas complex, which determines the development of the national economy, is faced with a number of problems, the main solution of which is the introduction of high-tech technologies, the development of innovative activities. Secondly, statistical data show that in terms of its level of innovative development, NGP lags significantly behind foreign ones due to insufficient funding. Currently, the main source of financing for innovative activities of companies in the oil and gas sector is their own and public funds, while in world practice, innovation is carried out through a developed process of financial support based on the interaction of science, business and the state. Third, foreign oil and gas companies, in addition to their own funds, also use external sources of financing.

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THE ROLE OF CLUSTERING IN INCREASING COMPETITIVENESS

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ABSTRACT

A cluster is a relatively fixed and stable collection of specialized enterprises that produce competitive products in the industry. In other words, clusters are systems of business entities operating in a similar sector, complementing each other and having communication capabilities in a particular geographical area. Within the cluster, there is competition between small and medium-sized businesses operating in a similar field. One of the main conditions for business entities and other participants to act at the same time is to gain a competitive advantage. At the same time, with the introduction of the system, the costs of business entities are reduced, marketing opportunities are expanded, productivity is increased, exports are increased, research and development capabilities are strengthened. This leads to the launch of new products, the establishment of new relationships, increased employment, regional development, and the improvement of infrastructure services. Geographically suitable area, abundance of natural resources, availability of scientific base, professional staff and developed infrastructure are important factors for the creation of industrial clusters. In order for industrial clusters to operate sustainably, reliably and productively, the state's cluster policy must be perfect and provided with working mechanisms. In this case, first of all, the state should develop a targeted cluster strategy and define specific approaches to clusters, their application models, goals and objectives, priority development directions. The most effective, competitive and perspective direction of small business development is its cooperation with large business through the formation of clusters. The development of a cluster network provides certain benefits to both government and business. Such benefits for the government include increasing the tax base, reducing dependence on individual business groups, increasing opportunities for economic diversification; for business, improvement of personnel infrastructure, creation of scientific and technical research infrastructure, reduction of costs, access to international markets and etc.
Keywords: *clusters, competitiveness, small and medium business, innovation activity, conditions of clustering*

1. INTRODUCTION

Clusters are the grouping of closely related industries in the region that serve to increase the material well-being of the population through the export of goods and services. The fact that clusters cover all links in the supply chain, as well as the integration of infrastructure, distinguishes them from traditional industries. Clusters concentrated in areas with high flows of goods and services create value for the country's economy. Clusters are formed by the fact that enterprises with certain similarities, trade and production relations operate in the same geographical area. It is not appropriate to limit clusters to companies within them. They include organizations, institutions and structures that help create economic value. The interaction of producers, consumers and competitors in a given area increases economic activity and specialization. Competition in a certain area increases the need for new technology, which leads to the formation of industrial clusters. Industrial clusters are formed as a result of the interaction of factors that are important for increasing the country's competitiveness. Geographical boundaries and competition are key factors in the concept of cluster. Industrial clusters have

emerged as a result of the development of competition and mutual relations. Under the influence of the three effects of the cluster (scale, coverage, synergism), they can increase labor productivity and reduce the cost of production. The main positive effect of the cluster is the synergistic effect, which occurs during the overall standardization of the product. In the last 20-30 years, a group of developing countries with strong industrial potential in the world economy has emerged. The economic potential of countries such as China, India, Brazil, Russia, Mexico, Indonesia and Turkey is constantly growing due to the rapid development and innovation of modern industries. China, the world's leader in the pace of accumulating strong economic potential, ranks second in the world economy after the United States due to the complex, rapid development of industries. The rapid development of industries is expected to make China a major player in the world economy from 2025 through clustering. One of the key points in this process is to give preference to more efficient use of industrial clusters in increasing industrial potential, organizing the production of highly competitive export products.

2. THE IMPACT OF CLUSTERS ON INCREASING THE COMPETITIVENESS OF THE NATIONAL ECONOMY

The creation of industrial clusters is important in the formation and development of the competitiveness of the economy. The main goal here is to support the development of industry, to ensure the coordination of the necessary infrastructure with other areas, to create the necessary financial resources. The main obstacles to the development of industrial clusters are incomplete infrastructure, weak relations with other participants, lack of human resources, lack of marketing research. In modern period, industrial clusters create a more favorable innovation environment for industry. Competition and cooperation increase innovation activity. The main factors affecting the competitiveness and innovation activity of the national economy are: faster access to information on innovations; constant monitoring of innovations; availability of qualified personnel exchange between firms; formation of a regional value chain; increase in product range; meeting domestic demand; efficient use of available resources. The deepening of the international division of labor, the expansion of exchanges, in other words, economic globalization is of great importance for the functioning of the national economy in all countries of the world. Most developing countries, countries with economies in transition, have partially renounced patronage and comprehensive state support for the economy. Clusters have special features such as strong relations between its participants, geographical concentration, information network, precise specialization within the cluster, tendency to innovation. It can be argued that a typical cluster includes both small and medium-sized companies. The fact that modern industrial clusters occupy a special place in the economy is a socio-economic process. This process is closely linked with the development of new technologies, especially in such industries as metallurgy, mechanical engineering, instrument making, energy. The process of industrialization changes society's vision by stimulating investment and economic development. In recent years, as in all sectors of the Azerbaijani economy, great progress has been made in the development of industry, and the volume of industrial production has increased significantly. In addition, numerous projects have been implemented to create competitive modern industries, improve the infrastructure of industry, create new jobs, and the country's industry has entered a new stage of development. The creation of industrial parks that will have a significant impact on the development of industry in Azerbaijan is also one of the main issues in the focus of our statehood today. To stimulate the development of technology parks, the country's tax legislation provides for benefits, income, property and land taxes for individuals and legal entities working in industrial and technology parks, as well as park management organizations and operators. Various technological parks are being created in connection with the development of industrial clusters. Here, the state also takes on a great responsibility.

Because the creation of technological parks, the construction of infrastructure, the construction of roads are issues at the expense of the state. All this is done at the expense of the state budget for the efficient operation of the private sector, which is the basis of industrial clusters.

3. MODERN EXPERIENCE IN FORMATION OF INDUSTRIAL CLUSTERS

The concept of long-term socio-economic development of the country envisages the formation of a network of differentiated production clusters, high-tech innovation clusters that realize the competitive potential of individual industries and territories. It is important to consider a number of issues when forming a cluster in small business, which is an important sector of the economy. These include the propensity of most small enterprises to innovate, the commercial orientation of their innovation activity, the high sensitivity of small enterprises to interaction, the high level of competition in the small business environment, the existing infrastructure and regulatory framework of small business. In the network of cooperation with large businesses, small business organizations act as part of the production structures of large organizations. This form of cooperation allows large businesses to enter new sales markets, gather important information about advanced new technologies, and increase business activity on other similar issues. Countries that develop their economies on the basis of a cluster strategy gain an economic advantage if there is a concentration of similar industries (clusters) and enterprises in these countries. This is due to the interaction of enterprises and organizations in the field and area within the clusters. Small enterprises operating within the cluster network manage to solve a number of problems. Such issues include the spread of innovation, the simplification of the organization of production, the ability to compete in new technological decisions. It is clear from the above that the cluster helps to complement the activities of its participants, creates a competitive advantage in the industry, stimulates business activity. Research shows that cluster theory is based on the assumption that the efficiency of the "scale of production" affects enterprises, their regional interaction. In a cluster network, organizations are not united on the basis of common property and management system. Clustering is a geographical concentration of enterprises, which reflects the resources of the region, production processes, and certain interactions in this direction. Clusters are divided into 3 parts. The first type of clusters leads to the emergence of components or services that reflect the synergistic efficiency of specialized raw material suppliers in this collaboration. Cluster marketing, finance, etc. leads to an increase in demand for such specialized services. Such clusters are usually distributed in proportion to the distribution of the population in the region. They can include local health care, utilities, retail, construction services, production of construction materials and etc. The second type of clusters consists mainly of resource-dependent industries located in areas with the necessary natural resources. Examples are clusters of extractive industries. The third type of clusters is created to increase the competitiveness of such industries. Such clusters are based on industries that combine according to professional types. These clusters are not dependent on natural resources. Because in some cases they sell their products and services in other countries. They are created to increase the competitiveness of industries. The main conditions for clustering include: the creation of clusters by administrative decisions in a market economy; formation of clusters with state support measures at the regional level, targeted nature of support for clustering, focus on areas with higher competitive potential; constant monitoring of cluster policy priorities, availability of reliable tools for their selection; defining the principles and mechanisms of cluster support. Clusters are more innovative for the following reasons: cluster participants are able to respond more quickly to consumer needs; consumers and suppliers are included in the innovation process; as a result of intra-enterprise cooperation, expenditures on research and development are reduced; Firms in the cluster are under intense competitive pressure. The cluster implies high innovation activity. Small entrepreneurs coming together in a cluster network have the opportunity to increase their competitiveness in other areas.

These areas include: achieving higher economic growth compared to competitors by focusing on high innovation projects; increase productivity by taking advantage of working in the same geographical area; stimulating the creation of new directions of development. The main obstacles to the development of small business in the country on the basis of the cluster model can include the follows: the lack of an effective methodological base for the implementation of cluster technology; lack of sufficient information of business representatives, executive authorities on the application of clustering; lack of specialists in the field of cluster organization; perspectives of cluster activity; non-involvement of cluster industries in innovation processes. As can be seen from the above characteristics of the cluster, the task of clustering is to strengthen other forms of capital movement at various levels, especially at the regional level, and to develop effective cooperation between business, government and other participants in innovation activities, both within the cluster and between cluster networks. The main purpose of creating cluster networks is to diversify traditional cooperation between innovation participants, effective application of high technologies, increase innovation and investment activity of the region, industry, sector and the economy as a whole, and training specialists.

4. CONCLUSION

With the application of the principles of modern market economy, competition between economic entities in various sectors of the economy is expanding. Research shows that the formation of a national economy based on market relations in modern times is a key criterion for its effective integration into the world economic system, first of all to ensure the competitiveness of the country's economy, especially industry. As a result of reforms in the country's economy in recent years, certain achievements have been made. To strengthen these achievements, increasing the competitiveness of the country's economy in the process of integration into the world economy should be a priority for industrial development. To this end, the level of industrial infrastructure should fully meet the needs of the industry, and investments in infrastructure necessary for production should be made taking into account the growing demand for infrastructure services in this sector.

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REVIVING TRADE INTEGRATION IN DEVELOPING COUNTRIES IN AN UNSTABLE WORLD ECONOMY

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ABSTRACT

The process of increasing international trade uncertainties is the main trend of the world economy. There has been an increase in scientific and practical interest in regional economic ties. This paper examines and summarizes the main trends and key areas in the field of regional economic relations of developing countries. The combination of a COVID-19 pandemic and a collapse in oil prices has affected all aspects of the economies in the Middle East, Africa, Central Asia and Eurasia. The most significant regional factors have been identified. The pandemic has further exacerbated trade restrictions and protectionist trends. Overall, trade performance has declined significantly in recent years in the context of the pandemic, slowing trade liberalization and increased protectionist measures. According to the WTO, in 2019-2020, 60% of new trade measures implemented by the G20 countries were related to the pandemic. The pandemic has also disrupted global value chains in developing countries and exacerbated as well as the growing importance of geopolitics, national security and the declining importance of multilateral decision-making. Internal industry prioritization has led to major disruptions in the regional supply chain. In the current situation, it is not clear how the global value chains will change with the reduction of the risks associated with the pandemic, as well as the emergence of reshoring trends. Changes are likely, although the economic underpinnings of most global value chains are still in place. This policy aspect becomes all the more relevant in a context of possible retrenchment or reconfiguration of GVCs, brought about by escalating trade conflict among major developed economies. In the context of an unstable world economy in developing countries, the trend of regional economic integration is increasing. It follows from this that regional economic cooperation may to a greater extent determine trade relations in the future, since its role in the restoration of the economic systems of developing countries is increasing. However, in order to develop complex ties and bring relations to a new level corresponding to the changing realities of the world economy, Central Asia and Eurasia need innovative approaches to interaction and economic recovery.
Keywords: Central Asia and Eurasia, COVID-19, GVCs, regional trade integration, reshoring

1. INTRODUCTION

The countries of the world and their governing institutions are in the process of comprehending the new economic reality and looking for their own answer to the question: how not to destroy their own economies in the fight against coronavirus? States are looking for new tools for interaction with partners, as well as effective measures to support business. However, many development strategies and economic concepts of integration have become irrelevant at the same time. Global economic and integration trends have changed. Faced with a new large-scale risk, today all national economies, industrial corporations and megalopolises, as points of concentration of all economic, labor and energy resources, are trying to adapt to new conditions and find a development strategy. New economic uncertainties, the possibility of which before the pandemic could not be imagined, opened up not only large-scale risks, but also new opportunities for the development of the economy and business inside the country. A number of industries and corporations have a unique opportunity to join forces in the development and implementation of strategies and become more competitive in the global economic field.

However, a number of pressing questions arise regarding the economic policies of developing countries:

- Are developing countries and their markets ready for global restructuring and global cooperation?
- Will their business structures be able to identify the best "working" solutions in a crisis and share them with each other?
- What is the role of the state and international corporations in these processes?

We consider regional trade integration, firstly, as a growth factor and an important crossroads between the EU, EAEU, Asia and Africa. Due to its location and its economic importance, the Middle East region has historically played an important role in world trade and connected the crossroads of the main trade routes of Europe, Asia and Africa. Middle East and North Africa region (MENA), EAEU countries are involved in various bi- and multilateral trade agreements, often referred to as the "spaghetti bowl". The "Spaghetti Bowl" (or "Noodle Bowl") phenomenon describes the trade-distorting effects caused by the multitude of Regional Trade Agreements (RTAs) (table 1) signed in the last three decades (As RTAs allow for a different treatment of imports from different countries, rules defining a product's country of origin play a crucial role in these agreements) (Schüle, Ulrich et al. 2016).There are: a)regional organizations such as the League of Arab States; b) as well as subregional ones, the Cooperation Council for the Gulf States (GCC) - Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE); c) Meanwhile, a number of noteworthy trade promotion initiatives have been launched with major trading partners such as the United States (MEFTA initiative) and the European Union (Association Agreements) and investment in the region, as well as to create a foundation for openness, inclusive growth and stability; d) Several Middle East and North Africa region countries are also active members of the African Union. In the region, trade integration has been pursued primarily through trade agreements that focused on progressively lowering tariffs for manufactured goods and, to a lesser degree, for agricultural production and services. The European Union has been a privileged partner for several Middle East and North Africa region countries (Cooperation and Association Agreements were signed with Algeria, Egypt, Jordan, Lebanon, Morocco, Syria, and Tunisia in 70's). Over 80% of exports are still destined for markets outside Africa, with the European Union and the United States of America accounting for over 50% of this total. The last decade witnessed a shift from these traditional partners to the emerging economies of China, India and Brazil, among others (Alemayehu Geda et al.2015). They mainly provided market access for industrial goods and preferential market access for agricultural products to the European Union. The main objectives of the Euro-Med FTAs were to: a) promote trade and establish the conditions for the gradual liberalization of trade in goods, services, and capital between the EU and South Mediterranean (SM) partner countries; b) stimulate intraregional integration by promoting trade both within the Mediterranean region and with the member States of the EU Community. The Eurasian Economic Union (EAEU) was established in 2014 by a treaty signed initially by the Russian Federation, Belarus and Kazakhstan, followed by Armenia and Kyrgyzstan, member States that accessed to EAEU soon after the entry into force of the treaty in January 2015 (EEC). The EAEU is an international organization of regional economic integration and has internationallegal personality. Its main objectives are (UNCTAD 2020 a): (i) to create proper conditions for sustainable economic development of the member States in order to improve the living standards of their population; (ii) to seek the creation of a common market for goods, services, capital and labour within the Union; (iii) to ensure comprehensive modernisation, cooperation and competitiveness of national economies within the global economy. The aspiration in the EAEU is to increasingly negotiate with other partners as a united front. Free trade zones with the EAEU (Elena Kuzmina 2019): The EAEU signed the first FTA Agreement

with Vietnam in 2015 (The Agreement immediately had the FTA + format, which stipulates not only the rules of duty-free trade, but also other formats of interaction); The second agreement was signed in 2018 with Iran (This agreement is signed for three years and limited); The agreement with Singapore in 2019 became the third such document of the Eurasian Union with third countries; Trade and economic cooperation between the EAEU - China, entered into force in 2019 (The document is not an FTA agreement, but it defines a single format for trade cooperation between the EAEU and the PRC). India is one important objective, according to the EEC Trade Policy Department, coming six months 2021 will be held negotiations with New Delhi on creating a free trade zone between India and the trading bloc. Trade between India and the EAEU in 2020 reached $9 billion, but the bloc sees potential for more. As protectionism is the norm internationally, EAEU defenses are roughly commensurate with those the United States and the EU take to shield their own steel markets against China's anti-competitive practices (Eurasianet, Jan 14, 2021, a).

Region	Notifications of RTAs in force
Caribbean	11
West Asia	23
Oceania	29
Middle East	34
Central America	42
Commonwealth of Independent States (CIS)	45
Africa	45
North America	49
South America	70
East Asia	100
Europe	150

Table 1: RTAs in force, participation by region
(Source: WTO Secretariat - March 13, 2021)

Paradoxically, there are more and more voices which rise to proclaim the uniqueness of the processes of economic integration between developing countries given the nature of their actions and their earnings (Koné, Salif, 2012). For the African region, a clear determination to expand intraregional trade is an important step. Growing uncertainties in international trade and populist protectionist measures in advanced economies are increasing the premium to regional intra-African trade. Therefore, African countries are learning from the experiences of East Asia and Latin America, even as protectionism ends, they are joining forces to build productive trade capacity through regional value chains. Therefore, in theory, a trade integration strategy for countries in the African region strengthens their trade opportunities. The resulting experience will allow to gradually increasing share in the international market. Integration infrastructure is a critical factor for intra-African and international trade. Indeed, there is still a colonial mining infrastructure in Africa, one of which is a railway line from Kasese in Uganda to a port in the Indian Ocean to transport copper for export. Infrastructure in the region is now branching out with new initiatives such as the Cape Town to Cairo road, the Northern Corridor, and China is encouraging investment in the construction of a road from Kampala to the Atlantic Ocean. Of particular importance is the railway line from Dar es Salaam to Rwanda and other African countries. However, integration and the move towards new industrialisation is not without challenges. İt should be noted that African countries face key infrastructure deficits which are key to boosting industrialisation. The AfDB estimates that Africa's infrastructure deficit accounts for 30 % to 60 % of productivity losses of firms and 40 % to 80 % of this is due to deficits in the energy sector n half the countries (Ahouassou A. 2017).

Thus, the integrating infrastructure created today will be necessary for the implementation of promising infrastructure tasks. Fifty-four AU member States have signed the AfCFTA, with the exception of Eritrea. To date, 35 of the African Union's 55 member States have ratified the agreement. Africa's free-trade area became reality on 1 January 2021, promising to make it easier to do business across the continent. The new regional market, created under the African Continental Free Trade Area (AfCFTA) agreement is estimated to be as large as 1.3 billion people across Africa, with a combined gross domestic product (GDP) of $3.4 trillion. This has a potential of lifting up to 30 million Africans out of extreme poverty, according to the World Bank (Franck Kuwonu 2021). African countries opened their domestic markets under the African Continental Free Trade Area (AfCFTA) on 1st January 2021 under the continental free trade agreement and duty-free trading of goods and services across borders is now underway despite the COVID-19 pandemic and other teething problems. In light of the COVID-19 pandemic, AU discussions have reverted back to the 2012 Pharmaceutical Manufacturing Plan for Africa (PMPA), which seeks to promote local manufacturing of essential medicines (AU 2012). It should be noted that talks of regional pharmaceutical hubs have been ongoing in some RECs, such as the Southern African Development Community (SADC) and Economic Community of West African States (ECOWAS). COVID-19 has not only distorted trade flows but also beggar-thy-neighbour trade policies (CEO Insights 2020). Facing multiple difficulties and shortages of essential resources to fight against the disease, many countries are turning to mercantilist forms of protectionism, albeit temporarily. On the future of international free trade, the remark by the WTO Director-General Roberto Azevêdo might serve well as an encouragement. He said that: "Once the medical crisis begins to recede, trade will allow countries to help each other grow, bringing faster and stronger economic recovery for all of us" (Azevêdo 2020). Nothing has disrupted supply chains quite like the COVID-19 pandemic, which has resulted in factory lockdowns and reduced demand. Growing global uncertainties have long inspired researches to predict the end of globalization and a rise in reshoring (Figure 1).

Increasing costs in developing countries
- As countries in Asia, continue to develop, labor costs are increasing and shipping costs are becoming prohibitive

Uncertainty and instability of international trade
- The geopolitical situation has changed over the past decade, with China taking the lead internationally. Meanwhile, there have been other changes in global trade relations (with the US position and Brexit)

Supply chain management
- Most of the links in the supply chain will be close, which will simplify their management and work processes.

Boosting the national economy
- Reshoring brings jobs, assets, resources back to the original nation and helps bolster the economy

Figure 1: Several factors make reshoring appealing (Designed by author)

Most of the negative tendency mentioned above shows that many will look to end their reliance on manufacturing in remote parts of the world, particularly when it comes to the production of critical supplies. As a result, the shift towards reshoring is likely to accelerate rapidly in the coming years.

2. METHODOLOGY

Analytical reviews of international economic organizations very often argue that South-South integration is inferior to North-South integration. This article focuses on the question of whether the success of regional integration relations in dynamically developing countries really depends on factors such as the similarity of their economic structure, market size and domestic demand, as well as the provision of their economies with relatively cheap labor. It is shown that there are other more important political, economic and institutional reasons explaining the problems of the functioning of economic relationships in developing countries. To discuss this issue, case studies of international organizations and expert assessments on the Middle East, Africa, Central Asia and the EAEU will be used. We used three scenarios as a methodological approach to formulate a research on trade integration developing countries: Baseline scenario, continuation of past trends simulated over three or more decades; "Instability wave" scenario under a COVID-19 pandemic and recession/unstable world economy. At the same time, longer-term damage can be avoided with rational economic integration moves. Such policy choices are crucial when save lives and health on one hand and economic growth on the other; Tariff and trade liberalization scenario in line with AfCFTA modalities starting in 2020-2035.

3. LITERATURE REVIEW

Given the unsatisfactory performance of the most developing countries in promoting intra-regional trade to date, questions such as 'is there an adequate potential for intra-regional trade?' and 'what are the major obstacles to intra-regional trade?' are relevant. The study shows that more and more economic players are joining the integration groups, and the agreements are deepening. The Eurasian Economic Union comprises an effective regional competition regime since the entry into force of the EAEU Treaty in 2015. Several national laws of its member States have been amended in that respect in order to comply with the new sets of rules for competition (UNCTAD 2020a). On the one hand, the EAEU has not been an impeccable "success story". The EAEU's progress has slowed after initial rapid progress. On the other hand, it has achieved much. The EAEU is best viewed not as an exception to general rules of regional economic integration, but rather as a functioning customs union with its own successes and stumbling blocks, enriched by several additional quite developed areas of economic integration (Evgeny Vinokurov 2017). The effectiveness of the Eurasian regional competition law system can be assessed according to a combination of factors, both endogenous and exogenous. The design of the legal framework has entrusted the EEC with exclusive competencies regarding anticompetitive practices affecting crossborder markets of the region (UNCTAD 2020b). The potential for intra-Africa trade and the role of RECs in that process is a contested issue. It is argued in the literature that in spite of the proliferation of RECs, the continent has not shown success in expanding intra-regional trade. Despite significant potential, the poor integration performance has triggered a number of studies that assessed the potential and performance of regional economic communities in Africa using the popular gravity model. At the same time the research findings and conclusions are similar. As shows the experience of regional trade integration in Africa region has been disappointing in achieving one of its main objectives of increasing intra-regional trade and fostering policy coordination (Geda and Kibret, 2008, WB. 2014; WB. 2020; Woolfrey, S., Apiko P. and Pharatlhatlhe, K. 2019; Vanheukelom, J., Byiers, B. Bilal, S. and Woolfrey, S. 2016; WTO. 2020; Simo, R. Y. 2020; Solomon E.M. and van Klyton, A. 2020; Mbapndah, A.L. 2019). Dr. Mukhisa Kituyi, Secretary-General of the United Nations Conference on Trade and Development (UNCTAD), emphasized what countries can gain and what challenges to expect. Excerpts: «Africa needs to build the capacity and structural transformation necessary to be a competitive international player. The creation of a continent with a free trade area is therefore an important step towards building, collectively, the competitiveness of African labour and African products internally and internationally»

(Zipporah Musau 2018). Of the literature analysis, we can also remark Hugon (2001) by adopting the concept that developing countries are engaged in economic integration processes whose shapes range from the sectoral co-operations to economic unions with partial transfers of sovereignty.

4. RESULTS

The processes of any economic integration cross similar stages and all require opportune primary conditions. But, in fact, the economic integration processes between developing countries differ. The consolidation of CIS and EAEU agendas looks unusual, since the former has a slightly wider composition and includes countries like Azerbaijan, Moldova, Tajikistan and Uzbekistan. Turkmenistan is on the periphery of the CIS as an associate member. Of this set countries, Uzbekistan, with its 33 million population, is a country that the EAEU would very much like to attract. Having received observer status in the bloc at the end of 2020, Tashkent took a small step towards joining (Eurasianet, Jan 14, 2021,b). Major studies on trade relations between countries in the African region show that what African countries sell within the region has more added value than what these countries sell to the rest of the world, that is, mainly natural raw materials. In other words, intra-African trade creates more jobs in the country of origin than countries in the region that trade with the rest of the world. Therefore, countries in the Africa region hope to generate more industrial and value-added jobs in the region through intra-African trade. Accordingly, it will increase competitiveness, which they can then use for the rest of the world. As a result, it was able to correct the distortions in the domestic market, which were a burden on the consumers of the domestic market due to excessive protectionism. Tariffs are not the only problem; one of the main challenges to intra-African trade is the nontariff barriers and also technical support for national negotiators. This is the role that UNCTAD played in relation to the AfCFTA, and it is now being strengthened in preparation for the next phase, with more emphasis on trade in services, to create a common continental e-commerce market. Much stands in the way of realizing the potential of intra-African trade. Many countries in the region are producing similar goods, so UNCTAD is working with member states and their institutions to build capacity and translate AfCFTA's promises into real economic benefits. Trade integration can be essential for achieving inclusiveness, provided structural reforms are implemented, complemented by industrial and innovative strategies. Together with additional industrial policies, trade can help reduce the level of technological backwardness, mainly in the manufacturing sector. Trade integration of the considered countries within the region and with the rest of the world remains below expectations for both economic and political reasons. For the Middle East and Africa, these include the exclusion of agricultural goods and services from association agreements with the European Union, and the maintenance of high non-tariff trade costs. The low level of integration between the EAEU countries is partly due to insufficient reform of the legal framework for investments and the lack of convergence of positions on regional production chains. Economic cooperation has also proven to be problematic, while regional conflicts and business environments also hinder regional trade integration and hinder manufacturing integration and its potential for inclusiveness.

5. DISCUSSION

In recent decades, there have been frequent discussions about regional cooperation in the Middle East, Africa, Central Asia and the EAEU region. It is noteworthy that even the previously intensively discussed issues do not lose their relevance. That's a mainstream truth. As many major trading nations sign trade agreements among themselves, creating a "spaghetti bowl" of trade arrangements that bypass the World Trade Organization (WTO), the organization is becoming less relevant for international trade negotiations.

Therefore, the WTO needs to make these transparency mechanisms more robust and link them to national transparency (Maria Panezi 2016). The study shows how the cumulative effects of the COVID-19 pandemic, falling oil prices and current international trade uncertainties have affected the main aspects of the economies of the countries of the Middle East, Africa, Central Asia, the EAEU and within the framework of regional relations. Discussions also focused on regional industrialization strategies in the context of AfCFTA and how they will work in practice; a number of RECs have adopted regional industrialization strategies, albeit with varying degrees of success (Philomena Apiko et al 2020). However, barriers to trade in services are much more complex than barriers to trade in goods due to NTBs related to market access, regulatory requirements and restrictions on workers and movement of people (Sáez et al. 2015). Trade openness can go a long way towards achieving inclusiveness. However, trade reforms must move in parallel with other policy reforms. The contribution of trade openness to inclusive growth can be uneven. This article examines the growing regional economic integration, especially in Eurasia, as well as the growing importance of this region in the global economy, and outlines the challenges to greater regional integration. It was found that the strategically located economy of Central Asia and the EAEU has become an increasingly important part of the post-Soviet Eurasian economy over the past two decades and is becoming more integrated into itself. However, realizing this vision will depend on addressing several pressing regional integration challenges, including improving the quality of transport infrastructure, ports and logistics, reducing barriers to trade and international investment, narrowing the development gap, and strengthening regional economic governance. Tackling these challenges requires a combination of coherent national and regional policies. Political relations between the EU and Russia are at a significantly difficult stage. The Crimean crisis, the Russian-Ukrainian conflict and other geopolitical problems have led to the fact that European-Russian relations have reached a "low point." However, there is no alternative to dialogue with Russia on important economic topics such as trade, energy, the fight against COVID-19, as well as regional economic interaction. Russia is one of the most important neighbors of the Central Asian countries, the EAEU and one of the most important actors in world politics. However, Russian, and even more so, Central Asian companies lack high technical capabilities in some areas, for example, to conduct drilling operations in the shelf zone. Therefore, it is likely that it will not be possible to do without a technological partnership with Western oil and gas giants, and the companies of the countries of the region will still be able to claim only insignificant shares in joint ventures operating on the shelf. Covid-19 has led many multinational enterprises to seriously consider transforming their manufacturing processes. They were faced with the need to take into account the new reality and answer the question of whether production on a remote continent still makes sense. The alternative is to return certain production processes back to their regions, to the USA and Europe. This regionalization also opens up enormous opportunities for Russia. In this regard, enterprises are thinking about transferring other industries here. However, transnational companies will begin to localize production in Russia only if they are able to build production that is competitive for the world market. Unlike in previous years, now we are no longer talking about the production of "local for local" (Falk Tischendorf 2020). An important issue is the establishment of clear requirements for regional integration. Discussions with enterprises from various industries continue on this topic. Despite the fact that many companies are ready to manufacture a Russian product, they complain that they cannot find appropriate suppliers of components in Russia, or that these suppliers cannot provide or are unable to maintain the required quality. Of course, it is impossible to rebuild an entire regional supply chain in one day. The challenge is to motivate businesses with feasible prescriptions, and these prescriptions should in no way lead to quality degradation.

6. CONCLUSIONS

The regionalization of economic spase is multifaceted. It is more supported by supronational institutions and by regional trade agreements (RTAs). It can result, however, from practices of GVC constituting trade, technological, and manufactured networks in regional spase. It can also result from a fragmentation of the global space taking in strategies of segmentation by transnational business activities. The modern world is an incredibly complex economic and political system, where many factors influence trade integration and supply chains.The most negative impact of the pandemic and the most sensitive for international business and trade has been the disruption of supply chains. Active dialogue, sustainable trade and logistics systems and digitalization can become tools for strengthening integration relationships. As matter of facts global economy is slowing, and commodity prices according World Bank Group are likely to remain stable. In this context, the creation of the AfCFTA vast regional market is a major opportunity to help member countries diversify their exports, grow faster and attract FDI. Managing this diversity of factors requires intensive international and regional dialogue - especially with the rapid growth in demand for international supplies, which, even despite the pandemic, increased in 2020. By 2025, according to forecasts of various experts, the number of containers delivered from China to Europe will grow to one million. All this flow of goods will pass from Asia along the logistics corridor of Central Asia, Azerbaijan and Georgia. Therefore, Europe needs to build a dialogue at the political level with Azerbaijan, Georgia and with all the EAEU countries. Through cooperation with the EAEU, Europe through the South Caucasus and Central Asia will be able to gain access to the largest Asian markets. Therefore, Azerbaijan, Georgia and the countries of the Central Asian region are considered promising "hubs through which one can connect to many Asian markets." Despite the geopolitical challenges, the dialogue between the regional trading blocs of developing countries must continue and become more intense. Trade agreements can take years for the impact to be felt. The developing countries have to learn these processes within existing regional integration mechanisms and scale up best practices. As regulation, doing business and trade facilitation are found in many developing countries as major obstacles to intra-regional trade, regional economic community (RECs) may need to be directed at addressing these challenges.

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EXPORT AND IMPORT POTENTIAL OF AZERBAIJAN'S AGRO-INDUSTRIAL PRODUCTION

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ABSTRACT
The paper says that food security is one of the main goals of the agricultural and economic strategy of the political leadership of our state. In addition, in its general form, it forms the vector of movement of the national food system to the ideal state, representing a continuous process. Such branches of agriculture as cotton growing and tobacco growing are being revived, olive, nut and almond orchards are being laid, tea plantations are being expanded, and agricultural land is also being expanded, soft loans are being issued, and agricultural services are being expanded. To this end, work has begun in the regions of the country to put tens of thousands of hectares of cultivated land into circulation. Today, our country actively promotes the national brand Made in Azerbaijan in foreign markets, expanding the geography of export. The introduction of export incentives for persons engaged in the export of non-oil products has significantly increased domestic production and exports of these products. For this purpose, the Association of producers and exporters of wine, pomegranate, hazelnuts, fruits and vegetables, persimmons, bee products, etc. was established earlier with the support of the Ministry of Economy. In comparison with similar indicators for previous years, there were significant fluctuations in the dynamics of imports of livestock products. During the analyzed period, there was a decrease in the volume of egg imports with some fluctuations. One of the priorities for the development of the agricultural sector is to strengthen the export potential. In 2015-2019, an increase in exports of some types of crop production was achieved.
Keywords: *agricultural land, agro-industrial complex, consumer protection, foreign trade, export, favorable investment environment, food security, import substitution, international trade*

1. INTRODUCTION
The most important trend of the modern international economy is globalization, i.e. the transformation of the interconnected economies of individual countries into one global, planetary economy. The increasing international trade, on the one hand, and the cooperation of production, on the other, lead to the fact that the phrase "the product is produced in country X" has an increasingly vague meaning. Countries import goods, services, and resources used to produce and export other goods and services. Thus, a certain part of the value of national exports is accounted for by imported resources and components. So-called "global value chains" are being formed, sometimes linking a significant number of countries. In order to increase the range and volume of exported products, the Head of state signed a decree dated January 6, 2006 "On the appointment of trade representatives in embassies and consulates of the Republic of Azerbaijan in foreign countries". In order to create a favorable investment environment in the Republic of Azerbaijan, the head of state signed an Order dated January 18, 2018 "On a number of measures to promote investment activities and protect the rights of foreign investors".

2. STATE CONTROL IN THE FIELD OF FOOD SECURITY
Support for local entrepreneurs was included in the activities of the newly established Food Security Agency in accordance with the Decree of the President of the country Ilham Aliyev "On additional measures to improve the food security system in the Republic of Azerbaijan"

dated February 10, 2017. This structure is the central executive authority that carries out the regulatory regulation of food safety (development and approval of sanitary norms and rules, as well as hygienic standards), risk analysis, state registration of food and materials, their packaging, provision of a safety certificate for food products exported to foreign countries, state control in the field of food safety and protection of the rights of food consumers at all stages of food production, taking into account the level of risk of products, including production, procurement, packaging, storage, transportation, including export-import operations. It should be noted that food security has always been and remains the focus of the government of the country, since the availability of high-quality and high-calorie food is an indispensable condition for the full life of citizens of any country, and we are no exception in this regard. Food security is one of the main goals of the agricultural and economic strategy of the political leadership of our state. In addition, in its general form, it forms the vector of movement of the national food system to the ideal state, representing a continuous process. According to the amendments made to the "Rules of Sanitary Protection of the Territories of the Republic of Azerbaijan", the Food Security Agency together with the customs authorities will carry out the food security inspection from the point of view of food safety of food products imported into the country through the state border checkpoints. An important document aimed at promoting the export of non-oil products was the Decree of the Head of state of March 1, 2016 "On additional measures related to the promotion of the export of non-oil products". The Decree notes that depending on the local components produced in the territory of Azerbaijan and used in the production process and the specific weight of the cost of non-oil products created in the territory of Azerbaijan, as well as on the type of these exported products, persons engaged in the export of non-oil products in the territory of the Republic of Azerbaijan will be paid export incentives at the expense of the state budget. The basic amount of the export incentive paid for export operations is from 3 to 6% of the customs value provided for in the export customs declaration of the actually exported goods. Later, on October 6, 2016, the Cabinet of Ministers of Azerbaijan approved the "Rules for the payment of export incentives to persons engaged in the export of non-oil products", as well as the "List of non-oil products to which export incentives will be applied according to the commodity nomenclature of foreign economic activity". The list of products subject to export promotion includes natural honey, dried fruits, persimmons, pomegranates, confectionery (including such oriental sweets as baklava and shekerbura), canned vegetables, fruits, nuts and hazelnuts, jams, jams, fruit jelly, marmalades, fruit and nut puree and pasta, fruit and vegetable juices, including pomegranate juice, sauces and condiments, natural or artificial mineral waters, carbonated water, non-alcoholic beverages, wine and grape must, vermouth or other flavored natural grape wines, alcoholic beverages (cognac, brandy, liqueur), wine distillates, naphthalene ointment, clothing, shoes and other products made of genuine leather, silk fabrics, handmade pile and lint-free carpets, cotton clothing, etc. The introduction of a mechanism for the return of part of the costs for the export of non-oil products, where about two million manats were returned to Azerbaijani exporters, was a clear indication of the state support for business. In accordance with the Decree of the head of state dated January 11, 2018, "The procedure for determining and regulating the mechanism for paying part of the expenses paid by the state budget for organizing export missions to foreign countries, researching foreign markets and marketing activities, promoting the Made in Azerbaijan brand to foreign markets, obtaining certificates and patents in foreign countries in connection with export, for research programs and projects for export development was approved. For these purposes, the head of state allocated 3 million manats from his own fund for the start of the project. According to the above-mentioned decree, the amount that specialized legal entities and individuals receive for analyzing foreign markets is also increased from 20 thousand to 30 thousand manats. In addition, the number of export missions that can be organized with the participation of Azerbaijani entrepreneurs within one calendar year

increases from 10 to 25. The number of international fairs and exhibitions, where Azerbaijani entrepreneurs can participate as a single stand, is increasing from 5 to 10. Entrepreneurs who take part in international fairs and exhibitions on an individual basis will be able to receive financial support in the amount of 50% of all expenses necessary for participation, including rent and creation of a stand, transportation costs and others. At the same time, the maximum amount of such support should not exceed 10 thousand manats. Exporters will also be able to apply for support to obtain an international certificate. The cost of support should not exceed 60 thousand manats and should not exceed 50% of the total amount of expenses. In addition, since November 2016, decisions were made on payments to encourage the export of wine, cotton yarn, canned food, water and juices, hazelnut and other products to Russia, USA, Germany, Turkey, Belarus and other countries. Recently, Azerbaijani wines have aroused great interest among consumers. If we recall, for many centuries, viticulture was the leading branch of agriculture and the main source of economic well-being of the people, and the peak of progress occurred in the 70s-early 80s of the last century, when the total area of vineyards in Azerbaijan reached 286 thousand hectares, and the gross harvest averaged up to 2.1 million tons per year.

3. STRENGTHENING OF EXPORT POTENTIAL AS ONE OF THE PRIORITY DIRECTIONS OF AGRICULTURAL SECTOR DEVELOPMENT

Today, this branch of agriculture is gradually reviving. In 2019, 877.3 thousand decaliters of wine products were produced in Azerbaijan, of which 532.3 thousand decaliters were exported. In accordance with the state program for the development of winemaking for 2018-2025, the export of the local "drink of the gods" is planned to increase fivefold. Also, such branches of agriculture as cotton growing, tobacco growing are being revived, olive, nut and almond orchards are being laid, tea plantations are being expanded, agricultural land is also being expanded, soft loans are being issued and agricultural services are being expanded. To this end, work has begun in the regions of the country to put tens of thousands of hectares of cultivated land into circulation. To date, the shortage of walnuts in Europe is 100,000 tons of fruit. The constant growth of the already high demand guarantees a high demand for the grown products. With relatively small investments, you can consistently get high returns for decades, which are still supported by trouble-free implementation. Every 5 years, the profit increases by an average of 45% (depending on the selected varieties and climatic conditions), as the trees themselves grow and their fruiting increases. A young seven-year-old walnut tree will yield a yield of approximately 17 kg (depending on the fecundity of the variety, it can reach up to 20 kg). Up to 200 trees can be planted on one hectare. So the average yield per hectare will be 3.4 tons. The purchase price of unpeeled walnuts today is $ 1.5 per 1kg. As a result, in the first year, you can reach profitability with the help of the income received from 214 invested funds. It brings many benefits: oxygen to nature, useful products and medicines to people. Nut leaves and buds are used in pharmacology. The bark from the walnut tree is used for the production of natural paint. This type of business is not only comfortably profitable with the prospect of constant growth, but also brings a lot of benefits to people and the environment, which makes it humane and in demand. Abroad, the yield of nuts varies depending on climatic conditions and varieties. In California, 7 t/ha of nuts are harvested, in France - 5-6 t/ha, in Moldova-3-3.5 t/ha. Economic calculations show that walnuts and hazelnuts have approximately the same profitability. Usually there is a difference between them between the technology and the start-up capital, but the total costs are the same. Judge for yourself-a walnut according to the 10 * 10 scheme is one hundred seedlings at the price of 4.60 mans./seedling, the price of one hazelnut seedling, depending on the variety and origin, is 2.30 mans, 35-40 seedlings are needed for 1 ha, so the price of laying is actually equal to a garden with walnuts. The content and technological care of hazelnuts in their natural (technological) form differ, but the cost is about the same $400/ha.

Now let's compare the revenue – walnut yields 3 tons/ha, if you multiply them by 40% of the yield at the price of 9.70 man./kg and this will give 11660 thousand. man / ha, hazelnuts also have a yield of 2 t/ha, and not peeled, directly from the field, costs about 8 man./kg, which in monetary terms is about 17352 thousand man./ha. That is, it is impossible to say unequivocally that hazelnuts are more profitable than walnuts. For example, in Europe and the Gulf countries, the consumption of nuts per year averages about 5 kg per person. In our country, this figure does not exceed 1 kg per person. At the same time, to obtain a sufficient amount of useful substances, it is necessary to eat at least 3.6 kg per year per person. Therefore, our market is open to walnut products. The EU countries are constantly in need of this product, and the inexhaustible Chinese market is also ready to buy all the walnuts offered to it. Potential customers – trade, confectionery industry, perfumes, paint and varnish industry and others. The main advantages of the walnut business: - the possibility of long-term storage, - simple conditions for packaging, storage and transportation, - almost all components of walnut production are used in industry, including the kernel, shell, leaves, and especially valuable wood. Thus, the cost of 1 kg of walnut kernel in the first 10 years is 1.77 euros, and with each subsequent year its cost will only decrease, because the yield will continue to grow, but the costs will not. Labor costs for the organization of growing walnuts in forest culture on an area of 1 ha are small, so there is no need for hired labor. The farm workers themselves are able to serve the plantings. In our case, the cost of nuts is predetermined by the market wholesale prices of their harvesting and transportation to the receiving point, where the fruits are used as raw materials for the production of confectionery. This type of activity is a highly profitable business that does not require an impressive capital for development. As practice shows, seedlings quickly take root after planting, tolerate temperature fluctuations and are resistant to various pests. The process of caring for trees is simple, and the harvest (and the availability of profit) is guaranteed for many decades. This branch of agricultural production is recommended for specialized farms as an additional source of direction, including for farms. Today, our country actively promotes the national brand Made in Azerbaijan in foreign markets, expanding the geography of export. The introduction of export incentives for persons engaged in the export of non-oil products has significantly increased domestic production and exports of these products. For this purpose, the Association of producers and exporters of wine, pomegranate, hazelnuts, fruits and vegetables, persimmons, bee products, etc. was established earlier with the support of the Ministry of Economy. In comparison with similar indicators for previous years, there were significant fluctuations in the dynamics of imports of livestock products. During the analyzed period, there was a decrease in the volume of egg imports with some fluctuations. One of the priorities for the development of the agricultural sector is to strengthen the export potential. In 2015-2019, an increase in the export of some types of crop production was achieved. It should be noted that domestic products under the Made in Azerbaijan brand have already been exhibited at Gulfood 2017 in Dubai, Prowein 2017 in Dyuseldorf and Worldfood Moscow 2017, Belarus, the USA, Japan, and China. In addition, the Ministry of Economy has organized eight export missions to foreign countries, and other measures are being taken to realize the country's export potential and promote our products to world markets. Today, there are more than a hundred companies with Chinese capital operating in our country, participating in various projects. By the way, Azerbaijan's trading houses have been established in Belarus, Ukraine and China. It is planned to create a trading house in Russia as well. In addition, to ensure the rational use of land, ensure food security and increase export potential, work continues on the creation of agricultural parks. In recent years, through the creation of modern enterprises, agricultural parks, large farms, horticultural and greenhouse farms in industrial parks and zones in Azerbaijan, it is planned to significantly reduce dependence on imports, increase the level of self-sufficiency, while steadily increasing the country's export potential.

Thus, at the end of 2019, according to the State Statistics Committee of Azerbaijan, Azerbaijan's foreign trade turnover amounted to $ 33.3 billion, including exports of $ 19.6 billion, or 98.8%, and imports – $ 13.6 billion, or 93.5% . In the structure of exports, as in previous years, and in 2019, the main volume fell on oil – 77.5%. In the structure of imports in 2019, the main volume fell on machines, mechanisms, electrical devices, equipment and spare parts for them – 21.3%. In 2019, Azerbaijan carried out its main export operations with Italy – 28.7% of total exports, Turkey-14.6%, Israel-6.8%, India -4.9%, Germany -4.7%, China-3.8%, and Russia – 3.7%. Among the private companies exporting Azerbaijani non-oil products abroad, they distinguished themselves: LLC "Aqrodoctor" and LLC "CTS-Agro". In 2019, Azerbaijan carried out its main import operations with Russia – 16.8%, Turkey-12.0%, China-10.5%, Switzerland -9.0%, the United States-5.6%, Germany-5.2%, Ukraine-3.4%, and Iran -3.3%. The performance of 141 global economies is assessed on the basis of the Global Competitiveness Index 4.0 (GCI 4.0), which reflects their ability to compete with other countries in the context of the Fourth Industrial Revolution. The 12 most important components of long-term growth are considered: the quality of institutions, the state of infrastructure, the penetration of IT and modern communications, macroeconomic stability, the consumer market, the labor market, the financial system, the size of the domestic market, the state of public health, education and skills of people, the dynamics of business development and the ability to innovate. Each global economy is assigned a GCI 4.0 on a scale from 0 to 100, where 100 represents the ideal state when the factors in question cease to be barriers to productivity growth. It should be noted that in 2019, Azerbaijan ranked 58th among 137 countries in the "Global Competitiveness Report 2019", compiled annually by the World Economic Forum (WEF). Many states rely on the agricultural industry, and this allows them to provide their own market with their products, and therefore not depend on other states. Due to the export of agricultural products, they replenish their budget with currency. In addition, the development of agriculture stimulates other areas of production and contributes to the creation of new jobs.

4. CONCLUSION

Thus, our country is able to fully provide itself with agricultural products, as well as increase the volume of export supplies. In 2015-2019, the volume of food imports to the country in value terms increased by 2.6 times. In recent years, hundreds of millions of dollars' worth of food products have been imported into the country. According to preliminary estimates, about one-fifth of this growth is due to imports of higher quality and expensive products, as well as to rising prices on the world market. Data reflecting the situation in foreign trade in food products do not always allow for an unambiguous comparative analysis of the nomenclature of these products. By the way, this is not a problem peculiar only to our country. During the analyzed period, the share of food imports in 2019 in relation to 2015 increased by 12.5%, and the level of exports in 2019 in relation to 2015 increased by 18.2%. Most of the imported crop and livestock products are products that can be produced or expanded in our country. In other words, the country's agricultural potential has the potential to significantly replace imports.

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DEVELOPMENT OF CASHLESS ECONOMY IN AZERBAIJAN: CONSUMER ATTITUDE AND PERCEPTION ON CASHLESS TRANSACTIONS

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ABSTRACT

The current article studies the trends in the formation of cashless payments in Azerbaijan, as well as the status and prospects for establishing a cashless economy in the country. The methodology of the paper is a survey as well as economic analysis of indicators such as the number of debit and credit cards, the use of contactless payments, the spread of payments through mobile devices, and the volume of cashless transactions during the last years. The use of electronic money is spreading. The article explored the factors affecting admittance to the cashless society and consumer' reasons behind choosing to utilize or not to utilize electronic payment, including a lack of confidence in the security and availability of innovative literacy or internet access. The data was collected from 179 citizens of the Republic of Azerbaijan using a questionnaire. The increase in electronic money usage depends on the awareness of society and government encouragement. Results of the survey showed the benefits and threats of the cashless economy and in the formation of the digitalization development activities. The paper's main output showed an increase in economic cashless payments, goods and services payments, e-commerce, consumer credit, social payments, pensions, and subsidies will lead to economic growth increase and integration processes in the Republic of Azerbaijan. The results showed that education, rate of literacy and age are key factors that affected respondents` attitude to cashless transactions. Finally, this paper suggests that an understanding and recognizing of the factors affecting the intention to use digital payment is critical to practitioners who plan and foster new forms of banking activities in the current competitive environment.
Keywords: Cashless economy, cashless transactions, cashless society, consumer, digital payment

1. INTRODUCTION

The use of electronic payment instruments throughout the community brings up something called Cashless Society. The cashless transfer is becoming the preferred option, and there are many reasons for that. First, people can easily pay their bills, shop, make transactions and manage all the finances using their electronic devices. The primary objective of this research is to define the level of awareness and attitude of Azerbaijani society, as well as to study the current position of the country toward the cashless economy. Advances in information technology and consumers' increasing openness to the use of it contributed to improvement in

the electronic payment system. As a result, the traditional system of cash payment is gradually being replaced. An increasing number of people find the relatively new method of payment more convenient because there is no need to travel, which saves time and money, and the risks associated with holding cash are avoided, but still, the cash system dominates economic transactions in Azerbaijan. Electronic payment can also help increase the efficiency of financial management, for instance, and the recipient can get money and manage it in real-time. Many research studies have been conducted in the field of non-cash business, however, few were found regarding the case of Azerbaijan. The authors are therefore interested in studying factors that influence participation in the cashless society, including reasons why consumers decide not to use electronic payment services, including the impact of transaction-related factors including convenience, security, cost, incentives and procedures on cashless transactions. The authors anticipate that the results of the research would serve as guidance on how to improve the digital economy strategy and promote Azerbaijan's electronic payment system.

2. LITERATURE REVIEW
The structure of the payment system has changed over the past decades by virtue of technological development. In developed countries like the US, UK etc., the use of cash for transactions has been replaced by non-cash payment instruments. (Humphrey, 2004). According to the World Payments Report 2016, globally non-cash transaction volumes have increased to more than 90% in most of the developed countries (Patel and Amin, 2012). For others, there is still a long journey to cover. Reistad (1967) proposed the term "cashless society" as a society in which transactions with electronic funds take over those with paper currency. It does not mean the complete exclusion of cash from the payment system, but one in which the number of cash-based transfers is maintained to the minimum level (Achor and Robert, 2012; Yaqub et al., 2013). Over time, there have been several forms of the payment system. It went through evolutionary changes starting from the barter system, precious metal used as the means of payment, money made from precious metal and gold to money. (Fabris, 2019). The problem with a barter economy was its inefficiency, as it involved high transaction costs in terms of efforts and time. Therefore, paper money and coins have been evolved (Chinnammai, 2013). The second half of the twentieth century observed better approaches for contemplating techniques for retail payments (Bátiz-Lazo & Efthymiou, 2016). The introduction of plastic cards, pre-paid payment cards, Electronic Fund Transfer and Internet banking all aimed at making payment more convenient (Akinola, 2012). Regardless of the level of cashlessness, it is possible to identify the main common drivers that lead to the Cashless Society. One of the main ones is an innovation triggered by the development of technology (Fabris, 2019). Efficient payments such as NFC (Near-field Communication), QR codes and mobile payments made the transfer of money and settlement of transactions more secure, reliable and efficient (Maurer, 2016). Another relevant driver of a cashless society is trust in digital technologies (Achord, 2017 & Smithin, 2000). The Trust between the payee and payer, confidence in the safety and protection of the payment, privacy, as well as conviction that the procedure is beneficial (Kapron & Meertens, 2017; Akinola, 2012). Satisfaction, application functionality and convenience of use influence the use of electronic payment services (Teerawanitchaikul, 2013). Likewise, the utilization of mobile technology significantly lessens the cost of sending money over large distances, gives the certainty of the process and diminishes the risk of theft (Rouse & Verhoef, 2016). However, if the costs of Internet usage and electronic transaction fees are higher than those of other payment methods, it will discourage people from using mobile banking (Ampunsuk, 2013). Previous research has demonstrated that prior internet knowledge and information on online banking perceived ease of use, and perceived usefulness positively influenced the adoption and use of online banking in Azerbaijan. (Ismaylova, 2020). In the absence of well-established bank networks in developing countries, most people prefer cash

and tend to display distrust toward electronic payment (Afi, 2013). The adoption of the cashless economy policy can enhance the growth of financial stability in the country. Much has been done in making the people aware of the cashless economy and a large proportion of the people are awaiting the introduction of the cashless economy. The Cashless economy initiative will be of significant benefit to developing economies. (Kumari & Khanna, 2017). One of the advantages is transparency by making it harder for some people to undertake widespread anonymous and untraceable transactions over and over again (Kenneth S. Rogoff, 2016). The utilization of cash enables protection in transactions and assist in the evasion of taxation (Achord, Chan, Nardani, & Rochemont, 2017).

3. BACKGROUND

Various projects are being implemented in Azerbaijan to raise public awareness of digital payments. However, it is observed that public perception of cashless payments is considerably low, especially in the regions. Lack of awareness of certain groups of the population (pensioners, homemakers) is particularly serious, negatively impacting the cashless transition of the country. According to the data of 2017 E-commerce remained underdeveloped in the country. Less than 1/3 of the population had a bank account, and only 25% had a debit card, many of which were social insurance and salary cards. Mobile money was rarely used due to limits on the amount of a transaction and other restrictions. Overall, just 5% of the population purchased something online, a low rate compared to the world average of 24%. Retail e-commerce in 2016 made only 0.04% of GDP and though its indicator doubled between 2016 and 2017 from $ 15 million to $ 27 million. It was still relatively low, which was closely related to cashless payment underdevelopment. Azerbaijan ranked 68 of 144 countries on the B2C e-Commerce Index, due to low penetration of e-payments, including credit and debit cards, a shortage of domestic online shops, underdeveloped logistics, absence of trust by both buyers and sellers, and lack of digital literacy of people in general. The government intention to increase the level of financial inclusion and the expansion of cashless payment is reflected in the Strategic Road Map on Financial Services Development in the Republic of Azerbaijan and the State Program on Digital Payment Expansion in 2018–2020. In addition, understanding the problem, the Government included the development of e-commerce as one of the priorities of the State Program. The Program was strategically expanding the cashless payments in the economy and thereby minimize the volume of cash payments, to strengthen the base of financial resources of the banking sector, and reducing transaction costs associated with cash circulation. The Central Bank of Azerbaijan launched the Instant Payment System (IPS) in pilot mode, stipulated in the framework of the "State Program on Expansion of Digital Payments in the Republic of Azerbaijan in 2018–2020," with the purpose of presenting new digital payment technologies in the country and growing the access to payment services. As of now, the integration works on 13 banks and the State Treasury Agency on the IPS platform has been completely finished and B2B, C2C payments have been provided in the pilot mode. As IPS will allow to conduct payment transactions between individuals, businesses and government agencies in the regime 24/7/365 through bank accounts using simplified identifiers (PİN code, TIN, mobile number, e-mail) and money will be quickly accessible to the beneficiary's bank account. The launch of IPS will expand the efficiency of electronic payments, as well as provide prompt liquidity for members. The opportunities provided by IPS will invigorate the development of electronic payments among business entities and a significant decrease in the size of the cash economy in Azerbaijan. Due to the implementation of the measures specified in the Strategic Road Map and the Program by the end of 2019, in terms of a number of transactions non-cash payments accounted to 43% of card transactions and in terms of the amount was 19%. As comparison, these figures were 3% and 2% in 2010. At the same time, there was a significant expansion in the number of bank cards in the country.

During 2020, the volume of plastic cards expanded by 26% to 9.14 million. Currently, the quantity of POS-terminals in the country is 56.9 thousand, and the number of ATMs is 2688. Additionally, 29 banks provided Internet banking services and 24 banks offered mobile banking services during the 2020. In 2020 the volume of cashless payments in card transactions amounted to over $1.2 billion, which is 58 per cent higher than that in the same period of 2018. The share of cashless payments amounts to 20.4 per cent of the total card turnover. This exceeds the indicator of the same period of 2018 by 4.2 per cent. During the COVID-19 pandemic banks of Azerbaijan Republic became more active in expanding e-banking by increasing the use of contactless technologies. For the aim to stimulate cashless transactions during a pandemic and lessen the costs of economic entities for these services, the Central Bank of Azerbaijan decided to reduce the service fees charged to banks in interbank payment systems, to decrease the tariffs for payment cards of entrepreneurs by 50 %.

4. RESEARCH METHODOLOGY

This study examines the perception of the cashless transaction, the effect of incentives encouraging people to avail cashless transactions, as well as poor internet connection and lack of security as impediments to the development of the cashless economy in Azerbaijan. During the research, the following research questions will be answered.

- H1: Cashless transactions are more convenient than cash transactions for daily transactions
- H2: Lack of security and safety in transaction are the main concerns in cashless payments
- H3: Poor Internet connectivity, lack of technical knowledge are the obstacle for cashless transactions.
- H4: There is a significant relation between age and choice of payment method

This study is based on primary data. Primary data were collected through a survey method conducted in Baku, Azerbaijan in January – February 2021. It is based on a well-structured questionnaire that was conducted to study the awareness and perceptions of customers toward cashless transactions. The questionnaire was used for collecting data. The questionnaire was developed based on past experience of the researchers and review of literature on the topic done by the researchers. The questionnaire consists of eleven questions out of which four questions related to the profile of respondents. Five level Likert scale was also used in the questionnaire with eight statements. The stratified random sampling technique was used for research and the sample size is 179. The data collected was analyzed based on simple statistical tools and techniques for explaining the results regarding the perception and awareness toward cashless transactions. Chi-square test is used for testing the hypotheses.

5. ANALYSIS AND DISCUSSION OF RESULTS

Demographic conditions of respondents, such as gender, age, occupation, education, have made a significant influence on the perception, awareness and use of cashless transactions.

Table following on the next page

Demographic Group	Category	Frequency	Percentage
Gender	Male	89	49.7%
	Female	90	50.3%
Age Group	Below 24 years	32	17.9%
	25–35 years	44	24.6%
	36–45 years	34	19%
	46–55 years	30	16.7%
	56–64 years	27	15.1%
	Above 65 years	12	6.7%
Occupation	Full-time Employee	88	49.2%
	Student	20	11.2%
	Pensioner	19	10.6%
	Part-time employee	14	7.8%
	Unemployed	38	21.2%
Education level	Higher Secondary	39	21.8%
	Bachelors/Diploma	72	40.2%
	Masters	33	18.4%
	Doctorate/PhD	17	9.5%
	Professionally qualified	18	10.1%

Table 1: Demographics of Respondents
(Source: Primary data)

Table 1 illustrates the demographic profile of respondents, which show that 90 or 50.3% of respondents, are female, where 89 or 49.7% are male. Out of 179 respondents surveyed, 17.9% respondents' age is below 24 years, 24.6% respondents' age is between 25 and 35 years, 19% respondents' age group is between 36 and 45 years, 16.7% respondents' age is between 46 and 55 years, 15.1% respondents' age is between 46 and 55 years and remaining 6.7% respondents' age is above 65 years. 49.2% of respondents are full-time employee, 11.2% are students, 10.6% are pensioners, 7.8% are part-time employees and the remaining 21.2% are unemployed. Among 179 respondents surveyed, 21.8% of respondents have a Higher Secondary degree, 40.2% have a Bachelors degree, 18.4% have a Masters degree, 9.5% have a Doctorate degree and the remaining 10.1% are professionally qualified. Education and rate of literacy are the key factors affected respondents` attitude to the cashless transactions.

Methods	Frequency	Percentage
Cash	109	60.9%
Credit/debit card	42	23.5%
Mobile or online banking	69	38.5%
Other	6	3.4%

Table 2: Use of Cash-Transactions methods by the respondents
(Source: Primary data)

Table 2 shows that methods to use the cashless transaction by the respondents. 60.9% of the respondents were used Cash, 38.5% of the respondents used mobile or online banking, 23.5% of the respondents through credit or debit card and 3.4% used Pay Points. The study reveals that the respondents used cash for paying for regular household expenses.

Frequency	Number of Respondents	Percentage
Daily	2	1.1%
Weekly	26	14.5%
Monthly	74	41.3%
Only in case of emergency	53	29.6%
Never	24	13.4%

Table 3: Frequency of Cash Withdrawal from ATM
(Source: Primary data)

Table.3 indicates frequency of cash withdrawal from ATM by the respondents. 41.3% of respondents performed cash withdrawal in monthly basis, 29.6% of the respondents conducted cash withdrawal only in cases of emergency. 14.5% of the respondents are stated that weekly, 13.4% of respondents never conducted cash withdrawal. The remaining 1.1% of the respondents stated that daily.

Frequency	Number of Respondents	Percentage
More than 2 times per month	19	10.6%
1–2 times per month	56	31.2%
More than 2 times per year	17	9.5%
1-2 times per year	26	14.5%
Never	61	34.1%

Table 4: Frequency of Shopping on the Internet
(Source: Primary data)

Table 4 shows the recent frequency of shopping on the Internet by the respondents. 34.1% of respondents had never been shopping on-line, 31.2% of the respondents are stated that 1–2 times per month, 14.5 % of the respondents are stated that 1-2 times per year, 10.6 % of respondents more than 2 times per month.

Reasons	Number of Respondents	%age
Due to the COVID-19 pandemic.	63	35.1%
To shop at any time	69	38.5%
To save time and money	78	43.5%
To buy goods not available in Baku	94	52.5%
To get better selection	57	31.8%

Table 5: Reasons for purchasing on-line
(Source: Primary data)

Table 5 shows the reasons to purchase on-line. 52.5% showed the possibility of buying goods unavailable in Baku as the main reason, then 43.5% stated that with the help of online shopping they can save time and money, 38.5% believe they can shop any time, 35.1% of respondents indicated COVID-19 pandemic and 31.8% believe that there is a better selection online.

Opinion	Number of Respondents	%age
Strongly Agree	59	33%
Agree	61	34.1%
Neutral	40	22.3%
Disagree	14	7.8%
Strongly Disagree	5	2.8%
Total	179	100%

Table 6: Statement: Cashless transactions are more convenient than cash transactions for daily transactions
(Source: Primary data)

The data in Table 6 indicate that, 33% of respondents strongly agree, 34.1% of respondents agree, 22.3% of respondents are neutral, 7.8% of respondents disagree and remaining 2.8% of respondents strongly disagree about cashless transactions are more convenient than cash transactions for daily transactions in Azerbaijan. It is concluded that majority of the public (67.1%) felt that cashless transactions are more convenient than cash transactions for daily transactions in Azerbaijan.

χ2-test

- H0: Cashless transactions are no more convenient than cash transactions for daily transactions
- H1: Cashless transactions are more convenient than cash transactions for daily transactions

Observed Frequency (Oi)	Expected Frequency (Ei)	(Oi-Ei)	(Oi-Ei)2	(Oi-Ei)2/ Ei
59	35.8	23.2	538.24	15.03
61	35.8	25.2	635.04	17.73
40	35.8	4.2	17.64	0.49
14	35.8	-21.8	475.24	13.27
5	35.8	-30.8	948.64	26.5
Total (χ2)				73.02

Table 7: χ2-test in respect of convenient of cashless transactions
(Source: Authors calculations)

Calculated value of χ2=73.02. The critical value of χ2 at 4 degrees of freedom at 5% level of significance is 9.488. Calculated value is greater than Critical Value i.e., 73.02>9.488, Hence, H0 is rejected and the alternative hypothesis which proposes that cashless transactions are more convenient than cash transactions for daily transactions is accepted.

Table following on the next page

Statement	Opinion	Number of Respondents	Percentage
Lack of Security and Safety in transaction are the main concerns in cashless payments	Strongly Agree	23	12.8%
	Agree	59	33%
	Neutral	54	30.2%
	Disagree	38	21.2%
	Strongly Disagree	5	2.8%
Poor internet connectivity is the obstacle for cashless transactions	Strongly Agree	43	24%
	Agree	82	45.8%
	Neutral	30	16.8%
	Disagree	21	11.7%
	Strongly Disagree	3	1.7%
Lack of technical knowledge is the obstruction for cashless	Strongly Agree	41	22.9%
	Agree	74	41.3%
	Neutral	31	17.3%
	Disagree	27	15.1%
	Strongly Disagree	6	3.4%
e-Commerce is cost effective, safe and improves the way the customers use, including buying of goods/services.	Strongly Agree	35	19.6%
	Agree	82	45.8%
	Neutral	40	22.3%
	Disagree	17	9.5%
	Strongly Disagree	5	2.8%

Table 8: Analysis of Respondents Perception in respect of Internet Banking
(Source: Primary data)

The data in Table 8 show that 12.8% of respondents strongly agree, 33% of respondents agree, 30.2% of respondents are neutral, 21.2% of respondents disagree and the remaining 2.8% of respondents strongly disagree that lack of security and safety are the main concerns in cashless transactions. It is concluded that the majority of the public (45.8%) strongly agree with this statement. The data in Table 8 indicate that, 24% of respondents strongly agree, 45.8% of respondents agree, 16.8% of respondents are neutral, 11.7% of respondents disagree and the remaining 1.7% of respondents strongly disagree that poor Internet connectivity challenges cashless payments. It is concluded that most of the respondents (69.8%) strongly agree with this statement. The data in the above table show that 22.9% of respondents strongly agree, 41.3% of respondents agree, 17.3% of respondents are neutral, 15.1% of respondents disagree and the remaining 3.4% of respondents strongly disagree that lack of technical knowledge is the obstacle for cashless transactions. It is concluded that most of the respondents (64.2%) believe that technical knowledge is crucial for a cashless economy. As shown in Table 8, 19.6% of respondents strongly agree, 45.8% of respondents agree, 22.3% of respondents are neutral, 9.5% of respondents disagree and the remaining 2.8% of respondents strongly disagree that e-Commerce is cost effective, safe and improves our way of living, including good and services purchase. It is concluded that most public (65.4%) agreed with this statement.

- H_0: Lack of Security and Safety in Transaction are not the main concerns in cashless Payments
- H_1: Lack of Security and Safety in Transaction are the main concerns in cashless Payments

Observed Frequency (Oi)	Expected Frequency (Ei)	(Oi-Ei)	(Oi-Ei)2	(Oi-Ei)2/ Ei
23	35.8	-12.8	163.84	4.58
59	35.8	23.2	538.24	15.03
54	35.8	18.2	331.24	9.25
38	35.8	2.2	4.84	0.14
5	35.8	-30.8	948.64	26.5
Total (χ2)				55.5

Table 9: χ2-test in respect of Security and Safety in Transaction as main concerns in cashless Payments
(Source: Authors calculations)

Calculated value of χ^2=55.5. The critical value of χ^2 at 4 degrees of freedom at 5% level of significance is 9.488. Calculated value is greater than Critical Value i.e., 55.5>9.488, Hence, H0 is rejected and alternative hypothesis which proposes that Lack of Security and Safety in Transaction are the main concerns in cashless Payments is accepted.

χ2-test
- H0: Poor Internet connectivity is not the obstacle for cashless transactions.
- H1: Poor Internet connectivity is the obstacle for cashless transactions.

Observed Frequency (Oi)	Expected Frequency (Ei)	(Oi-Ei)	(Oi-Ei)2	(Oi-Ei)2/ Ei
43	35.8	7.2	51.84	1.45
82	35.8	46.2	2134.44	59.62
30	35.8	-5.8	33.64	0.94
21	35.8	-14.8	219.04	6.12
3	35.8	-32.8	1075.84	30.05
Total (χ2)				98.18

Table 10: χ2-test in respect of Poor internet connectivity as an obstacle for cashless transactions
(Source: Authors calculations)

Calculated value of χ^2=98.18. The critical value of χ^2 at 4 degrees of freedom at 5% level of significance is 9.488. Calculated value is greater than Critical Value i.e., 98.18>9.488, Hence, H0 is rejected.

- H0: Lack of technical knowledge is not the obstruction for cashless transactions.
- H1: Lack of technical knowledge is the obstruction for cashless transactions.

Table following on the next page

Observed Frequency (Oi)	Expected Frequency (Ei)	(Oi-Ei)	(Oi-Ei)2	(Oi-Ei)2/ Ei
41	35.8	5.2	27.04	0.76
74	35.8	38.2	1459.24	40.76
31	35.8	-4.8	23.04	0.64
27	35.8	-8.8	77.44	2.16
6	35.8	-29.8	888.04	24.81
Total (χ2)				69.13

Table 11: χ2-test in respect of Lack of technical knowledge as a obstruction for cashless transactions
(Source: Authors calculations)

Calculated value of χ2=69.13. The critical value of χ2 at 4 degrees of freedom at 5% level of significance is 9.488. Calculated value is greater than Critical Value i.e., 69.13>9.488, Hence, H0 is rejected.

- Ho: There is no relation between age and choice of payment method
- H1: There is a significant relation between age and choice of payment method

Age Group	Observed Values (O)	Expected Values (E)	(O-E)	(O-E)2	(O-E)2/ E
Cash					
Less than 24	15	8.20	6.80	46.29	5.65
25–35	18	13.26	4.74	22.48	1.70
36- 45	14	10.13	3.88	15.02	1.48
46–55	24	11.33	12.67	160.52	14.17
55-64	25	8.20	16.80	282.36	34.45
More than 65	12	2.89	9.11	82.94	28.67
Internet or Mobile Banking					
Less than 24	19	5.16	13.84	191.53	37.11
25-35	18	8.35	9.65	93.16	11.16
36-45	17	6.38	10.63	112.89	17.71
46-55	10	7.13	2.87	8.21	1.15
55-64	4	5.16	-1.16	1.35	0.26
More than 65	0	1.82	-1.82	3.32	1.82
Debit/ Credit Cards					
Less than 24	0	3.19	-3.19	10.16	3.19
25-35	19	5.16	13.84	191.65	37.17
36-45	11	3.94	7.06	49.88	12.67
46-55	9	4.41	4.59	21.10	4.79
55-64	3	3.19	-0.19	0.04	0.01
More than 65	0	1.13	-1.13	1.27	1.13
Pay Points					
Less than 24	0	0.46	-0.46	0.21	0.46
25-35	0	0.74	-0.74	0.54	0.74
36-45	0	0.56	-0.56	0.32	0.56
46-55	4	0.63	3.37	11.36	18.05
55-64	2	0.46	1.54	2.39	5.24
More than 65	0	0.16	-0.16	0.03	0.16
Total (χ2)					**239.48**

Table 12: χ2-test in respect of relation between age and choice of payment method
(Source: Authors calculations)

Calculated value of $\chi 2=239.48$. The critical value of $\chi 2$ at 15 degrees of freedom at 5% level of significance is 24.996. Calculated value is greater than Critical Value i.e., 239.48>24.996, Hence, H0 is rejected. The study revealed that age plays an important role in the choice of payment method.

6. LIMITATION AND TURTHER RESEARCH

The study has a couple important limitations that influence the generalizations of the findings. This study was conducted on a smaller sample size of 179 respondents in Baku city. The size of the sample is insignificant to make generalizations on the awareness of the cashless economy. Future studies should consider a significant number of respondents proportionally distributed from different regions of Azerbaijan. We observed the opinion of individuals (customers), however, it is also possible to explore the view of businesses starting from small shops to global companies. In addition, we explored the positive correlation between age and electronic payment use, in further research education, gender, occupation influence should also be considered.

7. CONCLUSION

This study focused on the awareness of cashless payments, perception and attitude to e-Commerce among Azerbaijani consumers. It investigates the impact of perceived ease of use, incentives, lack of security and safety, poor Internet connectivity, lack of technical knowledge, e-Commerce adoption on the use of cashless payment among respondents. This study adopts a quantitative approach using a questionnaire survey among 179 respondents in Azerbaijan. The results reveals that hypotheses regarding perceived ease of use and incentives of cashless transactions are supported. Study also confirmed that lack of technology knowledge, followed by Internet connectivity and security obstruct the transition to a cashless economy. The finding reveals that due to these factors that cash remains preferable method of payments, despite the increase level of non-cash payments. The study concludes that education, rate of literacy and age have a significant impact on the choice of payment method. In addition, e-Commerce use would motivate people to adopt non-cash payment services. Therefore, the government and financial institutions should raise awareness among consumers, so that they understand how non-cash payment services would be more beneficial, easy to use, and less risky to improve their intention to use Internet banking services in Azerbaijan.

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CURRENT STATUS AND SOCIO-ECONOMIC ASPECTS OF THE AGRICULTURAL INSURANCE SYSTEM IN AZERBAIJAN

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ABSTRACT

The agricultural sector, which is one of the real and non-oil sectors of the economy, plays an important role in the life and well-being of people, especially those living in rural areas. Features of agriculture, which is one of the areas of material production, are primarily conditioned by natural and biological factors. It can save small and recurring risks by using risk reduction techniques (such as irrigation, crop management, and pest prevention), self-insurance tools such as savings, and conventional credit in farms. However, agricultural producers are unable to handle the less but more severe losses that affect agricultural activities. In this case, farmers transfer risks to other parties through financial instruments such as insurance when they are available and accessible. Owing to agricultural insurance, farmers take measures in advance against losses that may arise from risks and gain more confidence in the activity of the farm and increase its well-being. As a result, the socio-economic well-being of farmers living in rural areas is also relatively ensured. The development of agricultural insurance, which is one of the optimal methods of risk management in agriculture, has become a global trend, and major steps have been taken in this area in the country. During the government measures a law was adopted in this area and an Agricultural Insurance Fund was established. However, the next steps should be taken to systematically consider the next steps and bring Agricultural Insurance into operation. That all these nuances lead to positive trends on a global scale, the choice of optimal development directions by the existing climate in the country's agricultural insurance, and the study of solutions to existing problems in this area have become an actual issue.
Keywords: agricultural insurance, farming, finance, risk, socio-economic

1. INTRODUCTION

Agricultural insurance-insurance of agricultural crops or animals. Often, agricultural insurance is carried out under a property insurance license (different from fire insurance). In the practice of crop insurance, several types of insurance products are divided-fire and hail insurance, separate hail, multi-risk insurance (or combined), insurance against named risks. The most common insurance against named risks and insurance against hail, fire. Multi-risk insurance-insurance against most or a set of numerous risks, usually weather, but may also include risks of damage to crops by diseases or pests, wild animals, illegal actions of third parties, and others. Multi-risk crop insurance is a term that comes from the North American insurance practice. In European practice, it is called combined insurance (Spain). In some countries, multi-risk insurance is mistakenly called complex insurance, which is not methodologically correct (complex insurance-insurance of various objects under the same insurance contract/policy, for example, animals, crops, machinery, buildings) [3]. Multi-risk insurance is usually expensive, so it usually develops in the presence of state subsidies or other forms of state support.

The loss rate for multi-risk insurance is higher than for other types of agricultural insurance products. Recently, crop insurance based on weather and yield indices has been actively introduced in some countries. The main objective of these new products is to reduce administration costs and reduce the risks of anti-selections and information asymmetry. The impact of these types of risks is more local, for example, they are not so common in geographical areas as floods, frost, or droughts. That is why the private companies, which exist in the insurance services market in Europe at the time, these companies were able to concentrate a sufficient number of different insurance contracts in their portfolios. These contracts which concluded with agricultural crop producers have different profiles in accordance with various directional risks, thus it was enabling the optimization of the overall risk of the portfolio and the implementation of profitable operating activity. Management of agricultural production risks in farms is based on the optimal combination of material-technical means and available financial resources. Agricultural producers can retain small and recurring risks in their own farms using risk mitigation methods (e.g: irrigation, management of products, and prevention of pests, as agro and measures of zootechnics), self-insured tools such as savings to resources, and a conventional loan. At the same time, farmers have difficulty managing the less likely risks that impact agricultural activities and the risks that cause more serious damage. In this case, farmers transfer these risks to other parties (usually agrarian insurance companies) through insurance mechanisms. Private insurance systems created for agricultural crop producers at that time are still operating in some European countries, such as Germany, Great Britain, and Ireland [3]. The development of agricultural insurance, which is one of the optimal methods of risk management in agriculture, has become a global trend, and major steps have been taken in this area in the country.

2. SOCIO-ECONOMIC ASPECTS OF THE AGRICULTURAL INSURANCE

The low attractiveness of agricultural production in comparison with other sectors of the economy is largely due to its inherent increased exposure to risks. The availability of effective tools to reduce risks in agriculture should have a positive impact on its investment attractiveness and increase the sustainability of the agricultural sector. From this perspective, insurance can provide a positive impact on long-term growth in the agricultural sector and thus on the stabilization of rural incomes. At the same time, world experience shows that insurance can become a poorly effective tool for risk management and ensure the irrational use of financial and other resources. With the deepening integration into the global space, these issues are also on the agenda in countries with economies in transition. However, the solution to these issues largely depends on how well the legal framework, organizational and market infrastructure is developed. In this regard, countries with economies in transition may face a more complex question due to the underdeveloped institutional prerequisites. In addition, it should be noted that in these countries, the above problems are solved in parallel with the process of optimizing the use of basic production resources [2]. The main task of the transition period is to overcome and correct the consequences of the false economic decisions that were made in many socialist countries in the past, in order to optimally allocate and use the main factors of production: mainly land, labor and capital. Production factors should find their application where they will get the best return. In the case of subsidized insurance of agricultural crops, the distortion of economic signals can disrupt the process of optimal placement of agricultural production. Economic entities will not have the appropriate incentives to adapt their business to the objective economic and climatic conditions under which production is conducted [2]. Therefore, the development of risk management tools in agriculture, including insurance, should take into account the world experience and innovations in this area in these countries, as well as the specifics of the transformation process.

From this point of view, we would like to conclude with the most important aspects of insurance mentioned in the literature, the consideration of which is necessary for the development of an economically sustainable, socially fair and effective insurance system:

- Schemes should not distort market (price) signals;
- Insurance rates and refunds should ensure broad participation in the insurance program. This requirement is especially important at the first stage of the insurance program launch;
- Insurance should not compensate for losses due to incorrect production decisions;
- When developing an insurance product, it is necessary to take into account the phenomenon of natural hedging;
- Mandatory use of deductibles: the policyholder's participation in losses in the event of an insured event can significantly reduce the problem of moral hazard;
- Insurance schemes should be easy to understand and should have a transparent implementation mechanism;
- Strict control of administrative costs should be introduced, especially in the case of subsidized insurance by the state;
- Insurance should be offered only for crops whose production is profitable in a particular region. Insurance should not compensate for losses in marginal regions with high risk and low production potential;
- The role of the state is, first of all, to create the necessary legal, economic and organizational framework;
- Before launching an insurance program on a national scale, it is necessary to test it in pilot regions;
- A clear distinction should be established between the risks of a catastrophic nature and the insured risks, as well as a mechanism for regulating programs of compensation for damage from a catastrophic risk;
- Insurance must be voluntary. Agricultural producers should decide for themselves which risk management tool is best able to solve their problems.

3. ANALYSIS OF CURRENT STATUS OF AGRICULTURAL INSURANCE SYSTEM IN AZERBAIJAN

International experience in selecting a model of agricultural insurance in accordance with the characteristics of the insurance market of Azerbaijan, agricultural conditions and state policy has been investigated. At the same time, successful agricultural insurance companies, as well as the United States, Turkey, Spain, Austria, Canada, Germany, Israel, etc. the experience of countries has been studied. Thus, the main advantages of the agricultural insurance system in the US, Spain, Turkey and Canada have been identified:

- Insurance premiums subsidies
- Wealth of affordable insurance products
- Joint financing against catastrophic risks
- Database for product development
- Positive economic benefits of high participation

As a result of the researches, issues of improvement of legislation and analysis of data, and then implementation of institutional measures were kept in the focus of attention. In the Republic of Azerbaijan it was decided to improve the Agrarian Insurance Policy for the Prevention of losses caused by natural disasters or other causes and on June 27, 2019, the law of the Republic of Azerbaijan "on Agrarian Insurance" was adopted and The "Agrarian Insurance Fund", the Central Institute of Agrarian Insurance System, was established [4].

In order to formalize the new agricultural insurance, which came into force on January 1, 2020, the relevant measures are being continued. Thus, by the decision of the Cabinet of Ministers of the Republic of Azerbaijan No. 431 dated October 30, 2020 "Agrarian Insurance rules", by The Decision No. 238 dated July 6, 2020 "Agrarian Insurance" Information System regulations" and "Agrarian Insurance" Information Systems to be integrated into the information system and the list of information intended to be obtained from them has been approved. In the "composition of Agrarian Insurance subject" approved by the Cabinet of Ministers Decision No. 479 dated December 17, 2019, insurance of 14 names of "agricultural bitkilari and crop products", including rice, tea, cotton, as well as tangerines, oranges and lemons belonging to the Citrus bitkilari group is planned. At the same time, "composition of the risks guaranteed by Agrarian Insurance" was approved by the decision of the Cabinet of Ministers of the Republic of Azerbaijan No. 505 dated December 27, 2019. The risks on agricultural insurance items include natural disasters (earthquake, landslide, Hurricane, hail), burns and actions of third parties on agriculture and plant products [6]. The following problems and shortcomings in the country's agricultural insurance system have prevented the system from operating:
a) limited database (insufficient number of contracts to calculate tariffs, inaccessibility of required environmental and phenological information);
b) lack of methodology for calculating tariffs in the field of agricultural insurance;
c) lack of underwriting experience in agricultural insurance;
d) insufficient level of operations with foreign and domestic reinsurers in the relevant field;
e) high losses on agricultural insurance [1].

Taking into account the above-mentioned problems, the insurance of all plants and all risks pose a threat to the financial sustainability of the Agrarian Insurance Fund. At the same time, taking into account the gradual transition of countries to full-scale insurance in international practice, it was proposed to insure 14 agricultural crops at the initial stage. The Agrarian Insurance Fund in Azerbaijan has selected specific insurance items for the following risks in agriculture:

Table 1: On subjects of insurance and guaranteed risks on crops [6]

	Crop name	Guaranteed risks	The need to choose the subject
1	Wheat	Hail, Fire, Storm, Hurricane, Landslide, Earthquake	It is necessary in terms of strengthening food security
2	Barley		
3	Corn		
4	Potato		
5	Sugar beet		
6	Orange	Hail, Fire, Storm, Hurricane, Landslide, Earthquake, Loss of quality due to hail	It is the subject of import substitution policy
7	Lemon		
8	Tangerine		
9	Tea	Hail, Fire, Storm, Hurricane, Landslide, Earthquake	
10	Tobacco		
11	Rice		
12	Grapes	Hail, Fire, Storm, Hurricane, Landslide, Earthquake, Loss of quality due to hail	It is necessary in terms of strengthening **export potential**
13	Hazel	Hail, Fire, Storm, Hurricane, Landslide, Earthquake	
14	Cotton		

Also, in case of payment of an additional insurance fee, under the agreement with the insurance contract, the possibility of insurance against the risks of the spread of plant diseases and pests, as well as special dangerous pests, is offered to farmers. The requirements for the improved ACS to apply for insurance to the relevant insurance company after registration in the Electronic Agricultural Information System to farmers who want to benefit from agricultural insurance have also been established. At the same time, with the decision no 08/2 of the Board of Directors of the Central Bank of the Republic of Azerbaijan dated March 4, 2020, on the determination of the" minimum amount required by the insurer "the minimum amount required for the" joint insurer implementing the management of the Agrarian Insurance System on behalf of the Agrarian Insurance listed. The first Agrarian Insurance contract was concluded as a pilot on November 25, 2020, and insurance was carried out by The Agrarian Insurance Joint-Stock Company formed from a legal and organizational point of view. Currently, Agrarian Insurance Fund provides relevant insurance services to farmers through Agrarian Insurance Joint Insurance Company on agriculture crop products (including perennial crops and their products), agricultural animals and agricultural animals, and aquaculture products. From 2020, the Agrarian Insurance Fund has started to insure agricultural products, arable land and farm animals with state support. Thus, on November 3, 2020, dairy cows were insured for the first time in a livestock farm in the Tartar region. After that, insurance of arable lands and farm animals was started in other regions of the Republic. To conduct an economic analysis on the current state of agricultural insurance in Azerbaijan, it is necessary to look at the dynamics of changes in statistical indicators. The following table presents the data for the 2015-2020 in the field of plant and animal husbandry in Azerbaijan. So, Although insurance premiums collected on crop insurance in 2020 amounted to 9.2 thousand manats, no insurance payments were made. Insurance premiums in the livestock sector amounted to 2.84 million manats, insurance payments amounted to 613.0 thousand manats. The total amount of agricultural insurance premiums was 2.8 million manats [5]. The 2015-2020 years trend of agrarian insurance premiums and payments is described in the following chart:

Figure 1: Agrarian insurance premiums and payments trend in Azerbaijan for 2015-2020, thousand manats
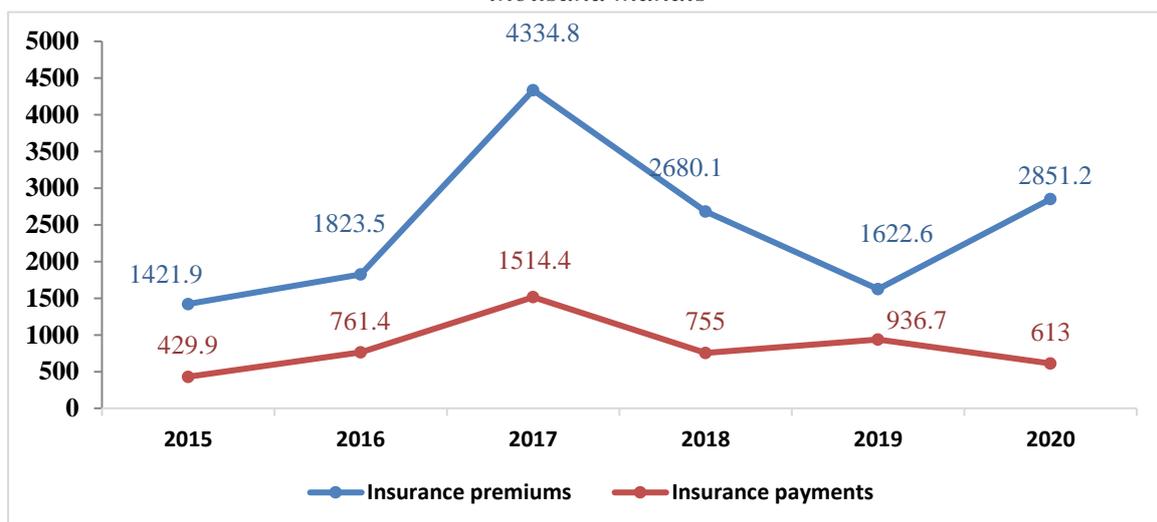
Source: Central Bank of Azerbaijan (https://www.cbar.az/page-189/insurance) [5]

It is shown that agricultural risks are higher than those of other sectors, increasing insurance literacy in this area, enlightenment of farmers and requiring government support for insurance companies.

4. CONCLUSION

Proper agricultural risk assessment is a prerequisite for the development of sustainable agricultural insurance programs. Besides, formation of agricultural and hydrometeorological information base and further improvement of information infrastructure are required. In addition, supporting for the development of innovative agrarian insurance products and services is important for servicing to small-scale farms and expanding the overall market. In other words, agricultural insurance products should be tailored to the customers who are targeted. Several factors must be taken into consideration when developing a comprehensive agricultural insurance strategy for the country:

a) understanding the economic and social importance of the agricultural sector;
b) distribution of agricultural producers in agribusiness segments;
c) risk assessment that affecting agricultural production;
d) harmonization of risk management strategies implemented by agricultural producers and the state;
e) assessment of financial sector activity in rural areas.

Although important work has been done at the state level in the field of Agrarian Insurance in Azerbaijan, there are still problems in attracting the private sector due to sectoral characteristics. Thus, in order for private insurance companies to be interested in insuring agricultural risks, reinsurance companies are not operational. At the same time, The Agrarian Insurance Fund has started its activity since 2019 and is expected to show its effect on the development of this sector in the coming years.

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THEORETICAL FOUNDATIONS OF THE DEVELOPMENT OF THE DIGITAL ECONOMY IN MODERN CONDITIONS

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ABSTRACT

The article considers the study of the needs of finding new sources of economic growth in Azerbaijan - first of all, in the field of innovative development, which, with the explosive development and large-scale penetration of new technologies in all spheres of human activity, takes on new meaning. The significance of the ongoing global changes suggests that Azerbaijan, like the whole world, is entering the largest technological period in its history, when the wealth of natural resources ceases to be the main growth factor, giving way to a knowledge paradigm. Together, these changes are rated as a "new industrial revolution." The widespread use of information and communication technologies and the need for a transition to the Information Society and the knowledge-based society provide economic growth in conditions of increased environmental protection, accelerating the reduction of physical consumption in favor of information and the capitalization of knowledge, moving the center of gravity of investments in fixed assets, investments in human capital. According to these conditions, information is a key resource for a new model of the economy, i.e. digital economy. The new economic model is characterized by the growing incorporation of knowledge into new products and services, the increasing importance of learning and innovation, globalization and sustainable development. This article is considered appropriate to consider this new model of the economy, highlighting specific functions and main components. In turn, the digital economy is characterized by a set of procedures that radically change the relationship between business partners and investors, introducing a consistent growing civic consciousness.
Keywords: *innovation policy, technological revolution, digital economy, globalization*

1. INTRODUCTION

At all times, technological innovation has had a decisive influence on the formation of global economic trends. Today, the so-called digitalization, the result of rapid innovative breakthroughs and scientific discoveries in the field of information and digital technologies, is the primary stimulator of expanding and reformatting international economic relations. Not only Azerbaijan faces the challenges of economic development. In the late 2000s and early 2010s, the majority of industrialized countries showed a tendency toward a decrease in labor productivity growth rates. Since 2011, the values of productivity growth have fluctuated at borders not exceeding 1% per year (this is two or more times less than in the period 1990-2013). The potential for further growth in labor productivity, under the conditions of the existing economic and technological structure, turned out to be close to exhaustion in both traditional production and non-productive sectors. The digital economy is not just an economic activity in the production of digital (virtual) goods and services, but an economy in which an increase in its performance is achieved by expanding the satisfaction of the needs of customers integrated into digital processes; development of innovative cooperation in the markets using information networks to create digital ecosystems; technological improvement of products and services based on digital solutions; digital restructuring of business processes and organizational forms of company management. Thus, we can say that the digital economy is a system of social, economic and technological relations, functioning in the global information space through the widespread use of networked digital technologies.

It generates new types and forms of production and promotion of products and services to the consumer, which lead to continuous innovative changes. From a technological point of view, it is the result of the mutual imposition of fundamental breakthroughs in the development of several branches of intellectual activity, including the creation of cyber physical and cyber biological systems, fundamentally new materials, new means of production, information technology, genetic engineering, renewable energy sources, etc. Transition to the digital economy is characterized by technological explosions, which is understood as a combination of technologies that makes it possible to create s products and services on the one hand, the formation of new areas of activity, and on the other - to destroy or radically alter existing economic sectors. Technical development is exponential: every year new high-tech technologies become more advanced (increasing the capacity and speed of information processing), and their physical embodiment - all better (reducing the size and cost of material information carriers). It can be assumed that it was the change in technological mode and the next industrial revolution that caused the emergence of the digital economy. According to many experts, we are talking about changing the paradigm of economic development - the digital revolution, comparable in importance to the agricultural, industrial and scientific-technical. The use of the term "revolution" does not speak of the spasmodic nature of changes (which, unlike political revolutions, in all four cases are cumulative in the gradual transition of quantity into quality), but about their radicalism — the formation of a new model of the economic structure of society. The paradigm shift in economic development is characterized primarily by a change in the nature of the division of labor.

2. RESEARCH

The digital revolution of the beginning of the XXI century marks the separation of development centers from production and service units, the redistribution of most of the created social wealth into the sphere of intellectual and organizational activity. In contrast to the industrial one, the reverse process takes place: the individualization of products and the return of the production of a significant part of consumer goods and services to households based on the improvement of household appliances, and in the near future - the independent production of many goods at home through 3D printers. Due to computerization and automation of the vast majority of operations, including those related to decision-making, there is a crowding out of living labor by robotic complexes and artificial intelligence systems. The result of the digital revolution is a gradual transition to network forms of economic interaction, which are based on the formation of sustainable ties between business entities based on a constant direct exchange of information and building mutual trust between a very wide circle of people. The study of the needs of finding new sources of economic growth in Azerbaijan, primarily in the field of innovative development, which, under the conditions of explosive development and large-scale penetration of new technologies in all spheres of human activity, takes on new meaning. The significance of the ongoing global changes suggests that Azerbaijan, like the whole world, is entering the largest technological period in its history, when the wealth of natural resources ceases to be the main growth factor, giving way to the knowledge paradigm [3]. Together, these changes are assessed as the "new industrial revolution" [1], leading to the formation of a new socio-economic formation - the "digital economy", based on the large-scale introduction of Nano-, bio-, information-communication, and cognitive technologies, and the transition from mass production of standardized products to flexible high-performance production that produces individualized products [2]. The World Economic Forum and the G20 (G20) define the digital economy as a wide range of economic activities, including all jobs in the digital sector, as well as digital classes in non-digital sectors. These include events that use digitized information and knowledge as a key factor in production, modern information networks as an important area of activity, and information and communication technologies (hereinafter - ICT) to increase

productivity and optimize economic structures [4]. As an example, in particular, in 2017, the Chinese e-commerce giant Alibaba generated sales of 168.3 billion yuan (25.3 billion US dollars) in just 24 hours during the "Lonely Day" event. Similarly, Amazon's US company has doubled its net sales revenue in three years, as a sign of growing confidence in digital technology, Alibaba is pumping another $ 2 billion to its e-commerce platform in Singapore, resulting in a total investment of 4 billion dollars in 2017, and Amazon launched its first two-hour Prime Now service in Singapore in July 2017, all at a time when the traditional retail sector is facing growing challenges. In the United States, long-standing retail giants such as Walmart and Macy's are closing stores amid falling sales, while Toy's R 'Us filed for bankruptcy in September 2017. [5] The widespread use of information and communication technologies and the need for a transition to the Information Society and the knowledge-based society provide economic growth in conditions of increased environmental protection, accelerating the reduction of physical consumption in favor of information and the capitalization of knowledge, moving the center of gravity of investments in fixed assets, investments in human capital. It goes without saying that the Information Society integrates the object of sustainable development on the basis of social rights and equal opportunities, freedom, cultural diversity and innovative development, environmental protection, and restructuring of industry and business. In addition, individual initiative, solidarity, cooperation and mutual trust in the workplace are key success factors in the information society. The digital economy is citizen-oriented, so we are faced with a new citizen orientation, which is subordinate to service providers, which pays taxes for receiving funds, including how government money is spent. Thus, the digital economy has dynamic facts that are consistent with structural updates and an information plan. [6] It should be noted that new digital technologies make access, storage and transmission of information more easy and affordable, therefore we are dealing with digital information that can be transformed into new economic and social values, creating enormous opportunities for the development of new products and services. According to these conditions, information is a key resource for a new model of the economy, i.e. digital economy. The new economic model is characterized by the growing incorporation of knowledge into new products and services, the increasing importance of learning and innovation, globalization and sustainable development. This article is considered appropriate to consider this new model of the economy, highlighting specific functions and main components. In turn, the digital economy is characterized by a set of procedures that radically change the relationship between business partners and investors, introducing a consistent growing civic consciousness. Due to the global nature of this type of economy, we presented some aspects of the digital economy in the European Union, given that this may be a possible solution to the economic crisis, the release of a new model of the economy based on the digital economy, analyzed in its various aspects by many political factors and various institutions and international organizations [6]. On the European continent, authorities intend to consistently support the development of the digital economy in the coming years, believing that it will attract about 110 billion euros. Strengthening the digital economy can act in different ways, the main of which is the creation of a scale economy for service providers and the liberalization of some European citizens, which will become a real power train to achieve a unique digital space accessible from any European country. The Internet has become a true multi-billion-dollar industry, a vital infrastructure for the global economy. The Internet decides how people live, bringing a greater variety of goods and digital services, lowering prices, improving data collection, several channels and social networks. For firms, the shift to digital has forced them to rethink their business models and constantly adapt to survive in the global market. The digital economy is seen as the pinnacle of the economy as a whole because of its economic consequences, which are associated with a reduction in resource consumption, an increase in innovator and entrepreneurial spirit, an increase in labor productivity, a speed of production and a change in

economic phenomena and processes, an increase in value added, etc. In the new economy, the development promoter is digitization (using information technology to produce the distribution of goods and services), in particular, the use of the Internet and other information technologies (smart cards, voice based on calculations, wireless, databases, telecommunication and expert systems) in service sector, which includes 80% of jobs. The economic crisis and the sustainable recovery of Europe can be achieved by using the potential of the digital economy, in particular, on the continent, where there is a generation of young, good specialists in the field of digital technologies, which is a powerful incentive for the development and promotion of innovation. This "resource" is a powerful incentive for the development of the market in the direction of development and innovation, since from the very beginning work influences and dominates the growing market [7]. All of the above factors represent the most important trends in the digital economy and a number of conclusions that indicate the role and importance of this new type of economy. As part of the Digital Azerbaijan project, our republic sets the following tasks for the implementation of this project for 2017. - 2020 In particular:

- creation of a new regulatory framework in the field of digitalization of the economy;
- stabilization in the field of broadband services;
- creation of a digital infrastructure for public services;
- ensuring cybersecurity at the EU level;
- launch of a new industrial strategy in the electronics industry.

The digital economy requires increased knowledge of new products and services, the importance of training and innovation, globalization and sustainable development. A huge amount of information is changing the functioning of markets, which makes it possible to restructure enterprises and the emergence of new opportunities for creating value from existing information. Thus, the digital economy is the state of the economy, information obtained in various ways, stored in databases, and its integrated use produced from premises or placed in public positions and related events and transactions of individuals and organizations. It should be noted that the digital economy is an increasing use of information technology (hardware, software, applications and telecommunications) in all aspects of the economy, including internal operations of organizations (business, government and non-profit structures), transactions between enterprises and transactions between physical persons acting both manufacturers and consumers. At the same time, information technologies make it possible to collect and process large volumes of information, stimulate innovation, which opens up great opportunities for organizations to improve quality and efficiency. Thus, it can be determined that this is the main driving factor in the global economy. This type of economy has brought huge benefits, but most importantly, developed countries and developing countries must provide appropriate policies and programs for digital transformation. Thus, in order to be successful in today's economy, people need knowledge and understanding of computer and website skills. Moreover, information technologies have significantly increased the ability to develop new business models, products and services, processes and fundamental inventions. [8] Thus, new laws, rules, standards and regulations, developed with the support of both business opinion and civil society, stimulate the development of some new services of the information society (trade and electronic transactions, computerization of public services, access of citizens and economic agents to public information, etc. etc.), and also ensures compliance with ethical rules for working and living in a new company (protection of confidentiality and personal data, confidential transactions, protection of consumer rights, etc. d.). Many risks, threats and problems of the development of the digital economy require the adoption of measures to neutralize them. Unfortunately, this cannot be done quickly and exclusively at the expense of state resources (since the task of developing the digital economy is positioned as nationally significant) it is impossible.

Integrated efforts are required using both public and private resources. Among the priority tasks that determine the direction of activity, in our opinion, you can specify:

- stimulating the creation and development of a business focused on the digital economy. Already today, a number of companies are operating in the world that can be recognized as world leaders in their segments of the digital economy. The state can provide them with targeted support: provide guarantees for bank loans, including export loans, compensate for part of the costs of patenting, form targeted investment funds, provide support through the public procurement mechanism, etc.;
- additional support for small and medium-sized businesses in the field of creating digital technologies, platforms, and the provision of digital services. This can be achieved, for example, by providing certain benefits to relevant companies (for example, in respect of insurance payments or tax contributions) developing digital technologies, creating healthy competition between such companies, providing them with orders and standards that the final product must meet;
- the formation and scaling of digital platforms for the main sectors of the economy. Now in Azerbaijan and many other countries there are portals for the provision of state and municipal services, platforms for making payments, the tax authorities are transitioning to accept electronic reporting, plastic cards are being introduced for social payments, etc. It should be noted that Azerbaijan has significant problems associated with the introduction of IT in local governments. Local governments themselves are not able to solve these problems, taking into account the subsidized nature of their majority, special support for their digitalization is required from the regional and republican authorities;
- an increase in the training of IT professionals;
- formation of sectoral, regional and countrywide cyber security systems. In particular, it is necessary to finalize legislation regarding the fight against cybercrime, create defense units in law enforcement agencies, develop secure technological solutions, and ensure interaction between all participants in the global digital economy. It should be remembered that security should not impede the growth and development of technology. Cross-country cyber security information exchange should be strengthened.

The digital economy is a new type of economic relations that is already present in all sectors of the world market and is actively developing. The digital economy may soon become a leading segment, a driver of growth and development of the economic system as a whole. This is due to the fact that the digital economy has some advantages over material commodity-money exchanges, such as the speed of delivery of goods or the almost instant provision of services. Another advantage of the digital economy is the lower cost of producing and executing transactions. One of the key advantages of the digital economy over the traditional one is that electronic goods are virtually inexhaustible and exist in a virtual form, while material goods are almost always limited in number and access to them is much more difficult. Today, the electronic economy is already beyond the scope of purely business processes. Digitalization is being introduced into social processes, the successful life activity of people is increasingly dependent on it, in addition, there is a large-scale introduction of digital technologies in the work of government organizations and structures. Digitalization efforts in Azerbaijan are based on the development strategy of the information society and the provisions of the state program "Digital Economy". These documents stipulate the holding of many events and set the basic mechanisms for the digital transformation of the Azerbaijan economy, as well as determine the sources and amounts of financing of the measures planned for implementation. Considering the situation as a whole, Azerbaijan does not occupy a leading position in terms of the development of the digital economy of Azerbaijan, but it is confidently held in the group of countries following the leaders, improving its position from year to year.

At the same time, competition in the area under consideration remains very fierce, therefore, one cannot stop there, the joint work of the state and business on the further development of the digital economy is necessary. In this activity, it is necessary to take into account a number of problems, risks and threats highlighted in the article in order to focus resources and efforts on their neutralization.

3. CONCLUSION
It should be noted that, despite the activation of the modernization agenda and the systematic development of an innovation policy, the "technological" positions of Azerbaijan amid insufficient changes in the world. When choosing priority areas for accelerated development, the emphasis should be placed both on the outstripping development of fundamentally new high-tech sectors and markets, as well as on deep technological modernization of traditional industries and industries, and the development of the digital economy. The combination of these two lines can ensure the frontal launch of the technological revolution already in the medium term, and in the long term achieve economic growth. The tools for the development of the digital economy proposed in this study make it possible to intensify the processes of building up the economic potential for the technological breakthrough. Subsequently, they will be transformed into a set of recommendations for practice and public authorities, which will allow them to change some laws in the field of supporting high technologies and innovations, as well as adjust the directions of strategic development of economic institutions and forecast models of economic development.

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TRANSITION TO A DIGITAL ECONOMY AND ENSURING SUSTAINABLE COMPETITIVENESS IN GLOBAL MARKETS

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ABSTRACT
The problem of digitalization of the economy, the challenges facing business, the state and society as a whole in this regard, the challenges posed by the digital economy, and the opportunities it provides are the object of intensive reflection. Its importance is reflected in the launch of the Global Digital Competitiveness Rating, which is focused on assessing the availability of opportunities and the degree of readiness of the countries included in the rating for digital transformation. The assessments of the progress achieved, as well as bottlenecks and problem areas of the transition to the DE, contained in the rating, are of undoubted interest both for politicians and for business, including in Azerbaijan. Analyzing the formation of the digital economy as a key area of the 4th industrial revolution, it is necessary to dwell on its structural characteristics, without understanding which it is difficult to organize effective management of the relevant processes by regulatory bodies, taking into account their innovative nature. The answer to this question is also important for enterprises (organizations), helping them navigate the radical transformations taking place in the economy, and not only for those of them that belong to the high-tech core of the modern economy. As for the technologies on which the DE development is based, then, according to the well-established ideas among experts, they include the following main ones: analytics of large databases, advanced robotics and sensors, neuroethologies and artificial intelligence, the Internet of things and the industrial Internet, virtual and augmented technologies. reality, cloud computing and a number of others. Meanwhile, for economic analysis, as well as for the orientation of business, and, we will repeat once again, not only the part of it that is employed in the information and communication sector, but also for those working in other, including traditional, sectors of the economy, the first is of considerable interest. from the levels highlighted above for the deployment of the 4th industrial revolution and the formation of the DE, namely, the level of markets and sectors of the economy.
Keywords: *cybersecurity, digital economy, digitalization, digital environment, digital infrastructure*

1. INTRODUCTION

The digital economy, which is based on a qualitatively new type of information and telecommunication technologies, covering and transforming all spheres of modern industrial and social life, although it is in the process of formation, already today has a powerful potential, which, in its implementation, provides a chance for achievement by both companies and countries. leading positions in key areas of socio-economic development. At the same time, as one of the well-known developers of the concept of the 4th industrial revolution, Chairman of the WEF Klaus Schwab emphasizes, it is about leadership in an increasingly global competition in the field of efficiency, productivity and innovation, as well as in ensuring high living standards and well-being understood in a broad sense, including the use of fundamentally new digital forms of communication between people, the use of the opportunities provided by artificial intelligence in meeting the needs of people on the basis of individualized principles [7]. The problem of digitalization of the economy, the challenges facing business, the state and society as a whole in this regard, the challenges posed by the digital economy, and the

opportunities it provides are the object of intensive reflection. Its importance is reflected in the launch of the Global Digital Competitiveness Ranking, which is focused on assessing the availability of opportunities and the degree of readiness of the countries included in the ranking for digital transformation. The assessments of the progress achieved, as well as bottlenecks and problem areas of the transition to the DE, contained in the rating, are of undoubted interest both for politicians and for business, including in Azerbaijan. In this context, the Information Economy Report 2017, prepared by UNCTAD and dedicated to digitalization, trade and development, deserves special attention [3]. The digital society, based on a complex of essentially radial innovations - technological, organizational, institutional, social, etc., raises many sensitive topics. These include, first of all, the question of who is the sovereign of a person's personal data. Further, does the development of digital technologies lead to the establishment of information monopolies or even some kind of "digital dictatorship." Are there technologies that allow for total control over an individual and his data by various state structures and international social networks, or, conversely, within its framework, favorable conditions are created for digital democracy with the transformation of a citizen into a sovereign of digital data and an active participant in ongoing radical transformations. In this regard, K. Schwab notes that new technologies and platforms can provide citizens with increasing opportunities to interact with governments, to publicly articulate their opinions and even to try to circumvent government control. However, at the same time, governments may gain new, technologically enhanced power to strengthen control over the population, based on the systems of comprehensive surveillance provided by the digital infrastructure. However, according to Schwab, in the context of the digital revolution, such attempts by governments will encounter increasing opposition, not only from the society, which does not want to put up with such methods of political decision-making, but also due to the modification of the role of politics itself in the face of increasing competitive pressures. and also as a result of the redistribution and decentralization of power, which become possible thanks to new digital technologies [7]. Among those affecting large segments of the population is the question of who becomes the main beneficiary of the 4th industrial revolution, whether it will lead to a further increase in economic inequality or will contribute to its weakening. And, further, - how to resolve the conflict, which consists in the fact that in the conditions of its deployment, the demand for highly qualified personnel increases, and the need for less educated and insufficiently qualified workers, who are still the majority in many countries, may decrease.

2. FORMATION OF THE DIGITAL ECONOMY

The process of transition to DE, the problems to be solved, are characterized by many facets, the understanding of which requires complex in-depth research. In this article, given its limited size, the authors focus on the following interrelated topics, the selection of which took into account the degree of their relevance, as well as the level of development in the literature. We are talking, firstly, about the structural aspects of the transition to the digital economy as a key link in the 4th industrial revolution in identifying those that may be of primary interest from both theoretical and practical points. Secondly, the main changes that are taking place in the business processes of modern enterprises (organizations) will be studied, including in the conditions of the formation of digital platforms, thanks to which the interactions of business entities are largely organized in a new way. Third, it is proposed to study the relationship between countries' transition to the digital economy and ensuring their sustainable competitiveness, taking into account the innovative nature of the ongoing changes. And, fourthly, possible ways of reflecting in the system of higher education the new requirements that are now imposed on specialists will be highlighted. Analyzing the formation of the digital economy as a key area of the 4th industrial revolution, it is necessary to dwell on its structural characteristics, without understanding which it is difficult to organize effective management of

the relevant processes by regulatory bodies, taking into account their innovative nature. The answer to this question is also important for enterprises (organizations), helping them navigate the radical transformations taking place in the economy, and not only for those of them that belong to the high-tech core of the modern economy. As for the technologies on which the DE development is based, then, according to the well-established ideas among experts, they include the following main ones: analytics of large databases, advanced robotics and sensors, neuroethologies and artificial intelligence, the Internet of things and the industrial Internet, virtual and augmented technologies. reality, cloud computing and a number of others. Meanwhile, for economic analysis, as well as for the orientation of business, and, we repeat once again, not only the part of it that is employed in the information and communication sector, but also for those working in other, including traditional, sectors of the economy, the first is of considerable interest. from the levels highlighted above for the deployment of the 4th industrial revolution and the formation of the DE, namely, the level of markets and sectors of the economy. The core of the DE is indeed the information and communication technology (ICT) industries. In this case, it is of interest, developed by the efforts of the OECD (Organization for Economic Cooperation and Development), a variant of structuring the ICT sector, which complements the current 4th edition of the UN Standard Classifier of Activities (ISIC, Rev.4), reflecting to a certain extent principles of the cluster approach. The proposed definition of the ICT sector, as noted by the authors of this approach, makes it possible to form an internationally comparable statistical basis for measurements by combining those types of economic activities that are formed on the basis of the creation of information and communication goods and services. And to some extent, the cluster approach applied in this case can be regarded as an attempt to more fully reflect the processes of structural and sectoral transformation that accompany the 4th industrial revolution. It should be noted in this regard that Azerbaijan uses a classifier of types of economic activities formed on the basis of ISIC. This makes it possible to carry out not only a comprehensive analysis of this segment of the Russian economy, but also to implement international comparisons, identifying strengths and weaknesses in its development. The need for this is all the higher since a number of research centers are actively studying this segment in priority countries from the point of view of its development, which include, in particular, China [2]. To form a more comprehensive understanding of the structural components of the DE, it is advisable to refer to the UNCTAD Report on the Information Economy 2017 [3]. In this document, following [1], the following three links are distinguished. Firstly, it is the core of the DE, which forms the ICT sector. Secondly, the narrow area of the DE, which, along with the core of the DE, also covers various digital services (for example, call center services) and services of digital platforms (for example, Facebook or Google). Thirdly, a wide area of DE is highlighted, which includes, along with the core of DE and its narrow area, also sectors 4.0 of the industry. These include e-business, e-commerce, artificial intelligence (AI) called the algorithmic economy, ultra-precision agriculture, sharing economy such as Uber, as well as on-line platforms for recruiting personnel and concluding contracts with freelancers. The latter are understood as free workers performing labor functions on the basis of freelance cooperation with the employer, possibly on a remote basis. As noted above, the digital economy is currently undergoing a phase of robust growth. And its place in the modern economy can be judged by the following data. As for the CE core, i.e. production of goods and services in the ICT sector, then in 2015 their volume reached 6.5% of world GDP, and employment in this sector amounted to 100 million workers. Exports of ICT services in the sector increased in the period 2010–2015. by 40%. Sales in the e-commerce sector were $ 25.3 trillion in the same year, of which 90% came from B2B e-commerce and 10% from B2C (business-to-consumer) e-commerce [3]. However, there are many unsolved problems in this area. So, despite the increase in the period 2010–2019 the number of Internet users in the world by 60%, still more than half of the world's population does not have access to these services

[Ibid]. At the same time, this, like other indicators of the degree of penetration of DE technologies into everyday life, should not be interpreted as unconditional indicators of social progress. For example, the famous German neuroscientist Manfred Spitzer warns about the dangers arising from the overload of our minds with digital information coming from computers, smartphones, tablets, etc., which can lead to impaired cognitive abilities and its consequences are akin to "digital dementia"... Of interest are also comparative data on the level of digitalization of the economy and society as a whole in various countries, which are contained, in particular, in the Global Digital Competitiveness Rating. The comparative assessment of countries in this ranking is based on their ability to perceive and effectively use digital technologies as a means of ensuring the transformation of regulatory practices, business models and society as a whole. This assessment is carried out on the basis of three complex factors, which have received the following generalized names: knowledge, technological environment, openness to the future. Each of these factors is further broken down into three sub-factors, which, in turn, are detailed using six indicators. The knowledge factor is understood as a system of knowledge (know-how), which are necessary for the discovery, understanding and creation of new technologies and which are subdivided into the following three sub-factors: talent, education and retraining, scientific concentration. The technology environment factor is subdivided as sub-factors into regulatory framework conditions, capital and technological framework conditions. Openness to the future is detailed through the sub factors of adaptive capacity, business flexibility and IT integration [4]. According to this rating, the top ten countries in terms of digitalization in 2017 included the following (from first to tenth places, respectively): Singapore, Sweden, USA, Finland, Denmark, Netherlands, Hong Kong (SAR), Switzerland, Canada and Norway.

3. THE SPECIFICS OF BUSINESS PROCESS MANAGEMENT IN THE CONTEXT OF THE DIGITALIZATION OF THE ECONOMY

The successful development of DE, as can be concluded from the above, is possible only with the coordination of efforts implemented at the macro and micro levels. For this reason, it is important to find out what impact the digitalization of the economy has on the management of business processes in modern enterprises, as well as what changes in the relationship between enterprises are being made by the industrial platforms that are currently actively developing and functioning on digital principles. Digital concepts and technologies are fundamentally changing all types of activity, including production and economic. An increasing number of them, having gone from the use of personal computers, networks of the Republic of Kazakhstan, the Internet to the widespread use of mobile devices (including smartphones), are acquiring digital forms. Qualitatively new aspects of the management of industrial and economic activities are associated with the active development of the Internet of Things (IoT), which, in turn, is conditioned by the evolution of the Internet and the development of distributed networks as an important link in the information infrastructure of the DE. At the same time, the Internet of Things is understood as the concept of connecting physical objects by a computer network, which ensures the autonomy of devices and their ability to transfer data without human intervention. Already today, on this basis, experts point out, it becomes possible to organize the operation of assembly lines and entire enterprises according to a network principle, significantly reducing production costs and accidents caused by the human factor, optimizing production stocks and giving production a customized (focused on meeting individual needs) character [10]... Business Process Management (BPM) today focuses on cross-functional areas and aims to effectively organize business processes throughout the entire life cycle of products and services. This is of fundamental importance for a gradual transition to the implementation of the principles of a circular economy based on closed supply chains and ensuring a high level of socio-economic and environmental efficiency and safety.

At the same time, as experts note [6], if in the past several decades BPM has focused on analyzing and solving technological problems associated with reducing waste, optimizing costs and taking into account dynamic changes, which was the focus of and widely used methods like Lean Management and Six Sigma, the use of digital technology opens up a qualitatively new perspective. Thus, mobile technologies and the Internet of Things, by equipping objects with sensors, computing power and communications, enhance the fusion of the physical and digital world. Analytics of large databases, including the latest advances in cognitive technologies, make it possible to use information processed in this way in production for diagnostic and predictive purposes. The foundation is being created for information-driven business models, including remotely, to automate the solution of unstructured tasks and the interaction of people and machines using the so-called social robotics. Finally, 3D / 4D printing is disrupting traditional supply chains and value networks, allowing for decentralized and deferred manufacturing capacity. So, in the context of the digitalization of the economy, in the field of radical changes is the management of the main business processes of an enterprise (organization), up to their re-conceptualization. These include planning and management of production and industrial complexes, logistics, supply chains, both at the strategic and tactical levels. In the same row - advertising, sales, financial services and personnel management. Relationships within the organization and with all of its external stakeholders are being transformed, including, first of all, customers. Inside the enterprise, personnel are being replaced by "agents". The relations of the state with business and society are changing, and a digital state and e-government are being formed. In a digital economy, it is in many ways necessary to define in a new way such key elements of business processes as mission and strategy, human resource management and process culture. In the DE, strategies, management, methods, IT and attitude to human resources should be client-centric (client-oriented). When strategizing and prioritizing, you need to create value propositions and benefits for informed customers. Management procedures should establish appropriate and transparent reporting and decision-making processes, developing traditional management technologies. Information technology is needed at all stages of the life cycle of business processes, and they must provide massive personalized processes. In human resource management and staff development, the focus should be on competencies in analytics, privacy and data protection practices, as well as innovative technologies. The formation of the DE is accompanied by radical changes not only in the management of business processes of individual enterprises, but also in the organizational forms of their interaction with each other. These changes are in no small part related to the formation of digital platforms. Digital platforms are multi-level digital frameworks that define the conditions for the interaction of their participants. Revealing the role of digital platforms, Kenney M., and Zysman J. emphasize that if the factory was the organizational center of the industrial revolution, then today's changes are organized around digital platforms. At the same time, digital platforms structure and facilitate relationships between economic agents in society. Well-known examples of digital platforms are Google, Amazon, Facebook with multi-billion-dollar turnover, but many specialized platforms, including industrial ones, perform similar functions. For example, Kenney, Martin, and John Zysman distinguish the following types of them in this regard: platforms for other platforms that facilitate the formation and provision of cloud services and other tools with which other platforms are built (examples are Amazon Web Services and Google Cloud Platform); mediator platforms (LinkedIn), platforms that act as retailers (Amazon, eBay); service-oriented platforms (for example, Airbnb "- an online platform for rental housing), etc. [8]. Along with this, specialized platforms for industrial products and services, including engineering and transportation, stand out, examples of which are Amazon business, Mercateo, Industry buying, Grainger, and Instafreigth. "Platformization" is increasingly embracing innovation markets. German authors Tobias Kollman and Nolger Schmidt, when revealing the role of information platforms, draw attention to the fact that they

are becoming the central business model of the digital economy. These search engines, acting as electronic intermediaries between suppliers and buyers, provide a lubricant function for the economy, expanding existing markets and creating entirely new ones. Google and similar digital platforms as search engines informally unite suppliers and buyers who, without the intermediation of these platforms, would either have to spend much more effort on such a search, or, perhaps, could never find each other [9]. The result is, we note from ourselves, overcoming (or significant weakening) of information asymmetry and reducing transaction costs associated with the search for information and the conclusion of contracts between market agents. Continuing the analysis of the functions performed by information platforms and the changes they bring to the modern economy, the authors compare them with the "invisible hand" of the market by A. Smith. In addition, due to a sharp reduction in transaction costs and, as a result, huge popularity among consumers, a certain part of the wealth is shifting in the platform economy from producers to consumers and their operators. This is reflected in the market value of integrator companies. For example, the four largest platforms (Alphabet, Amazon, Facebook and Alibaba) are now worth more than all Dax30 companies, which continue to operate largely the old fashioned way [Ibid]. As can be concluded, in the broadest sense, platforms mediate social and economic interactions online. Economic communities that produce goods and services of value to customers form what are called ecosystems. The complexity of the B2B landscape initially leads to the emergence of multiple platforms, but consolidation can be expected in the medium to long term in the platform segment. Information platforms, as well as the use of their services, are becoming an important factor in the competitive struggle. Experts, in particular, predict an increase in competitive pressure in mechanical engineering due to new forms of differentiation of supply and demand. Many platforms have been created and continue to be created, allowing industry partners from certain ecosystems to form alliances to share resources and competencies, complement their product lines with products and services of partners, and thereby intensify the interaction of ecosystem partners with customers (own and partners' customers), such as and income from network effects. As a result of this development, such business models as open innovation, cooperation within platforms are increasingly spreading in the world, and companies appear that play the role of an integrator. When assessing a kind of "platformization" of business processes and, in general, the formation of the economy of information platforms, one should bear in mind the presence of various facets of these changes. Indeed, as already partially noted above, the result of the analyzed processes is a weakening of information asymmetry and a significant reduction in transaction costs, since the costs of preparing business agreements with partners are reduced, and platform standards simplify communication and implementation of transactions. New services and business models are becoming available, such as proactive diagnostic maintenance and services that provide services (car sharing, white-sharing, etc.) instead of a person's car or bicycle ownership. Parallel to this, the benefits of network effects are growing. However, at the same time, the threat of severing relations with business partners from those companies that are still abandoning the potential of platforms increases, which increases the risk of destruction of existing business structures. In addition, a significant part of the added value and income of companies is moving from real business, as well as from consumers, towards digital services (on platforms), which is facilitated by unresolved pricing issues and a lack of clarity about the willingness of customers to pay for digital services. Experts also draw attention to the fact that during the reorganization of the economy, today's platform owners are able to acquire power that exceeds that which was possessed by factory owners in the early period of the industrial revolution [8]. This creates the danger of abuse of their dominant position, and can also lead to a significant exacerbation of social conflicts and deepening of socio-economic stratification in society.

The issues of information security and consumer sovereignty deserve special attention, which, in particular, is indicated by the scandalous situation with the leakage of personal data of tens of millions of users of the Facebook platform.

4. DIGITAL ECONOMY AND ENSURING SUSTAINABLE COMPETITIVENESS IN GLOBAL MARKETS

The formation of the DE is an important factor that determines the level of competitiveness of modern business leaders, as well as of entire countries. Countries that are among the advanced in the development of technologies and the use of DE tools, as a rule, are distinguished by a high level of competitiveness and sustainable development. Table 1, as a confirmation of this conclusion, presents a comparison of the indicators of countries belonging to the leaders of the global competitiveness rating (2017-2018), as well as world rankings of digitalization and sustainable development. manuals.

Table 1: Comparison of the leading countries in the global rankings of competitiveness, digitalization and sustainable development

#	Global ranking competitiveness (2017–2018)	IMD Global Ranking digital competitiveness 2018	Global ranking sustainability 2018
1	Switzerland	Singapore	Sweden
2	USA	Sweden	Norway
3	Singapore	USA	Finland
4	Holland	Finland	Denmark
5	Germany	Denmark	Switzerland
6	Hong Kong	Holland	Canada
7	Sweden	Hong Kong	Australia
8	United Kingdom	Switzerland	New Zealand
9	Japan	Canada	United Kingdom
10	Finland	Norway	Luxembourg

Source: https://gtmarket.ru/ratings/networked-readiness-index/networked-readiness-index-info

At the same time, DE development is characterized by extreme unevenness, which requires from the lagging regions to intensify efforts in this area, the effectiveness of which will determine their position in global markets. As for developing countries, as well as countries with emerging markets, according to the recommendations of experts and the parameters presented in the ratings of competitiveness, digitalization and sustainable development, the priority tasks for them include the integrated development of industrial, financial, digital, social, environmental and management infrastructure (see Table 2).

Table following on the next page

Table 2: Comparison of indicators of global competitiveness, digitalization and sustainability in the group of developing and emerging markets

Country ratings	Global ranking competitiveness (2017–2018)	IMD Global Ranking digital competitiveness 2018	Global ranking sustainability 2018
China	27	10	60
Russia	38	45	55
India	40	44	56
Mexico	51	48	47
Turkey	53	46	53
Kazakhstan	57	32	42
Azerbaijan	69	85	64
Brazil	80	51	50
Ukraine	81	60	58

Source: https://gtmarket.ru/ratings/networked-readiness-index/networked-readiness-index-info

However, as follows from a comprehensive analysis of global rankings (Table 2), a broader interpretation of the infrastructure component as a necessary basis for DE development in the context of increasing competitiveness and sustainable development is also advisable. A special direction in the analysis of infrastructure components of a new type is the development of digital infrastructure platforms. Note that the key feature of such platforms is the ability to recharge them in a way and use them in various sectors of the economy. For example, the end-to-end industrial Internet platform, on the one hand, makes it possible to accelerate and simplify the transition of domestic industry to the "rails" of Industry 4.0, and on the other hand, to stimulate the development of "smart" transport, ensuring the connectivity of vehicles and road infrastructure.The formation of the DE, as the defining direction of the 4th industrial revolution, is based on the complex implementation of radical innovations - product, process, marketing, organizational, social. At the same time, entrepreneurs are increasingly becoming the initiators of such innovations, who are looking for useful ideas and developments in the "field of science" for successful promotion to the market and for strengthening their positions in the competitive struggle. In this regard, it should be noted that today companies operating in mature markets, where the competitive situation is very tight, have to fight literally for a fraction of a percent of cost reduction. And the victory in this super-tough competition goes only to those who competently use the possibilities of digitalization of the economy and production. The innovative context of the digital economy deserves special attention. Complementing what has been said on this issue above, we emphasize once again that in relation to the digital economy we are talking to a significant extent about radical innovations that must be implemented in a comprehensive manner. The task is not only to develop high-tech business in key areas of the 4th industrial revolution and its successful entry into high-tech global markets. Along with this, the digitalization of the economy gives rise to products, processes and organizational forms that are massively distributed and which radically change all spheres of production, consumption and behavior in modern society. At the same time, it is appropriate to recall the lessons of the past, when the introduction of computers required a radical restructuring of management processes, the education system and training of professional personnel. No less, and possibly more serious organizational and managerial changes are to be implemented in the era of digitalization of the economy. At the same time, CE is not a panacea for all ailments and diseases of modern production and society as a whole. The benefits inherent in it are not realized automatically. The introduction of digital technologies requires not only careful preparation, but also experimental testing, as well as, taking into account the scale of the required financial resources, a thorough assessment of their real effectiveness (both current and future). It requires, as the experience of leading companies confirms, qualitative changes in the culture of production, taking into account the fact that these changes should cover not only the company's

personnel, but also its main external stakeholders. The transition to the 4th industrial revolution and the formation of the DE presupposes the use of innovative approaches, as well as the setting up of various kinds of experiments and the participation of personnel in them. And the potential inherent in the CE can be realized only by developing the staff's readiness for changes and the ability, including the necessary qualifications, to be their conductor and an active participant, which makes new requirements for the system of training and retraining of personnel, and also makes it necessary to introduce new accents into the mechanisms of their stimulation. The DE leads to a world that is distinguished by: huge potential for development, hyper-high connectivity, hyper-high speed, new risks, hyper-high competitiveness. This fully applies to business processes, which, recall, combine the following interconnected links and stages: marketing → product / service development → production → supply / delivery → customer service. DE, creating the ability to analyze large amounts of data, forms the basis for assessments and decision-making along this entire chain in real time. And, like any innovation, the DE will meet resistance (loss of traditional jobs, digital fatigue) and unexpected risks until it finds some relatively sustainable path for its development. Achieving sustainable competitiveness by business in the digital era depends on adequate understanding and consideration in practice, on the one hand, of opportunities and chances generated by digitalization, and, on the other, challenges and threats, to business and its stakeholders in the era of the DE, including total control over the state all business processes regardless of space and time. As for the chances and their transformation into real business opportunities, then, summarizing what has already been said on this issue above, they include continuous possession, including online, full information about the company, the emergence of new forms of financing (crowdfunding), participation of local companies in global supply chains, access to international markets with products; strengthening the position of women in business, etc. Among the challenges that can be both a source of success for business and the reason for its failures is mastering innovative drivers of business success. The threats also include the dangers associated with the loss of an employee's sovereignty over himself, the growth of social inequality, the need to protect consumers from uncontrolled penetration into their privacy, new criminality, not to mention the whole complex of threats associated with ensuring information security in the digital era. Among the mega-trends of the DE, which relate to both production and consumption, the following trends appear, which should be understood not only by business and regulatory bodies, but also from the point of view of modernizing the system of higher education. Among those actively discussed in this context is the intensifying process of replacing people with modern machines. The role functions of many economic agents are changing: clients are increasingly cooperating with computers; the boundaries of enterprises, especially in connection with the spread of the phenomenon of open innovation, are becoming less rigid, and their activities - more and more transparent; employees are increasingly preferring network structures to hierarchies; traditional relationships between employer and employee take the form of cooperation. The formation, in the true sense of the word, of research universities, along with the support of the changes carried out for this purpose on the part of the administration and management units, as well as the leadership style on the part of the leadership, implies ensuring that the specialist is called inclusive leadership, i.e. active and motivated, and responsible participation in the implemented innovative changes of the whole team.

5. CONCLUSION
Concluding the analysis and its results, we note that it is impossible to hope for the release of innovation-oriented specialists to higher educational institutions without giving an innovative character to the educational process. The creation of research universities in the full sense of the word means supporting the changes made for this purpose by administrative and

management departments, as well as ensuring the active, interesting and responsible participation of the entire team in innovative changes. There should be more university graduates with basic digital economy skills in Azerbaijan. More IT professionals and people need to be freed up who can confidently use these technologies to motivate people to embrace the new directions the digital economy requires. Employers should be involved in this issue. They are happy that their employees are developing and gaining additional knowledge. Large companies, including those with government participation, could create training services and courses. We believe that our actions in this direction should be based on the following four target areas, detailed measures on which serve to achieve them. These target issues include:

1) creating a system of motivating citizens to acquire the necessary skills and participate in the development of the digital economy;
2) compliance of the education system with new challenges, assistance in the integrated development of students, training of qualified personnel for the digital economy;
3) creation of basic conditions for training digital economy personnel (including the development and testing of the concept of key competencies and models that ensure effective interaction of the digital economy with business, education and society as a whole in a digital economy);
4) assistance to employers in the development of employees, taking into account the requirements of the digital economy.

Given the need to develop, apply and use innovative approaches that accompany the transition to the 4th industrial revolution, the creative component of the educational process is becoming increasingly important. In this context, universities face special tasks not only in ensuring the training of highly qualified specialists for an innovative economy, but also in ensuring that all components of the educational process comply with the principles of innovation, and not on a bilateral basis, without a company approach. should be analyzed.

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CONCEPTUAL APPROACHES OF WORLD SCIENTISTS TO INTEREST-FREE FINANCIAL MARKETS

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ABSTRACT

The purpose of the modern management system is to study the scientific and theoretical approaches of world scientists Aristotle, Nizami Ganjavi, Ibn Khaldun, Ismail Mutlu, Seyid Qutubi, Abu Ala Mawdudi, Yahya Abdurrahman, Muhammad Yunus and Servet Bayindir in the field of interest-free financial markets. The goal is to identify and research the contributions of world scientists to interest-free financial markets. The methodology of the article is a systematic and comprehensive study of the scientific approaches of world scientists Aristotle, Nizami Ganjavi, Ibn Khaldun, Ismail Mutlu, Seyid Qutubi, Abu Ala Mawdudi, Yahya Abdurrahman, Muhammad Yunus and Servet Bayindir in interest-free financial markets. Because these approaches have a great impact on the organization, management and development of interest-free financial markets. The importance of the application of the article is to apply the results in the management of interest-free financial markets. All this will lead to an innovative approach to the management of interest-free financial markets, the systematic development of this area, sustainable and sustainable operation. The scientific results of the article - Improving the management of interest-free financial markets, reflect the conceptual theoretical innovations in this area. The results of the study serve the application, improvement and development of interest-free financial markets. The originality and scientific novelty of the article is that the main scientific-theoretical directions of the scientific approaches of world scientists in interest-free financial markets are studied, theoretical and practical views, theories on the formation of this field as a scientific and practical direction were studied and generalized, and its necessary scientific aspects were studied. From this point of view, the research work can be considered commendable in terms of research of scientific approaches to the management of interest-free financial markets.

Keywords: Islamic finance, Islamic financial management, Islamic financial system, interest-free financial markets, interest-free financial market management, Islamic management system

1. INTRODUCTION

When studying the theoretical and practical approaches of interest-free financial markets in the modern management system, it can be seen that this field is very important and relevant. Each of these approaches has its own set of rules and principles. First of all, it is important to consider the nature and content of interest here. I would like to note that the nature of interest is given interesting information in the holy sources, especially in the Holy Quran (The Quran). Thus, in Ismail Mutlu's book on "Interest", the term is expressed in terms of percentages with different definitions, which mainly consist of the following:

- Interest is a set that is conditional on a certain amount of money being invested or borrowed. That is, it is the return on investment without labor and without taking any risks;
- Interest is a majority condition that the debt to the party be repaid in kind or in cash;
- Interest - profit from the loss of another;
- Interest is the price paid for the use of money;
- Interest is a debt that increases over time;
- Interest is a profit that is not shared with the loss. (Mutlu İsmail, 2003).

As we know, interest is an economic fact that has been known since ancient times, applied and subject to positive or negative assessments. This fact, which has not lost its significance throughout the history of the economy, is still considered one of the most important indicators that distinguish political and economic regimes. Because of this importance, since its inception, interest has been among the research topics of philosophers and economists, especially the heavenly religions. Islam, the last of the heavenly religions, has taken up this problem, which is of great interest to society, within the framework of a law based on its own moral laws, and has shown a religious-legal attitude towards interest.

2. ARISTOTLE'S SCIENTIFIC APPROACH TO INTEREST-FREE FINANCIAL MARKETS

Aristotle (384-322 BC), a disciple of Plato, was one of those who had such an attitude towards usury. Aristotle, on the other hand, found it unnatural to be rich because of interest, and argued that money would not personally produce a product and that money could not be used as a means of gain or wealth. He likened the percentage to "an eggless hen." According to Aristotle, who likened money to an endless hen that does not lay eggs and says that "money cannot breed," money is very different from a human, a plant, or an animal because of this feature. His interest in his book Politics is as follows: "The most disgusting interest is interest, because the profits from it come directly from the very existence of money, and the reason for the birth of money is contradictory. Because money is created for exchange, while interest increases the amount of money, and thus is the most unnatural way to earn money. Aristotle (384-322 BC) did not consider it right to make money from money like his teacher Plato. According to him, there are two ways to gain wealth, which mainly consist of the following:

- Natural - this includes shepherding, farming, fishing, hunting and other natural methods.
- Unnatural - this includes activities that are carried out only for the purpose of making money using unnatural methods. One of the unnatural ways to get rich using this method is interest.

3. NIZAMI GANJAVI'S SCIENTIFIC APPROACH TO INTEREST-FREE FINANCIAL MARKETS

The most prominent figure in the development of the Islamic financial and economic system is Nizami Ganjavi, a great Azerbaijani poet, philosopher and thinker who lived and created in the 12th century. He was well educated and studied history, ethics, philosophy, logic, theology, astronomy, chemistry, physics, medicine, botany, mathematics, interpretation of the Holy Quran, music, fine arts, etc. was deeply acquainted with the sciences. His works, called "Khamsa" and combining five great poems, are known for their rich approaches to social, economic and other sciences. Nizami Ganjavi, living in the era of developing feudalism, was not indifferent to the social, economic and economic problems of his time. From this point of view, his works are rich in socio-economic approaches. One of the important issues in his socio-economic approaches is labor, wealth and their relationship. In his works, he praised the work of those who created material and spiritual wealth, and wrote images of people whose physical and mental abilities were above all else. Nizami Ganjavi exposed those who lived in wealth, those who were addicted to gold, those who lived with rifles, and saw the meaning of life in work, in the service of humanity. He wrote: "Do not teach your body to enjoy, because the result of unemployment is bloodshed ... If you are alive, keep your hands and feet at work," "In any case, you work, work is life." In "Treasure of Secrets" and other works, Nizami Ganjavi shows that labor is a human activity, he saw the difference and superiority of man over other living beings, labor and professional activity. He criticized those who practiced haraam habits, saying, "Neither lust, nor sleep, nor food, should have any meaning in life." Nizami Ganjavi called people to understand, to think, to "show courage in revealing every secret of life."

In his works, Nizami Ganjavi showed that the ultimate goal of production is to meet the needs of man for survival: "The ultimate goal in any endeavor is nothing but food and clothing." Therefore, the labor process has a social meaning, where everyone works for himself and for others, everyone is dependent on everyone, and everyone is dependent on everyone: "If we look at the field of the world, we are all farmers for each other." This approach further develops the idea of the division of labor and its impact on the growth of wealth. In Nizami Ganjavi's works, if the state does not take care of art, craftsmanship and farming, if everyone does not create conditions for their profession, "everyone will not be able to benefit from their profession", wealth will decrease, taxes will not be paid, treasury will be empty and social justice will be violated. The great Azerbaijani poet, philosopher and thinker Nizami Ganjavi concluded from his socio-economic approaches that he did not agree with the society he lived in and its injustices, he lived and created it with the ideas of "regulation" and "reconstruction". (Vəliyev T. S., (1995).

4. IBN KHALDUN'S SCIENTIFIC APPROACH TO INTEREST-FREE FINANCIAL MARKETS

In his Introduction, Ibn Khaldun made an in-depth analysis of the issues raised in his theory of development, even though he used the works of his predecessors and scholars of his time. The theory of development in his "Introduction" and the model of governance referred to here are focused on the activities of the ruler. A number of recommendations have been made in this model, which mainly include the following:

- The power of the ruler (al-mulk) is manifested only through the application of the Shari'ah.
- Sharia is applied only by the ruler.
- The ruler derives his power only from the people (ar-rical).
- The people can only stand on their own two feet.
- Wealth can be obtained only through development (improvement).
- Development can only be ensured by justice (al-adl).
- Justice is a measure of God's evaluation of people (al-mizan).
- The ruler is committed to ensuring justice. (Muhammad Umer Chapra, (2018).

In his work, Ibn Khaldun pointed out a number of issues in the concept of "Social Physics", which mainly consist of the following:

- showing a conscious attitude to work;
- combating mismanagement and greed;
- Realization of the impossibility of property and social equality.

Research on the classical Islamic system of economic governance has been reflected in the writings of many Islamic scholars and thinkers. However, Ibn Khaldun wrote his name in golden letters with his approach to the history of Islamic economic thought. (Hacızadə E. M., 2006).

5. SEYID KUTUBI'S SCIENTIFIC APPROACH TO INTEREST-FREE FINANCIAL MARKETS

Professor Sayyid Qutubi's book, "Interest", contains a number of reasons for Islam's harsh stance against interest and the specific truths that explain them, including the following:

1) The primary truth, which is the absolute conviction of the heart, is that Islam will not exist where interest exists. If Islamic scholars and muftis comment on anything else, know that this is a lie and a deception. Islam is resolutely fighting against the effects of interest on human life, thought and morals.

2) The interest rate system is not only a problem of faith, morality and life, but also a problem of economic life. Because interest is the most terrible order that destroys the happiness of mankind. Although it looks attractive and claims to improve the overall economic system, it destroys close human and moral values.

3) Moral order and practical order are completely interrelated in Islam. Man must be faithful to his promises and commitments in managing all his actions. Undoubtedly, man's activities must be observed, tested and tested throughout his life, and he will be held accountable for all his deeds in the Hereafter. There is no single moral and practical order of life in human activities. On the contrary, they both regulate human activity. So both are a form of worship. If a person lives a pure life, he will be rewarded, and if he lives a bad life, he will earn a sin, and this will be recorded in the book of deeds and he will be held accountable for it. A successful Islamic economic system cannot be built without morality and ethics. If a person stays away from morality and ethics in his life, the success he will achieve in his practical life is nothing but strife.

4) The purpose of an interest-bearing borrower is not to do any useful work for humanity, but only to do business to make a profit from his work. Since the main way of working here is to make a special profit, he will exploit people to the fullest to achieve his desires. Thus, the picture of the world today and the main reason for this is to work with interest.

5) Islam consists of a mature order. When he forbade the rules of interest, he laid the foundation of his order on the principles of ownership. It regulates all spheres of socio-economic life in its own way. Thus, all this can be done without interfering with the development of closely linked socio-economic and human relations.

6) Islam - there is no need to liquidate any enterprise or organization while organizing life in accordance with its own thinking and special order, eliminating the interest rate regime, developing socio-economic life, and carrying out natural processes. He is simply against the hegemony of interest and the problems it brings. He is regulating his place with a stable and healthy relationship. If banks operate on an interest-free basis, such organizations are considered Islamic institutions.

7) There is an important fact that a person who wants to become a Muslim must believe. That is, the life of human society can never be based on anything that God has forbidden, and will not continue on that condition. At the same time, it is impossible from the point of view of religion, which has the right to have the last word about life, to lay the foundation for certain unjust methods of life.

The world of humanity, which was previously oppressed under the yoke of this order until it was abolished by Islam, is still being crushed by the blows of the new order. Unfortunately, the new world of humanity is fleeing from the Islamic order, which will save itself and bring salvation. Professor Seyid Kutubi's book "Interest" had its own approach to solving the problems caused by interest. In his work on interest, he argued that the first reason was that, despite his material well-being, he suffered from a morally depraved human spirit, devoid of spirituality, faith, and submission to God, in accordance with the requirements of faith in God and consent to be caliph on earth. is to stay away from great human goals. One of the reasons for this situation is the scourge of interest. Interest is a sad scourge of the economy. It ensures the development of the economy, but prevents the orderly, equal development, good deeds and the regular distribution of blessings among all people. The benefit of this is that some interest-bearing businessmen stand behind large safes in banks and lend to traders and industrialists to make a profit. These are not in the interests of the people, the needs of society as a whole, the needs of society as a whole, the goals of social and individual peace everywhere, but they will impoverish and destroy millions of people, even the lives of all mankind. even if it enters. they are focused on the most profitable goals.

It is obvious that there is no peace and tranquility in the human society that carries out its relations with interest. God will destroy the blessing of interest. In a society that carries out these disgusting interest operations, it is impossible to find anything but misery, hardship and calamity. Islam does not consist of a word spoken in the language. He is the regulator of the proper organization of life and all things. It is like denying some of its rules and rejecting all of them. There is no doubt that interest is haraam. It is the job of the "sinful disbelievers" to make interest lawful and to regulate life according to the interest system. Only God can take refuge in them from their evil and wickedness. (Seyid Kutub, 1998).

6. ABU ALAW MAWDUDI'S SCIENTIFIC APPROACH TO INTEREST-FREE FINANCIAL MARKETS

Abu Ala Mawdudi's greatest contribution to the Islamic financial and economic system was his 1960 book, "Interest". In the book "Interest" by Abu Ala Mawdudi, the specific features of the Islamic order are shown in a unique way. Islam, which opposes the existing economic systems in the world, takes a golden mean between economic systems and combines a scientific and perfect order. Its main principle is to give man all kinds of personal and natural rights, as well as not to upset the balance of the distribution of wealth. On the one hand, it gives a person the right to personal property and the right to save property. On the other hand, it imposes certain legal restrictions on these rights and powers, both morally and materially. The main purpose of all this is to prevent the excessive accumulation of natural resources and national resources in one center, to ensure the continuous circulation of national resources and natural resources, and to ensure that every member of human society receives its rights and shares. To this end, the Islamic order has approached the economy with principles that are completely different from the principles of any system in the world in terms of its spirit, principles and methods. Thus, the view of the Islamic economy can be briefly explained as follows. In economic life, the individual interests of each person and the socio-economic interests of all people are closely linked. Therefore, instead of contradicting the socio-economic principles of Islam, there is mutual assistance, harmony and solidarity. If a person fights against the common public interest and accumulates the wealth of human society in his own hands, if he intends to spend his profits only for himself, it will not only harm human society, but will also be detrimental to him. In the same way, if the general social order of society is sacrificed to the personal interests of a few people, not only people but also society itself will eventually have problems. Thus, doing good will lead to the prosperity of human society, and doing good in human society will lead to a prosperous life. The goodness and happiness of both must be based on the right balance between people's feelings of interest and regret. Under this rule, no one should have the right to acquire wealth in a harmful way, so the wealth acquired in a proper and proper manner should not be accumulated, but should be circulated as much as possible. The purpose of the economic order underlying this meeting is to ensure that neither a handful of people become millionaires nor all other people remain hungry and poor. The purpose of this order is not to prevent some people from becoming millionaires, nor to make all of them equal in socio-economic terms, despite their natural differences. The main purpose of the issues mentioned here is to ensure that the economic needs of all members of human society are met. If everyone in human society remained within the limits of their natural activity without harming others, if they were frugal in spending this profit, if they could help people, there would be no economic imbalances and inequalities in the order of capitalist society. Because while such an economy does not prevent one from becoming a millionaire, thousands of people are not allowed to go hungry because of the wealth of this person. On the other hand, this economic order naturally requires that all people be given a share of the wealth God has given them, and at the same time does not impose artificial restrictions that make it impossible for this person to acquire wealth according to his own strength and ability.

According to Abu Ala Mawdudi, the main elements of the Islamic economic order include the following important directions.
1) Free economy with some borders and restrictions;
2) Zakat is obligatory;
3) Determination and adoption of the law of inheritance;
4) Prohibition of interest.

Islam draws its support from morals and laws to establish a practical order on the accepted middle economic path and meeting between communism and capitalism. Islam, with its spiritual upbringing, prepares every individual in society to voluntarily submit to the order of thought. He imposes a number of restrictions on people through his Islamic laws, which require them to abide by this regulatory mechanism and not to go beyond its borders. These moral principles, legal provisions are the conditions and elements of this economic order. Thus, it is advisable to take a good look at them in order to better understand their character and spirit. (Əbu Ala Mevdudi, 2004).

7. YAHYA ABDURRAHMAN'S SCIENTIFIC APPROACH TO INTEREST-FREE FINANCIAL MARKETS

Professor Yahya Abdurrahman addressed the new generation of bankers, Muslim or non-Muslim, who held positions in the interest-free banking system, and considered it expedient to follow the following issues:

- Work hard and never give up because of your faith in God. Do your best to work for your "possible" thoughts, ideas and ideals so that you can achieve what everyone says is "impossible";
- Remember that we, as those who believe that it is possible to lead an interest-free life, do not discredit, eliminate or condemn a traditional interest-based banking and financial system, and in return do not adapt to an interest-based lifestyle, we are in favor of seeing it. What we really support is to draw people's attention to the possibility and existence of a system that combines a different way of life in the face of an interest-based system;
- When faced with a setback or difficulty on this path, or when there is a difficulty such as not being able to reach the goal, do not feel defeated or unsuccessful, and never leave the battlefield and retreat. You will be criticized by some well-meaning Muslims or non-Muslims, or by those who do not have enough life experience and experience, or by some people who have no idea about the future; these criticisms should never shake you. Listen to them carefully and try to solve or try to solve the problems that are in the center of your attention within the possibilities and limitations at your disposal. Never be careless in the face of such criticism of your work. Listen to the opinions of other people on the topics you are working on, and listen to them with sincerity, attention, and respect, whether they are criticisms or not;
- Get in touch with well-meaning and constructive critics, but never hold a grudge against your critics and see them as your rivals or bridge bridges between you; because do not forget that in the future you may one day come and need such people;
- Address and communicate with people in a language they can understand, explaining the similarities and differences between interest-free banking regulations and all transactions, products and contracts, interest-based traditional banking, financial regulations and disciplines;
- Try to build relationships between organizations instead of individual relationships between people; because organizations, enterprises, continue their activities for generations; Among human beings, it ends with the death of that man or woman or other causes;

- Keep your faith and discipline in the interest-free structure alive and be sincere in your relations with the people and do not deviate from honesty; if you act with an open heart, you will win the hearts of the people;
- Communicate with all members of the public in a humble and respectful manner. Do not brag about the services that you and your subordinates and the organization you work for provide to other people in the community. Do not complain about the fact that the people's representatives do not know the value of your services and work. Remember that our ultimate goal is to gain God's approval and approval;
- We must also keep in mind that if serious relations with these circumstances and conditions are lost, God will be able to remove His protection from us;
- Make sure that you never set any tricks or traps against the laws of the country with interest-free discipline and legal system.

Remember that no one, no matter how religious, holds the keys to Paradise and God's Kingdom. We are always in the service of God and the Son of man. (Yahya Abdurrahman, 2015).

8. MUHAMMAD YUNUS' SCIENTIFIC APPROACH TO INTEREST-FREE FINANCIAL MARKETS

According to Professor Dr. Muhammad Yunus, in order to eradicate poverty, policy must have a broader and deeper meaning than an approach to the creation of ordinary employment. Thus, the real eradication of poverty begins when people can control their own destinies. Therefore, it is not the work that saves the poor, but the invested capital that, in many cases, quickly eliminates poverty at little or no cost to the taxpayer and allows the poor to manage their own lives. As you can see, there are limitations to individual entrepreneurship, but in many cases it is the only solution to help the fate of people who our economy refuses to include and who do not want to take on the responsibilities of taxpayers. (Muhamməd Yunus and Alan Jolis, 2016).

9. SERVET BAYINDIR'S SCIENTIFIC APPROACH TO INTEREST-FREE FINANCIAL MARKETS

Professor Servet Bayindir's book, «Islamic Finance in Terms of Fiqh and Economics-2», shows that in the Qur'an, a person's life activity is described by linking it to the beginning of an economic activity consisting of housing and food. Therefore, the world is a promised place to live and enjoy the means of subsistence and to be resurrected in time. In order to survive, people need to have certain knowledge in specific areas, such as nutrition, shelter, clothing, protection, defense and housing. Here, all human needs are met by living things obtained under goods of economic value. Thus, the place where the rain is produced and the sustenance is produced has been given to the service of human beings by God, the true owner of all beings in heaven and all the wealth on earth. God is the sole possessor of beings. Man has the special qualities that God has established in all beings, the power to use the blessings bestowed upon him sparingly, and the power to dispose of them. The basic principle in this matter is to establish a relationship with the Creator in this sense, acknowledging that God is the true owner of creation. In order to have wealth in human society (to protect property relations), it is necessary to follow certain rules in order to benefit from and dispose of this wealth. The rules and principles set by Islamic economics in this regard are not fully understood by modern economists and are not reflected in modern economic theories. In other words, economic theories that have emerged since the founding of economics are far from Islamic principles in this regard, and in some cases even anti-Islamic. Legitimacy is the main criterion for owning, using and consuming property. Thus, the property must be legally owned and ordered to be used in the same way. Confiscation of property permitted under a license agreement, inheritance, will, grant of all kinds, and trade based on mutual consent are among the main methods of obtaining legal wealth.

Interest, gambling, theft, usurpation, bribery, fraud, religious exploitation, etc. and it is one of the methods of obtaining wealth by false means. Man has the opportunity to acquire wealth not only through superstitious means but also through legal means in order to acquire wealth and ensure the socio-economic security of his life. Economics is considered to be a science that adopts the methods and principles applied in the process of production, circulation and distribution of existing natural resources for the healthy and balanced continuation of socio-economic life. Numerous theories and guidelines have been developed to achieve the desired socio-economic well-being and sustainable development using the available natural resources in the most efficient way. The sum of all this knowledge is the common heritage of mankind. The views put forward have always been met with considerable respect by Muslims because they coincide with the principles of the Qur'an and its rules, which are indirectly practiced in the Sunnah. Thus, those who do not conform to the principles of the Qur'an are either corrected, and those who cannot be corrected are rejected and expelled. For example, in today's modern economic thought, theft, usurpation, bribery and deception are not considered legitimate economic activities, as in Islam, and ways to obtain interest and other superfluous goods are seen and validated as anti-Islamic means of gain. Therefore, theories on the subject of modern economics should be evaluated within the framework of these criteria, and not with generally rejected or fully accepted approaches. Many areas of today's economic life have emerged as a result of methods, inventions, and economic methods and institutions developed in historical processes to meet the basic needs of human beings. Among the human needs are the food sector, the textile sector, the housing sector, the arms sector for self-defense, the medical sector for a peaceful, quality and healthy life, and the information for intellectual development. sector, entertainment, recreation and sports sector, communications sector related to the circulation of goods, services and information, etc. formed. (Servet Bayandır, 2015).

10. CONCLUSION

We conclude from the research that the scientific-theoretical approaches of world scientists Aristotle, Nizami Ganjavi, Ibn Khaldun, Ismail Mutlu, Seyid Qutubi, Abu Ala Mawdudi, Yahya Abdurrahman, Muhammad Yunus and Servet Bayindir in the interest-free financial markets in this area are socio-economic. and creates great opportunities for cultural development and expansion. For sustainable and sustainable development in interest-free financial markets, it would be expedient to take into account the following results:

- According to Aristotle, he removed money from the process of commodity-money relations and promoted the activity of money in the form of capital. As a result, the harm of usury to human society was clearly reflected in his works.
- According to Nizami Ganjavi, he explained and commented on his views on the exchange of goods, market, price, money and its functions, usury and interest in his works in a unique way. His advice, recommendations and comments on a number of socio-economic and practical activities of people, about the place and role of man in life are still relevant today.
- According to Ibn Khaldun, if the state does not protect the natural human rights of farmers, artisans, merchants, scientists, does not create conditions for them to operate freely, does not implement fair tax and financial policies, does not eliminate usury, the system of society will be violated and the state will be destroyed. that precautionary measures must be taken to prevent all this.
- According to Sayyid Qutubi, interest is nothing but a violation of one's identity, morals and conscience against one's brother and society. In general, a person disrupts the life of society and causes feelings of greed, jealousy and selfishness towards each other.
- According to Abu Ala Mawdudi, it is not enough to create some moral virtues in the internal structure of people alone to protect the distribution of income and this turnover of wealth.

Thus, the laws of human society must regulate the proper organization of the acquisition and use of wealth.

- According to Yahya Abdurrahma - you need to be open and transparent in your comments about the "added value" provided by interest-free discipline. It should be borne in mind that the interest-free financial management system exists to serve all peoples of the world.
- According to Muhammad Yunus - if people build their business with interest, it is their disaster, if they build their own business systems, it will improve their socio-economic situation. Of course, they need help. Thus, it is not the work that saves the poor, but the capital invested that, in many cases, quickly eliminates poverty at little or no cost to the taxpayer and allows the poor to manage their own lives.
- According to Servet Bayindir, in order to achieve the socio-economic development of society in the modern system of governance, it must be regulated in accordance with the economic principles contained in the Holy Quran.

As a result, all the activities carried out for the sustainable and sustainable development of interest-free financial markets must be based on the principles of justice, social justice, social equality, and take into account the scientific approaches of world scientists in this field.

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POTENTIAL FOR ECONOMIC DEVELOPMENT AND SECURITY OF THE NATIONAL ECONOMY

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ABSTRACT

The economic security of the country and the sustainability of growth in modern conditions are of paramount importance, since they provide guidelines for making the most important socio-economic decisions. Constantly occurring changes in socio-economic dynamics give rise to the possibility of crisis phenomena, which in turn actualizes the problem of ensuring economic security and sustainable growth. Modern transformations in the economy of the Republic of Azerbaijan have a multifaceted nature, which is influenced by internal economic conditions and trends in the world process. Significant changes in the conditions of globalization have led to radical changes in national economies, which are under positive and negative, objective and subjective, stable and temporary influences. Reproduction of the national economy at a progressive pace presupposes the achievement of economic stability as one of the conditions, which is not an end in itself for economic development. The goal of economic development is to improve the level and quality of life of the population. The condition for ensuring the economic security of an individual country is the ability of the economy to resume the process of expanded reproduction in all sectors and branches of the economy. In this regard, a study of the features of economic and social dynamics is carried out by industries and spheres of economic activity of the republic.
Keywords: *development potential, ensuring national security, economic diversification, quality of economic growth, innovation orientation*

1. INTRODUCTION

In the modern geopolitical conditions of world economic development, huge changes are taking place in economic relations. The ongoing changes in socio-economic transformations are enormous, and the prospects for development are in the interval between the exit from one crisis to another and the transition to high-quality economic growth. In many countries, the problems of integration into the world economy in the prevailing conditions and the achievement of the stage of sustainable development are being solved. Participating in global processes, the republic's economy must combine the possibilities of efficient use of all resources, preserving territorial integrity and ensuring national security. The dynamics of social and economic development, the ongoing changes in economic systems, the possibility of more efficient use of available resources require the deployment of research on the nature of growth and ensuring economic security.

2. THE SIGNIFICANCE AND RELATIONSHIP OF ECONOMIC GROWTH, DEVELOPMENT AND SECURITY

Opportunities for economic growth and security, as processes reflecting the state of the economy, are complex, multidimensional, and at the same time quite contradictory. The development of an economy of any type is determined by the stage of economic growth and the provision of national security. The ability of the national economy to maintain internal equilibrium development ensures the stability of the system within certain limits. But at the same time, the state of the system, in which it is stable, shows its stability. The national economic system maintains its stability and stability due to synchronous, constantly occurring

changes. Each socio-economic stage in its development is unique, and the modern period of the market economy combines the factors of globalization and the conditions for ensuring national security. Despite the great achievements of the world economy, they have not eliminated significant gaps in the level of development of individual countries. There is a spatial and temporal discrepancy between the means and the goal of economic development, reflecting the originality of a certain stage of economic growth. With all the differences in the concepts of economic growth, economic development and national security, they are very adjacent, but not identical, combining similar features, as well as mutually conditioning each other. If economic growth is understood as an increase in the volume of the country's economy, then economic development is understood as a general improvement in the state of the country's economy, which implies primarily economic growth as such and, secondly, the qualitative characteristics of the results of economic activity, reflecting the level of competitiveness and social environment. The main difference between economic growth and economic development is that economic development includes economic growth, i.e. has a more capacious content and in the future they imply each other. The essence and differences between economic growth and development were defined by J. Schumpeter as follows: "Put as many post carriages in a row as you wish - you will not be able to get a railroad" [1]. In accordance with his theory, economic growth is determined by quantitative changes in the economy, i.e. an increase in the scale of production, and the development of the economy with qualitative positive changes, innovations in production, services, consumption. Therefore, if economic growth means a positive development of the real volume of production of a particular country, then economic development presupposes an increase in the level of production on an innovative basis along with an increase in the quality of life of the population. But economic growth can occur, and without development, if the results of economic activity are used by certain segments of the population. Further, the sustainability of economic growth will also be determined by inclusiveness and the state of the environment, which characterize the development of the national economy. These problems are related to the diversification of the economic structure. Note that structural shifts remain one of the main factors of economic growth in the modern period, and the implementation of structural diversification is possible with effective government policy. Economic growth is objectively the main factor in ensuring economic security. State economic policy through stimulating economic growth is designed to ensure national security. The economic growth observed in certain years, as well as the dynamics of the main macroeconomic indicators, show that the economic growth of the corresponding years cannot be considered self-sufficient due to the obvious dependence of the state of the economy on the conjunction of energy prices. Let us emphasize, as noted by the authors in the future, "The modern growth model, solving the problems of new industrialization on an innovative basis, must also respond to new global challenges, including climate change, be environmentally oriented, weaken social stratification, and generally improve social welfare" [2]. The level and growth rates of individual countries have changed over a fairly long period depending on the socio-economic structure, the rate of scientific and technological progress, demographic processes, and international economic relations. Despite all this, the consistently growing growth rates are periodically interrupted, suspended, and reduced due to the resource opportunities of investment, labor, natural, financial, and innovative nature.

3. STUDY OF THE DYNAMICS OF ECONOMIC GROWTH AND SECURITY

Differences in the economies of individual countries are predetermined by such characteristics as geographic location, availability of natural and labor resources, structure of production and use, foreign economic activity, historical conditions, development of market relations, which predetermine national characteristics and the state of economic security. It should be noted that the quality of economic growth in the Republic of Azerbaijan has its own characteristics,

preconditioned by structural dynamics. The main dynamics is expressed in the fact that the share created in the oil and gas sector in the republic's GDP for the period under study, although with fluctuations, decreases from 44% in 2005 to 37% in 2019 and, accordingly, the share created in the non-oil sector increases with fluctuations. sector from 48% to 54%, which is generally positive. The comparison of the concepts of economic development and economic security deserves attention, and as noted by the philosophers of this point of view, development and security appear to be two different, but closely interrelated conditions of life in any sphere. In this case, the defining condition is still development, and this development only ensures security. Thus, "ensuring economic security should be considered as a necessary condition for the normal functioning and progressive development of the economy" [3]. The national interests of any country are based, first of all, on economic security, the provision of which in any period is determined by the ability of the economy to function in conditions of expanded reproduction. Thus, it can be noted that, although in recent years there has been a slight increase in the rates of economic growth in the republic, this growth has not passed to a stable stage, because fluctuations interrupt the nature of the duration of growth. In connection with the operation of objective economic laws, it remains necessary to accelerate the diversification of the structure of the economy, to increase the share of industries with high added value and, consequently, to stimulate the expansion of technological exports. Note that in the sectoral structure of the gross value added of the Republic of Azerbaijan, its share created in the extractive industry is decreasing from 45.6% in 2005 to 38.6% in 2019 and an increase in the share of gross value added created in the manufacturing industry from 7% to 5.5%, which characterizes its positive orientation. In accordance with this, and based on the structure of the economy by spheres of economic activity, it is necessary to ensure the further development of the non-resource sector and exports with the flow of capital from the raw materials sector to the processing industries and the outstripping growth of knowledge-intensive information industries. There remains a need to channel capital investments into non-resource sectors of the economy that have a high share of added value. Note that the quality of economic growth and ensuring national security is characterized to a large extent by the growth rates and the structure of industrial production. So, during the study period, the growth rates of the manufacturing industry began to outstrip the growth rates of the mining industry, since the ratio between them in 2005 amounted to 116.0% to 141.5%, then in 2019 - 111.5% to 100.4%, thereby expressing a progressive trend, but this trend has not yet sufficiently affected the structure of industrial production, in which the mining industry remained in the share of 85%, and the manufacturing industry - 12% include the production of machinery and equipment accounted for only 0.3% (GVA). The structure of the produced product predetermines the structure of foreign economic activity, in which the share of the republic's mineral products in exports is 90.9%, which indicates the need for a radical change in reproductive proportions. The solution of these tasks in the republic will provide a long-term potential for dynamic growth, a consistent increase in the well-being of the population, an increase in the country's competitiveness and economic security. At the same time, structural diversification should be aimed not only at using domestic financial resources, but also to stimulate the activities of foreign firms to invest in the production of non-resource sectors and sectors of the economy. The most important condition for ensuring economic security is the ability of the economy to function in the type of expanded reproduction on an intensive basis. Economic dynamics are changeable and are reflected in the level of economic security, depending on specific circumstances and time period. Note that after several periods of recession associated with ongoing crises in many countries, economic growth in the Republic of Azerbaijan began to recover in the following order: the rate of GDP of the republic compared to the previous year had the following value 2005 -126.4%, 2010 - 105.0 %, 2015 -101.1%, 2016 -96.6%, 2017 -100.2%, 2018 -101.5%, 2019 -102.2%. However, the next year, the republic's economy faced the global problem of a pandemic and the need to

liberate and restore the liberated territories of the country. The economic security of the country, in the final analysis, is a special stable state of the national economy, predetermined by its constantly developing combination of its properties and abilities. Since the reality is that Azerbaijan is an oil country, this circumstance is, accordingly, the basis of its economic development. In these conditions, both GDP, and GVA, and the national income, and the country's budget are based on the development of the oil and gas sector. This natural resource potential sets the optimal use of mineral reserves as the main task of economic policy, as well as reducing the dependence of the country's economic and social needs on oil exports and ensuring independent economic development. In the context of modern globalization, the processes of ensuring the country's economic growth and security are developing more and more complexly and contradictory. Also, the dynamics and state of security characterizes the process of using GDP. The analysis showed that during the study period, the share of final consumption increased from 52.6% in 2005 to 67.6% in 2019, amounting to more than 2/3 of the total, which characterizes an increase in social orientation. The share of total accumulation decreased from 41.5% in 2005 to 20.1% in 2019, which is associated with a worsening situation in the raw materials sector. Further, the share of net exports in the used GDP had strong fluctuations, but in general in recent years it has increased significantly, amounting to 16.5% and 12.3%, also depending on the volume and structure of raw materials export. In general, the structure of use is determined by the value of consumption and accumulation, accounting for more than 80%, which are affected by the share of net exports. Next, we will analyze the dynamics of the ratio between the intermediate product and gross value added in the total output of goods and services. During the analyzed period, this ratio grew in favor of gross value added, the share of which increased from 57.2% in 2005 to 66.1% in 2018. This dynamics grew simultaneously with the growth rate of the republic's GDP, with the exception of 2015-2016, associated with the raw materials and price situation. At the same time, in recent years, the rates of growth in the spheres of economic activity have been positive. Thus, the growth rates in the manufacturing industry in 2018 and 2019 amounted to 106.4% and 111.5%, in agriculture 104.6% and 107.3%, in information and communication 109.8% and 115.9%, and in total in all spheres (GVA) 101.5% 102.2%, i.e. progressive industries grew at a faster pace than other industries. At the same time, we note that if the rates by industry show the dynamics of economic growth or its decline, then the specific weights characterize the state of economic security. Economic security acts as the reverse side of economic growth, on the basis of which economic sovereignty is based. The ultimate purpose of ensuring economic growth and security is to solve a whole range of social tasks to increase motivational incentives, life, educational, cultural level of the country's population. Development is one of the components of economic security, because if the economy does not develop, then the possibilities of its survival, as well as resistance and adaptability to internal and external threats, are sharply reduced. The ability for self-development and progress is especially important in the modern, dynamically developing world. The economy now more than ever needs diversification, that is, the development of various competitive industries and, above all, it concerns the processing industries, machine building. Thus, the study showed that there is a certain relationship between the dynamics of economic growth and indicators characterizing economic security, significant or weak, depending on the characteristics of the functioning of the economy in the domestic and foreign markets. Improving the quality and standard of living, being the goal of a socially oriented market economy, in fact, becomes not only the result of economic growth, but also its condition. Here, the causal interdependence of economic growth and security at the country level is manifested. The required quantity and quality of economic growth makes it possible to reach the threshold values of economic security, thereby strengthening the country's potential, from which, in turn, it becomes possible to change the socio-economic dynamics with a higher level of development.

To ensure economic development, it is necessary to promote in every possible way the gradual transition to closed production cycles with the optimal use of natural, capital and labor resources. The achieved level of economic, social, innovative, foreign economic development will ensure the safe functioning of the economy and the progressive development of the country. Certain indicators of economic growth and security may reflect the similarity of the economic situation or their divergence depending on the focus of the study. Improving life, being the goal of a socially oriented market economy, in fact, become not only the result of economic growth, but also its condition. The improving mutual influence of the level of economic growth and national security will become the basis for building a social and innovative model of the country's development. For the transition of the republic's economy from a state of instability to stability and progressive growth, a set of measures should be provided for technological, structural, investment, innovation, and financial restructuring. We also note that, despite the presence of differences in national security and economic growth with their ramifications, they do not exclude each other, but complement each other and relate to each country to a greater or lesser extent, depending on the specific socio-economic dynamics. Of course, the concept of economic security does not exist outside space and time, it is a form and reflection of threats of an economic, environmental, political, social nature. The national security of the country is determined by the system of its national interests, which imply the protection and efficient use of natural resources, the improvement of the structure of the market economy, the development of the innovation and social sphere. Being a collective, synthetic category, economic security is closely related to the following concepts: economic stability, economic development, economic independence, economic growth, economic sovereignty, national interests, threats to national security, etc. The state should act as a guarantor and spokesman for economic security, protecting and ensuring the living conditions of all its subjects. In addition, it is necessary to take into account the factors that undermine the stability of the socio-economic system of the state. It is also necessary to take into account that in the modern period, economic security is formed in the context of the development of globalization processes and market relations. When identifying the conditions for ensuring the economic security of an individual country, it is necessary to take into account the following basic properties: preservation of a single economic space, ensuring the observance of national interests; the ability of the economy to resume the process of expanded reproduction in all sectors and industries; ensuring the least dependence of the country's economy on external factors, stimulating investment and innovation; maintaining social stability. National economic security should objectively reflect the entire multifaceted interconnected system of interests of the country, expressing the potential and possibilities of its economic development, and, consequently, economic sovereignty, i.e. national economic system. The role of the state in the economy is essentially proportional to the resources that it manages, natural, capital, labor, as well as the budget. In this regard, the decree "Azerbaijan 2030: National Priorities for Socio-Economic Development" was adopted by the decree of the President of the Republic of Azerbaijan, according to which, in order to ensure the country's sovereignty, sustainable economic growth should serve to form a dynamic and inclusive society and every member of society will be provided with the results of this development [4]. As a result, the goal of forming a socially-oriented, innovative economy will be achieved.

4. CONCLUSION

In the modern period, the socio-economic situation of the country is determined by the ability of the economy to structural changes, i.e. economic progress is assessed not by quantitative indicators of growth, but by innovative and social development, which ensures the sustainability of growth and national security. Along with this, economic security is considered as a combination of factors that ensure the independence of the national economy, sustainable

competitiveness, and the ability to constantly renew and improve. Also, the content of economic security is multi-level, including the individual, micro, meso, macro or national and world economic levels. The study showed that with factorial, structural features, negative and positive trends, the economy of the Republic of Azerbaijan has the ability to achieve sustainable economic growth and ensure national security under the coordinating, regulating, stimulating influence of the state.

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MACROECONOMIC SUSTAINABILITY CHALLENGES OF AZERBAIJAN: A NEW APPROACH TO ECONOMIC DIVERSIFICATION

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ABSTRACT

In the light of recent global economic volatilities, macroeconomic sustainability challenges have recaptured significant policy attention in Azerbaijan. The essence of these challenges is largely shaped under the impact of the transition and resource-rich character of the national economy. In the new phase of economic reforms launched in 2016, the urgency for economic diversification is not only explained by the necessity of structural transformation but also maintaining long-term economic development. In this research, current macroeconomic sustainability challenges are analyzed through three aspects. Brief analyses reveal that despite continuous reforms and an increasing share of the non-oil economy, the capacity of the tradable sector to reduce dependence on the oil sector is still limited. Such underdevelopment level of the tradable sectors creates an additional burden on the fiscal sector which also adversely affects fiscal sustainability and transition into more resilient policymaking. Finally, chronicle challenges regarding exchange rates restrict monetary policy independence and effectiveness of the structural policies. Authors consider that there is a need to redesign the economic diversification strategy and review it as a comprehensive set of macroeconomic, financial, and structural reforms.
Keywords: Economic diversification, macroeconomic sustainability, economic development, resource abundance, volatilities

1. INTRODUCTION

During the independence years, the Azerbaijan economy has gone through fluctuation cycles under the impact of several structural and contextual factors. All these cycles raised serious concerns regarding achieving and sustaining macroeconomic equilibrium without adversely affecting the socio-economic situation. Until the commencement of oil boom years, macroeconomic sustainability challenges mainly covered preserving fiscal and monetary balance, addressing socio-economic problems that appeared after transitioning into the market economy as well as devastating consequences of the war. While looking through programs funded by international financial institutions such as the International Monetary Fund (IMF) or World Bank, it seems that macroeconomic sustainability challenges were also related to the institutional environment including low efficiency of economic policymaking, weak fiscal discipline, and regulatory frameworks. The oil boom period starting from 2004 gave an excellent opportunity to eradicate all these deficiencies as well as to shift into a proactive policymaking phase in preserving macroeconomic sustainability. Mainly convenient external economic environment as well as economic policy frameworks and strategies adopted during this period, let Azerbaijan enjoy two-digit economic growth, implement massive infrastructure investments, eliminate poverty, raise living standards and finally use financial resources at its

own discretion to address economic problems. However, this period gave birth to new concerns regarding maintaining macroeconomic sustainability in the example of economic diversification. During rapid economic growth years, economic diversification has always been one of the topics of the economic reform agenda. However, its ranking amongst other agenda topics has been exposed to some changes under the impact of the fluctuations in the global energy markets. From our point of view, the current state of the global and national economy makes economic diversification a top priority for the government to take comprehensive measures targeting not only short-term growth but also long-term development goals. In these regards, there is a need to revise the approach toward the interpretation of the concept of 'economic diversification' and using it as an economic policy tool. Instead of being judged as a panacea, economic diversification should serve as a tool to modernize the national economy and foster its adaptation to the changes in the global economy stemming from technological and industrial advancements.

2. LITERATURE REVIEW: ECONOMIC DIVERSIFICATION, RESOURCE ABUNDANCE AND ECONOMIC DEVELOPMENT

The problem of economic diversification is very relevant for developing economies, particularly for resource-rich countries. Studies regarding economic diversification generally assess it either as a way to eliminate development challenges in the least developed economies or as a tool to maintain long-term sustainable development in rapidly growing resource-rich countries. In both options, economic diversification is inherently related to the development of national economies on sound institutional and structural grounds. Referring to the Prebisch-Singer hypothesis, economic growth cannot be based on resource-based products because world prices of the primary exports, despite some cyclical upwards, generally tend to decline in comparison to the manufactured export goods (Kaulich, 2012). Indeed the main problem of a limited diversified economy is just not related to the fluctuations of the prices of resource-based products in the global markets. Limited diversification and dependence on the resource sector make national economies more vulnerable to the internal and external shocks as well as make it lag structural and institutional adaptation to the global economic system. Therefore, besides enabling a country to reduce its exposure to commodity price volatility, economic diversification should be understood as a means to jump into the development race rather than as a goal in itself (Benavente, 2016). As economic diversification can be generally looked through in the context of development economics, its conceptual interpretation, as well as its linkages with other macroeconomic and structural factors, raises substantial discussions regarding what kind of policy strategies and tools should be chosen to get the ultimate goal of development. One of the widespread approaches regarding economic diversification assesses it as a strategy that enables transformation of the economy from using a single source to multiple sources of income spread over the primary, secondary and tertiary sectors (UNFCC, 2016). Effective diversification of income sources enables countries to mitigate external shocks, reduce the balance of payment volatilities as well as achieve a more balanced allocation of employment over the economic sectors (Gelb and Grasmann, 2010; Papageorgiou and Spat 2012) . In other words, through reducing dependence on narrow fields of activities, economic diversification can offer a broad maneuver space for the countries in their domestic and external economic policies. Esanov (2012) defines economic diversification as a process in which the economy becomes more diverse in terms of goods and services it produces. Freire (2017) argues that economic diversification is the ultimate result of innovation based on the assumption that each new economic activity, including producing a new goods or service, generates a novelty which stems from the innovation process and technological change. This approach generally requires reviewing economic diversification in the light of technological and industrial differences between advanced and developing economies.

Therefore, research on economic diversification should not be analyzed just in terms of contemporary macroeconomic policies that affecting the current state of the economy, but it should also focus on the development patterns or path-dependence of the economy (Hausmann and Rodrik, 2006) and should seek better ways to turn innovation and technological changes to the drivers of progress. Thus economic diversification should serve to the implementation of strategic goals such as *(i)* achieving more resilient short-term growth trends and transforming these dynamics into long-term economic development cycles and *(ii)* accelerating comprehensive structural transformation which should encapsulate upgrading the industrial capacity of the economy. Realization of these goals should allow countries to improve their international competitiveness and achieve better positioning in the global economic system. As appears, economic diversification requires a broad mixture of macroeconomic as well as institutional and structural policy tools. Besides its separate interpretation as an economic concept, the impact of the economic and political landscape on the economic diversification and mutual linkages between these concepts constitute objectives of the studies on economic diversification. In this regard, two main strands of studies can be classified which analyze the inherent relationship of economic diversification with other economic factors. The first strand of such studies uses an indirect channel for studying the correlation between economic diversification and development. In this context, more preference is given to understand whether natural resource abundance and economic development are somehow correlated with each other or not. In other words, does being a resource-rich economy make it compulsory to conduct economic diversification policies for the sustaining of the development? Empirical studies introduce a mixed outcome on this issue. Some studies (e.g. Bravo-Ortega and De Gregorio, 2007; Pineda and Rodriguez, 2010) show a positive relationship between resource wealth and economic development while Auty (1993), Sachs and Warner (1995), and Neumayer (2004) have found that resource abundance adversely affects economic development in the long horizon. From our point of view, it can be misleading to review resource abundance as either a blessing or curse while there are sufficient 'success' and 'failure' case studies on both sides. There is no doubt that economic factors generally create some obstacles for resource exporters in terms of sustaining long-term growth dynamics. However, it also appears that the effect of resource wealth does not definitely lead to pre-determined, standard failure scenarios for the countries, and the experience of each resource-rich country is largely shaped under their policy responses and development strategies (Neary and van Wijnbergen, 1986; Gelb and et. al, 1988). In this regard, in the process of economic development, institutional and political economy factors and their impact on states and economic policymaking play a key role rather than resource abundance. Any country with inadequate institutional capacity and flawed economic policymaking will fail to achieve resilient economic development with or without resource abundance. Therefore, governance, policymaking, regulatory and surveillance capacity of the state institutions, openness to international trade, development level of financial markets as well as maturity of political system, human capital and other factors should also be given significant attention. The second strand of studies reviews economic diversification in the context of structural transformation of the economy and the role of stakeholders (particularly state and private sector) in this process. A sufficient number of studies have been addressed to analyze what kind of policy approaches can yield more efficient outcomes in the process of economic diversification. Through differentiating vertical and horizontal diversification, Morris et al. (2012), Bond and Fajgenbaum (2014), Goldhorpe (2015) have conducted studies on what kind of measures can be more effective in terms of realization of economic diversification in the light of structural transformation. On the other hand, there is not unique approach regarding the role of state intervention in the structural transformation process. While there are success stories associated with the widespread usage of state capitalism in the process of promoting industrial transformation, particularly in the cases of some East

Asian countries, Hirschman (1981) considers that a state's active guidance through its fiscal resources can entail efficiency problems in the process of targeting industries. Nonetheless, particularly in less developing as well as in transition economies, through both implicit and explicit fiscal channels, policy and administrative guidance, state intervention can yield more benefits for fostering the transformation process if necessary fundamental institutions and market economy mechanisms had been built. However, the number of factors affecting the efficiency of the state intervention varies based on the examples of different economies which make it difficult to put straightforward hypothesis regarding this issue.

3. ECONOMIC DIVERSIFICATION IN AZERBAIJAN: INTERPRETATION AND URGENCY CHALLENGES

Since regaining its independence, Azerbaijan economy is going through two major strands of economic transformation. The first one is the transition from a command economy into a market economy while the second one encapsulates the transition from resource to the non-resource-based economy. At first glance, it can be thought that in its original interpretation the concept of economic diversification is only applicable regarding the second transition strand. However, it should be mentioned that under a much broader context of structural transformation, economic diversification has been one of the major challenges in the process of transition from a command economy. Due to the provincial economy features inherited from the Soviet period, collapsing economic relations with former Soviet economies adversely affected national production capacity in the initial years of independence. Therefore, transition into a new economic system did not only reflect institutional and regulatory aspects but also required quick re-adaptation of the industrial capacity to new economic realities. In this regard, major economic policy packages, as well as projects conducted by international financial institutions such as IMF and World Bank, mainly focused on mitigating shocks and vulnerabilities as well as enabling macroeconomic sustainability through reactive policy tools. In this period, economic diversification was not amongst the top priorities of the economic reform agenda while economic policies were designed to bolster and upgrade existing infrastructure rather than the implementation of a more comprehensive and forward-looking transformation strategy. Thanks to the commencement of the oil boom period in the middle 2000s, the Azerbaijan economy has enjoyed double-digit growth dynamics. This period also enabled policymakers to conduct comprehensive economic policy programs by focusing on both current economic vulnerabilities and addressing future designing of the economic system. In this section, through focusing on the narratives used in several official policy strategies, the interpretation of the concept of economic diversification is analyzed. In the early and momentum years of rapid economic growth (2004-2011), development of various economic sectors, expansion of the production capacity as well as stimulation of export-oriented industrial production were perceived as standard and sufficient policy objectives for economic diversification and rural development. At this stage, economic diversification has been addressed through a general point of view rather than specifically designed strategies. Beginning from the early 2010s, economic diversification narratives began to capture more space in official policy documents. In this regard, "Azerbaijan 2020: Vision into the future" Development Concept which was adopted by Presidential Decree in late 2012 can be considered as the first official document in which the strategic outlook of the authorities regarding the diversification of the economy has been explicitly indicated. However, in this document, economic diversification was mentioned as an ultimate goal of the development process without clear and detailed information on what kind of measures and approaches would be used to realize it. "Strategic Roadmap for National Economy Perspective of the Republic of Azerbaijan" which was adopted by the Presidential Decree in December 2016 was the most comprehensive and detailed strategy which also encapsulated a SWOT analysis of the national economy.

Adoption of this document coincided with the recession period in which due to the sharp oil price fluctuations in 2015, manat was exposed to devaluation two times which worsened fiscal balance and financial stability. Prior to the Strategic Roadmap, authorities took several measures to increase economic activity and maintain stability in financial and real sectors. In this regard, the adoption of the Strategic Roadmap was not just a temporary reaction of the authorities to the contracting business cycle; it was also an outlook for the future in which economic diversification and supporting economic growth through new growth drivers were listed as medium-term objectives (Strategic Roadmap, 2016). In this document, concrete targets such as increasing non-oil exports per capita from USD 170 to USD 450 by 2025, increasing non-oil FDI in non-oil GDP from 2.6% to 4% by 2025, creating new jobs in tradable sectors indicate the urgency and priority level of economic diversification for policymakers. At the same time, other strategic targets covering strengthening fiscal resilience and improving monetary policy robustness, rethinking the role of the public sector in economic activity as well as fostering privatization and reforming of the state owned enterprises (SOEs) are also directly and indirectly, related to the economic diversification.

4. SUSTAINING MACROECONOMIC STABILITY: THE STATE AND ROLE OF THE ECONOMIC DIVERSIFICATION

Despite sharp fluctuations in the external sector since 2015, macroeconomic sustainability has been an ultimate policy goal achieved through comprehensive and continuous policy actions. In this section macroeconomic sustainability is briefly analyzed in terms of three aspects: *(i)* GDP's composition and its growth dynamics; *(ii)* fiscal balance; *(iii)* exchange rate dynamics.

4.1. GDP and its composition: tradable vs non-tradable sectors

According to the State Statistical Committee of the Republic of Azerbaijan, excepting some years, GDP dynamics has been downward mainly under the impact of the volatile external sector over the last decade. In the light of the average low level of oil prices over this period, a positive GDP trend is either achieved thanks to partial recovering of the oil prices or the expansionary fiscal policy which supported domestic economic activity. Despite positive growth dynamics are mostly preserved in the non-oil GDP over the recent decade, this sector is not able to fully compensate for adverse spillover shocks in the global oil prices due to several reasons. First of all, the share of tradable sectors in the non-oil GDP is smaller than non-tradable sectors which can also be observed while looking through trade balance and overall industrial production as well as their composition. Secondly, active state intervention to the real sector as well as access to finance shortcomings made non-oil GDP more dependent on the 'external' funding (spesifically, dependent on the funds mainly coming from fiscal and quasi-fiscal sectors rather than the private sector). This tendency additionally increased the vulnerability of the non-oil economy to the oil price changes. The procyclical and discretionary fiscal expansion has also increased dependence on the state's financial support (Strategic Roadmap, 2016) as well as elasticity of the tradable sector to the changes in the fiscal sector. Therefore, despite the rising share of non-oil GDP that mainly concentrated in the non-tradable sectors including construction, services, public catering, and others, oil price fluctuations in the global markets can substantially restrain these sectors in any time. Vulnerabilities stemming from these sectors can be explained by two factors. The first one is the low capacity of these sectors to generate value. In other words, the value generated in non-tradable sectors relies either on the spending earned in the production sectors (in the case of Azerbaijan, dominantly in the extractive sector) or acquired through other sources (such as borrowing from the banking sector or remittances). Moreover, as non-tradable sectors outweigh the domestic tradable sectors over time, it increases the usage of imported goods (as well as services) and demand for other supplementary non-tradable sectors.

On the other hand, while looking at industrial production capacity, it becomes obvious that despite some increase in the manufacturing sector both in real and nominal terms, nearly half of its composition comes from the manufacturing of food products, construction material as well as refined petroleum products. This structure of domestic industrial production reveals itself through a low level of exports per capita and export sophistication (Hampel-Milagrosa et. al, 2020) as well as in less economic complexity. Without improving manufacturing capacity to produce sophisticated products and export them, economic diversification will be restricted to quantitative indicators such as the number of goods produced or exported rather than qualitative benchmarks such as economic complexity and technological capacity. This type of diversification definitely exhibits serious shortcomings in terms of supporting long-term and resilient economic development. These highlighted problems stemming from such composition of GDP and industrial production also raise fiscal constraints and exchange rate concerns which to be discussed below.

4.2. Fiscal sector and its sustainability challenges

As a transition and resource-rich country, fiscal policy has been a dominant factor in shaping and supporting the whole economic system in Azerbaijan. Pursuing a macroeconomic policy relied on active state capitalism which enabled capital accumulation during the oil boom years (Strategic Roadmap, 2016) also led to leveraging of fiscal sector. In this regard, the task of the fiscal policy was not restrained only providing public goods as originally deriving from its nature; it also included subsidizing the real sector and stimulating aggregate demand to cover supply shocks which mainly originated in the mining sector. The dilemma of the fiscal sector in this context appeared: how to sustain positive growth patterns through a gradual shifting in the main drivers of economic growth without disrupting macroeconomic equilibrium? This dilemma still preserves its urgency and priority for the policymakers and the solution of this dilemma requires a comprehensive set of policy measures in various directions. The revenue and spending composition of the state budget still exhibits higher elasticity to the oil price fluctuations while restricts the countercyclical behavior of the fiscal authorities. As accentuated previously, the non-oil economy still needs continuous subsidies from the state which makes it indirectly dependent on the oil price changes. Overreliance on the transfers from the State Oil Fund (SOFAZ) hampers both the realization of fiscal rules adopted in 2018 and creates a macro-fiscal burden on the SOFAZ. Moreover, the recent oil price volatilities reduce the maneuver space for the state in terms of both supporting growth in the short term and implementing smooth shifting into strict fiscal rules without disrupting overall economic activity. Active state capitalism faces challenges in terms of realizing targeted support to the tradable sectors. The current composition of industrial production reveals the dominance of low value-added sectors or in other words, the sectors that can be characterized with low processing capacity. In recent years, thanks to the state's activity, new facilities, factories, and industrial parks began to operate in the non-oil sector of the economy. However, the problem regarding these facilities is that they mainly focus on less technologically sophisticated production. On the other side, missing industries and fragmented linkage between existed industries make it difficult to use locally produced intermediary goods for production. Such a missing chain of production logically urges importing of intermediary goods from other countries which in its turn reduces the share of the value generated by domestic industries. On the other side, problems relating to the access to finance which appears through a mixture of the high cost of financial intermediation, underdeveloped non-bank financial institutions as well as structural challenges of the banking sector make it difficult for the fiscal authorities to refrain from subsidizing tradable sectors. Insufficient activity of the private sector, SMEs' financing challenges, inefficiency in the finance sector as well as immature market environment urge the state to subsidize economic activity even though such activity in some cases leads to market failures.

The mixed character of the state's regulatory and commercial activity imposes an additional burden on the fiscal institutions, mainly through SOEs. While such mixed regulatory and commercial activity can be assessed as a legacy of the tough transition period, SOEs receive huge financial support from the state budget to finance their operations benefiting from their quasi-fiscal status. In the current phase, the major challenge is not just improving the accountability and operational activity of the SOEs as well as redesigning their stance in the real economy. In this regard, the most recent actions taken regarding modernizing and improving SOEs should be welcomed as a complementary part of the economic diversification while looking at the great picture.

4.3. Exchange rate dynamics: harmonization of short and long-term targets

Exchange rate stability has been one of the indicators which characterized the state of macroeconomic stability during both oil boom years and the post-oil period. It should be mentioned that debates regarding what kind of exchange rate policy should be pursued to prevent Dutch Disease and support non-oil sectors have attracted substantial attention during all these years. In this context, empirical and academic findings generally criticize monetary policymaking conducted during oil boom years under the pretext that this policy was partly effective in terms of eliminating resource curse. The dynamics of the exchange rate affect macroeconomic sustainability through three channels: *(i)* price stability; *(ii)* balance of payments channel (mainly through current account balance) and *(iii)* financial stability.
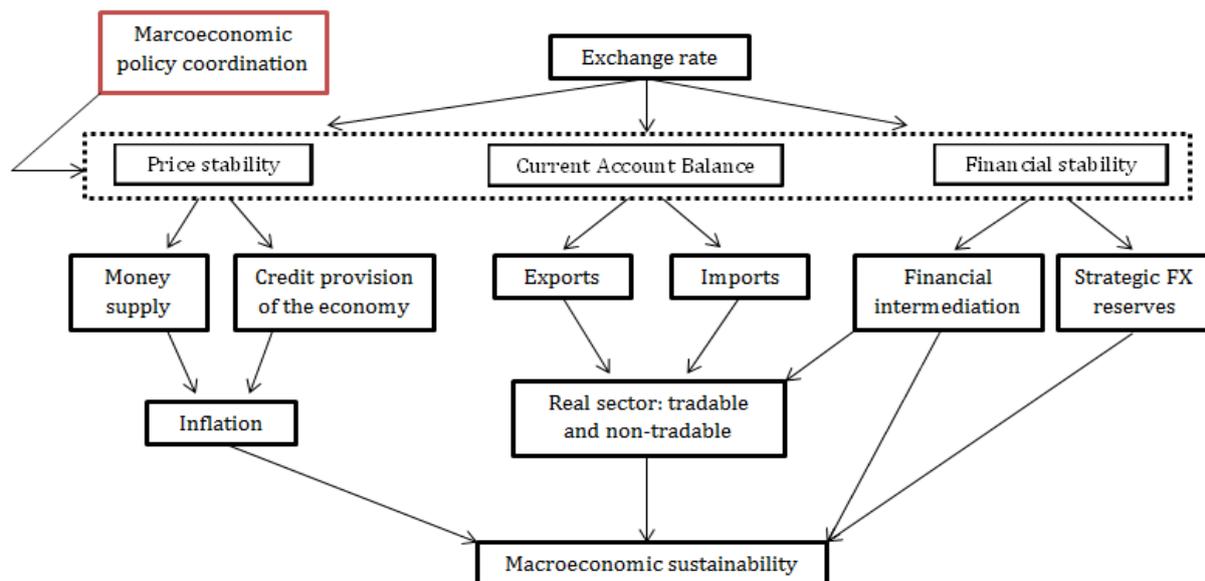
Figure 1: Exchange rate transmission channels to the macroeconomic sustainability

Hyperinflation legacy from initial years of independence has played an important role in shaping the institutional memory of the monetary authorities. In this regard, price stability which is naturally amongst top policy objectives for monetary policymakers has also been prioritized over independence years in the light of inflationary pressures. However, the realization of this objective became more complicated once Azerbaijan started to experience huge oil inflows which entailed further inflationary pressures stemming from increasing aggregate demand and imports. Additionally, the introduction of the new currency in 2005 is observed with rising inflation levels to 16.7% in 2007 and 20.8% in 2008 as well as rising nominal average wages and income while nominal and real effective exchange rates were exposed to appreciation. At this stage, the Central Bank of Azerbaijan (CBAR) did not have enough maneuvering space other than pursuing managing exchange rate policy through

sterilization of huge oil inflows aiming to smooth inflationary pressures and achieve price stability. However, this policy stance led to the sharp appreciation of manat during 2004-2008 which negatively affected economic diversification and competitiveness of the non-oil sector (Hasanov, 2010; Hasanov, 2013; Hampel-Milagrosa et. al, 2020). Such strict exchange rate targeting policy dominated until 2015 when negative oil shocks hit the economy and caused a substantial shrinking of the CBAR's strategic reserves. A similar policy stance still continues to exist in which de-facto fixed exchange rate policy is pursued to keep price stability and inflation under control which partly contradicts the economic diversification strategy. Such prioritization of policy targets involves several inherent vulnerabilities. Firstly, the current policy approach is still vulnerable to oil price shocks as it was during the oil boom years. Secondly, this policy is highly costly which urges authorities to intervene market during new oil price shocks. However, the maneuver capacity of the authorities is not as larger as the oil boom years. Thirdly, the current exchange rate policy also adversely affects the banking sector which indeed should play a more active intermediary role to bolster current economic reforms. This negative effect on the banking sectors stems from increasing market uncertainties as well as restrictive monetary conditions which make banks refrain from providing credits at affordable conditions. Fourth but not least, such a policy stance emits wrong impulses to both domestic and foreign economic actors (investors) regarding the independence of monetary policymakers as well as firmness of the vision of fiscal authorities. Another key transmission channel of the exchange rate to macroeconomic sustainability is the current account balance. While oil revenues constitute nearly 90% (peaking to 95.3% in 2011) of overall exports during the recent decade, oil inflows to the economy make CBAR sterilize these flows through market interventions to hinder further appreciation of manat. On the other hand, inflation, higher wages and incomes, substantial oil revenues inflows, including FDI triggered a peak in the demand for non-tradable goods and services as well as the imports. Rising imports stemming from increasing aggregate demand and low levels of domestic production have created additional appreciation pressures on manat. Some authors argue that it was a more reasonable option for the authorities to manage imports rather than creating new production sectors as appreciated manat allowed to implement effective control over the imports (Ahmadov, 2017). In both transmission channels, manat's appreciated exchange rate affect economic activity in the real sector in which non-tradable sector experienced substantial growth while tradable sectors gradually lost their competitiveness both in real (technological backwardness and structural challenges) and nominal terms (rising cost, shrinking income level). These challenges preserve their urgency in the current period while the current account balance is still dominantly shaped under oil revenues and non-oil exports are strictly constrained within low value-added sectors. Moreover, while deficits will continue to be observed in the non-oil balance, the current account balance will be more vulnerable to the oil price shocks.

Figure following on the next page
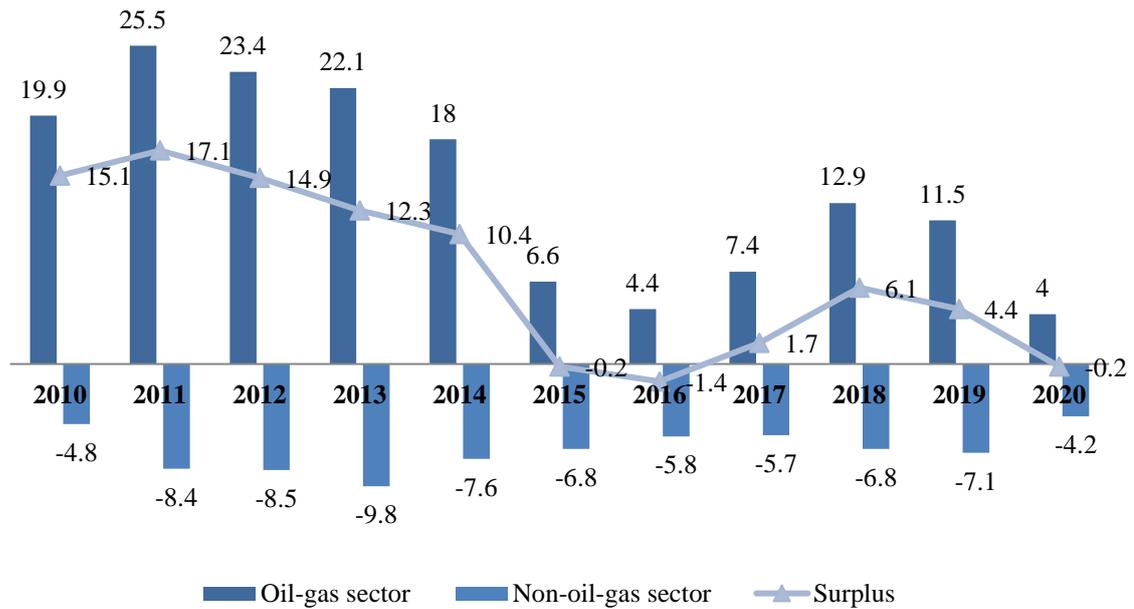
Figure 2: Current account balance dynamics
(Source: CBAR)

Financial stability challenges attracted significant attention during the recent economic recession in which the banking sector suffered substantial challenges which resulted in revoking the licenses of several banks. In the context of our research, financial stability is analyzed through the impact of the exchange rate movements on the financial sector. Firstly, due to the undeveloped financial markets and financial intermediation, exchange rate movements affect financial stability mainly through lending activity and liabilities of the banks rather than monetary policy transmission channels or financial market developments. In the light of economic shocks experienced in 2015-2016, the banking sector suffered substantial losses stemming from unsustainable credit expansion which mainly occurred during oil boom years benefitting from cheap funding sources. As the general income level increased, consumption spending rocketed while the rapidly growing non-tradable sector benefitted from increasing aggregate demand. However, such unsustainable credit expansion into the real sector, mainly to the non-tradable sector subsequently led to the rapid growth of the non-performing loans and substantial shrinking of capital resources of the banks. In the background of the rising imports and growing economic activity during the oil boom years, financial intermediation mainly served to meet financial demands for the consumption, coverage of import financing, and growth of the non-tradable sector. Manat's appreciated exchange rate as well as high interest rates impeded the tradable sectors to benefit from overall economic activity. The existence of structural problems mainly in the banking sector also made it difficult for financial institutions to build sustainable business models. In the current phase, the banking sector still exhibits serious challenges in terms of fulfilling their financial intermediation roles while consumption credits dominate in the share of overall credit provision to the economy as they did in the recent decade. Without the development of effective financial intermediation, private entrepreneurship will continue to experience access to finance problems. Fixed exchange rate policy and uncertainties regarding the future of the policy actions of the monetary authorities can hamper economic activity in the tradable sector.

5. CONCLUSION

Empirical and academic experience reveals that producing more and diversified low value-added products is not sufficient for sustaining long-term growth. On the contrary, economies that have the human and technological capacity to produce a more diverse range of sophisticated goods and services can preserve their international competitiveness while maintaining macroeconomic sustainability. In the light of these findings and the current economic reform agenda, it is important to review and redesign economic diversification strategies implementing in Azerbaijan. Experience of the oil boom years reveals that avoidance from the Dutch Disease has been partly achieved while economic diversification strategy has some problems in terms of yielding sufficient outcomes to reduce the dependence on the oil revenues. The complex structure of macroeconomic sustainability requires a more comprehensive and visionary set of macroeconomic, financial and structural policy measures to achieve short-term growth and transform it into long-term economic development.

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"APPLICATION OF A SYSTEMATIC APPROACH IN THE MANAGEMENT OF THE CONTINUOUS EDUCATIONAL PROCESS IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT"

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ABSTRACT

In modern conditions, companies in management use a situational, process or systematic approach. The choice of a more optimal approach is justified by the existing management system in the enterprise. A systematic approach is a comprehensive analysis of business processes, identification of the main elements of the processes, and making decisions that affect the ultimate goal of the company. The main problem in the formation of the system is the scheme of interactions between subsystems, since each system has its own subsystems, and they respectively sub-subsystems.Continuous educational process as the main goal of the educational organization determines the principles of strategy formation and the relationship with the outside world, including the state and potential customers interested in the final result of the educational process. This article defines the systems approach, reveals the elements, and substantiates the effectiveness of its use. The role of teamwork and priorities in achieving the goals of the educational institution are determined.
Keywords: *system, system approach, subsystem, result, educational institution, continuous educational process*

1. INTRODUCTION

The systems approach is one of the most important and generally accepted methodological approaches in modern theory and practice of education management. A feature of modern educational organization as a system is its relationship with the external environment. An educational organization can function by adapting to the external environment, rebuilding its processes without destroying integrity. In the case when the social system is well organized, it can itself influence the external environment, adapting it to achieve its goal. For this, the educational system must mobilize its external and internal capabilities.

2. LITERATURE REVIEW

The ancestor of the systematic approach can be considered Ludwig von Bertalanffy, who introduced the concept of a general theory of systems. The followers of this approach can also include representatives of the management theory N. Wiener, W. Ross Ashby, S. Bira, etc. The theory of systems was actively developed in the 50s – 60s of the 20th century [1].Today, a special focus of the systems approach in management is the development of Malik Fredmund (University of St. Gallen (Switzerland)) - system-oriented management [2]. This direction is a continuation of the developments of the school of Hans Ulrich and S. Beer [3]. We can also include the development of Jamshid Garedagi "Systems Thinking. How to manage chaos and complex processes. Architecture business modeling platform'' (USA, 2007)[4]. Many researchers have paid attention to the systematic approach to enterprise management, among

which I would like to mention such scientists as Russell L.Akoff [5], Peter Senge [6],Vihansky O.S.V[7], William Detmera [8], Gaponenko A.L. [9], Daft R.L. [10], L. Stanford Optner [11], Joseph O'Connor, Ian McDermott, Zharikov ON, Ignatieva A.V., Korotkova E.M. [12], Korenchenko R.A. [13], Mineeva N.V., Maksimtsova M.M. [14], Nikanorov S.P. [15], Rogozhina S.V. [16] and etc. Since the second half of the 20th century, management theories have been strongly influenced by the intensively developing general scientific direction of the "general systems theory", that is, the general scientific systems approach. At the junction of control theory and system theory, a simple but fundamental conclusion was formulated that any organization is a system in the most complete and strict sense of this concept [17].

3. METHOD

Using the methods of observation, grouping, induction, deduction and classification, a system of factors influencing product quality in different directions was analyzed and developed.

4. PROBLEM ANALYSIS

What definition does this theory give the concept of a system? This approach is understood by the system as a set of interdependent parts, each of which contributes to the functioning of the whole. Given that the whole is primary, and its parts are derived from it. It means that the main thing at the enterprise is awareness to feel the purpose of the company, which consists of parts, and they interact with each other and with the outside world. Each manager is obliged to understand that isolated cases of managerial influence on an organization will necessarily lead to numerous and often unpredictable consequences. The consequences of decision making can be predicted by understanding the essence of the system, determining the influence of each decision on the final goal. And they become unpredictable in the case if they do not take into account the principle of organization as a single interconnected system. Each company, on the one hand, represents a certain system, on the other hand, it exists by its own special rules. In order to effectively manage an enterprise, it is necessary to form a system of values in the achievement of which all participants should be interested. The main problem in the formation of the system is the scheme of interactions between subsystems. Since each system has its own subsystems, and they respectively sub-subsystems. Decision making in the subordination of subsystems and the organization of links between them is a long and painstaking process, often culminating in the wrong and inefficient choice. The commercial component of the educational organization puts a trade secret in tight boundaries with a closed information system, leaving the information for the external user only with legally valid data in the framework of accounting and financial reporting. Previously, the goal, mission, and tasks facing the company were not accessible to an external user, but today each educational institution, within the framework of the reputation and image enhancement program, openly declares these parameters of its policy on official websites. Reasonable openness of educational organization to the external user makes it part of an open system, with the ensuing consequences, when both participants can influence the organization of the educational process, the decisions of the other party. Becoming part of a unified system of existence, the company must accept the conditions of this system for making complementary decisions. In the conditions of virtualization, digitalization and technologization of the world, only the advanced achievements of an educational organization can attract potential customers. An educational institution that openly declares on its websites that new educational technologies are used in the educational process has more chances for development than an organization that applies such technology but does not advertise itself. Formation of educational process programs jointly with the employer, pre-university and post-graduate training of qualified competent specialists, organization of continuous educational process is key to success of a modern educational institution. In the face of tough competition, each company is looking for its own development path.

At the same time, she herself chooses the value system that is most suitable for her. The formation of the system, as well as subsystems, is part of the overall concept of enterprise development. Which departments, divisions to create, what management structure to choose, these questions remain open for owners. Life experience, level of education, intuition and other factors are important in determining the effectiveness of decision-making. Another feature of the existence of a modern enterprise is the definition of the place and role of the organization in the system of state relations. Being a part of the external environment, the state influences not only current activities, but also the development strategy of the educational institution. On the one hand, changes in legislation, innovations in the educational process, changes in the system of regulation and accreditation of higher educational institutions may have a negative impact on the existence of an educational institution; on the other hand, the state as a customer can provide targeted orders for many years. Therefore, the formation of the strategy of the educational organization should take place within the state system of the strategy for the development of science and the educational process. Here, a fundamentally new view of the subsystem as a subject of activity and its role in ensuring the viability of the unified system as a whole is manifested [18]. The old approach to the management of an educational institution as a single system assumed that subsystems play a major role in the development of an enterprise and that operational decision-making within the process approach is the key to success. However, the new approach of strategic thinking puts questions of long-term development and the achievement of a single goal at the head of management; that is, a new approach of systematic thinking leaves managers with a decision-making function within the framework of solving strategic tasks, thereby forming the relationship between personal achievements and the overall goal of the educational enterprise. From this position, the manager should realize his role in achieving the overall goal of the company, show abilities in the field of analysis, develop solutions to problems, be prepared for self-learning and application of new skills, etc. [19]. Thus, despite the fact that much depends on the quality of teaching, unrelated management decisions on time and space in achieving private goals may not give the desired result on the whole, thereby reaffirming the importance of a systematic approach to management of an educational institution. Having analyzed the existing interpretations of the systematic management approach, we can present the system in the following forms:

1) System as a mechanism - each part of the system is dependent on the previous one, the end result is the result of successive actions. For example, the clock works this way: the failure of any part of the clock mechanism leads to a distortion of the result.
2) The system as a whole - as a human body. The overall goal of the system is complementarity, mutual assistance. In the case of an illness of an organ, the whole system fights with a foreign body, thereby helping to quickly recover and get into operation for full development.
3) The system as a struggle for survival, the struggle for resources. An example is the World System. Understanding the principle of coexistence, however, confrontation constantly arises between countries for goods, spheres of influence, etc. At the same time, world powers realize that there will be no final winners; such a system is self-destructive. But the world system has existed for thousands of years in conditions of war and destruction [20].

Taking into account the above, educational organization should work on the principle 2 - the system as a whole. When errors are made in one subsystem, they should be corrected jointly by other subsystems, thereby minimizing the influence of an erroneous decision on the overall result. A distinctive feature of the process approach (outside the framework of the systems management approach), in our opinion, is the existence of specific issues within the solution of a specific task, thereby confirming that each process is by itself, that there is no specific interconnectedness, when the personal interests of the results of one process are not linked to

common purpose. Meanwhile, a systematic approach implies that all participants in the system act for the benefit of the common system, for a single result, for a single goal. In the process approach, management is carried out by specific managers within their functional responsibilities; in a systems approach, a collective decision should be taken at the head of the decision; that is, management as much as possible should be carried out collectively, more precisely, not even the management process itself but specifically the decision-making and monitoring of implementation, thereby forming independent control over each process. The main distinctive feature and advantage of the systems approach is the coincidence of personal and collective interests. In the system approach there is no place for competition between participants in a single process. Competition is permissible only in terms of achieving quality in educational process.

5. CONCLUSIONS
Following on the above hypothesis, each system must consist of subsystems; each subsystem is a collectively controlled mini-system. The role and place of the manager is concretized and minimal within the framework of achieving the overall result, since the cumulative effect is the result of collective efforts. The effectiveness of a systematic approach to the management of an educational institution is determined by the prestige of the educational institution and the competitiveness of graduates of an educational institution in the labor market.

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MODERN UNIVERSITIES: NEW CHALLENGES, TRENDS, PARADIGMS AND EXPECTATIONS

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ABSTRACT

Radical transformations are observed in the higher education system of economically developed countries. Experience shows that the abundance of natural resources is not the main indicator of the development of society, but the main thing is to ensure the transformation of these resources into human capital, which is the driving force of society. This is the most important task of the higher education system at this stage. The United States, Japan, South Korea, and other developed countries have benefited more from the human capital produced by the education system than from the material resources they have. This means a change in the socio-economic functions of universities: the emergence of a rapidly growing sphere of economic activity, along with the already traditional educational and scientific missions. In this context, the issues of commercialization and marketing of academic science products are analyzed. Universities are accepted and specialized not only as educational centers, but also as research centers. In addition to teaching people at universities, they also conduct large-scale scientific research in various areas. At the same time, the reputation of universities is achieved through their scientific achievements. In modern times, universities are an integral part of the global economy, acting as the leading players in the global knowledge services market in the field of the most advanced knowledge and creative intelligence. In this context, the governments of many countries around the world are well aware that it is important for their leading universities to be at the forefront of the world's intellectual and scientific development. Thus, "Does university research meet the needs of society and the economy in today's world?" The topic is one of the most discussed topics, and the article will seek answers to these questions.
Keywords: *Universities, research centers, higher education system, knowledge economy, research university*

1. INTRODUCTION

Radical transformations are observed in the higher education system of economically developed countries. Their essence is related to the crucial role of universities in innovative development and economic growth. This means a change in the socio-economic functions of universities, the emergence of a rapidly growing sphere of economic activity, along with traditional educational and scientific missions. This framework includes the development and transfer of technology, the commercialization and marketing of academic science products, the creation of new businesses, and, finally, the management of intellectual property for profit. The current development, based on the knowledge economy, implies the commercialization of scientific potential and scientific products, especially in the higher education system. In modern times, universities are an integral part of the global world economy, acting as the leading players in the global knowledge services market in the field of the most advanced knowledge and creative intelligence.

In this context, government officials in many countries around the world are well aware that it is important for their leading universities to be at the forefront of the world's intellectual and scientific development. From the review of patenting work at the global level, it can be concluded that the engine of scientific progress in the field of biotechnology is not companies, but universities. Scientific activity in modern universities develops for three purposes:

1) Knowledge is produced through research. The University is interested in and researches everything within the power of human knowledge;
2) Research is used in the teaching process to prepare future generations with knowledge;
3) Prepares quality personnel or specialists in accordance with the needs of society and, in particular, the labor market [Mamedov, Bayramova, 2020., P.102].

Thus, "Does university research meet the needs of society and the economy in today's world?" The topic is one of the most discussed topics, and the article seeks answers to these questions.

2. NEW PARADIGMS RELATED TO THE DEVELOPMENT OF UNIVERSITIES
The mission of a modern university is to find answers to the question of how to live in a rapidly changing environment, to identify pragmatic approaches, to study the problems of all spheres of human life in a market economy, to monitor and investigate the rapid differentiation of society. Modern universities are research institutions that carry out both research and teaching processes. Universities are scientific centers that deliver scientific knowledge to those who want to learn and continue scientific research without interruption. World-class universities employ the world's best researchers and bring in the best students from different countries, regardless of whether they belong to the public or the private sector; they act in accordance with the events and trends and challenges in the international environment and take them into account; they tirelessly work to solve pressing world-class problems and actively cooperate with other organizations.

Jamil Salmi's concept of university development in modern times is considered to be more meaningful and distinguishes 3 main features related to the development of universities [Дж. Salmi J., 2009]:
1) concentration of talents (among teachers, students and administrators);
2) abundance of resources (finance and infrastructure);
3) flexible management (freedom in management, innovative decisions and lack of bureaucratic barriers).

These are reflected in three main crucial functions:
1) training of highly qualified personnel;
2) scientific research;
3) the welfare of society.

Regarding the training of highly qualified personnel, it should be noted that world-class universities strive to create human resources, thus forming the most talented and strong human resources in the world, as well as provide the most important resources in this field nationally and globally. As for scientific research, world-class universities are engaged in the most advanced research and strive for the best discoveries of modern times, thereby improving the well-being of mankind by fulfilling important tasks in this field at the international level. There are three main strategies in approaching the establishment of a world-class university from international experience:
1) increase the level of several universities with potential and turn them into advanced educational institutions;

2) creation of a new university as a result of merger of several universities, creation of synergetic development (effect) inherent in a world-class university;
3) creation of a new university from scratch.

3. NEW CHALLENGES TO THE TEACHING PROCESS IN UNIVERSITIES

1) David Cohen writes in Traps of Teaching: "There are essentially two tasks before us. First, it is necessary to ensure that students do not just accept knowledge in the form of consumption and learn it by mastering it. Second, feedback needs to be increased and diversified, and there needs to be communication and feedback between students and teachers. Students need to be encouraged to pursue independent activities" [David K. Cohen, 2017].

2) Students should be active participants in the discussions and they should think and learn. But if someone is not reading a book on the social sciences, how can they be taught something? These are not ordinary topics, but topics based on discussion and reflection. However, modern students rarely use books of scientific and educational importance. If he does not read a scientific book, then he will not be able to explain the structure of the relevant topic.

3) The professor or lecturer should acquaint students with the research work carried out in the educational process. Teaching from a textbook prepared by others distracts students. The professor should organize a discussion about his scientific activity in the class, ie his research. Those who do not present their research to students for public discussion can never be good lecturers or teachers.

4) Students should be taught academic skills in a new form. These skills are multifaceted and form critical thinking, are effective, and allow you to identify important problems.

5) Google Thought. We no longer really think through the brain, but with the help of Google. Critical thinking is taught in books, for which the criteria of the past knowledge system, including encyclopedic knowledge, are more important. The Internet simplifies knowledge and information enough and makes it easier to digest, and as a result, deprives people of critical thinking.

6) The situation is also exacerbated by the fact that in the modern world, universities are losing their "monopoly" on knowledge. Today, lectures by professors at universities are not as valuable as in the past, and everything that is said in these lectures can be read freely on the Internet. University libraries have also fallen in price, because here, too, the Internet is at the forefront, and the required materials are quickly found on the Internet [Balatsky, 2015].

4. SCIENTIFIC ACTIVITY IN UNIVERSITIES

The system of management of scientific activity in modern universities covers the following priority areas: Management of the system of promotion of scientific activity; Management of research projects; Management of university-business or real sector cooperation; Research centers, institutes and their management; Management of real and virtual research laboratories; Technology transfer management; Management of scientific journals and publishing activities; Management of the provision of academic ethical principles in scientific activity and management of the system of measurement and evaluation of scientific activity. In modern times, administrators in the process of evaluating and managing scientific activity mainly use references to the number of publications and scientific journals. In our opinion, the evaluation of the activities of researchers and teams should be based on the results of very serious examinations and should be carried out after the public discussion of scientific results. Elmmetric indicators published in scientific journals and calculated on the basis of the number of references can only play the role of information-auxiliary.

For example, Ed Lewis, who won the Nobel Prize in Physiology or Medicine in 1995, published very few articles and had a low h-index. One of the main problems of academic life in recent decades is the demand for the publication of teaching aids (textbooks, manuals, methodical instructions, methodical guidance) and scientific publications (scientific articles, reports at conferences, monographs). Thus, the main task of leading employees and teachers of universities is to teach as a participant in the educational process, which has a serious impact on academic careers and has a negative impact on the growth of their professionalism. At elite American universities, employees are required to publish articles in first-class scientific journals, and only then do they sign indefinite contracts. In other groups of universities, the principle of "publish or you will perish" prevails, a large number of publications are required, regardless of their quality and impact factor. Most members of the academic community are already of the opinion that the quantity of scientific publications is more important in the world than their quality. Thus, the teaching load is constantly increasing, the number of students is increasing, and for most teachers, scientific research comes to the fore, and teaching becomes a secondary job. It is known that demand forms supply, so the number of magazines that are not read and intended for mass publications is growing, the main task of these magazines is to ensure the activity of publication. At the same time, the constant demand for publication leads to the individualization of the academic community: higher education institutions spend less time on academic commissions and young staff in areas where assistance is needed. So the main priority for them is to publish more and get foreign grants, in which case career growth is possible. Therefore, at the beginning of their academic careers, young scientists take for granted that their main task is not to seek the truth, but to publish more. This can have a negative impact on their professional discipline, quality standards and researcher behavior. The amount of publication is an incomplete indicator with a number of limitations for evaluating the performance of the university. National universities are also affected by the market economy and are trying to get more publications to rank in international rankings. The deepening "rating dealership" increases the importance of publishing activities, as it is one of the main leading indicators and is used in determining ratings. The rankings do not refer to the quality of publications, but to their quantity, so universities are interested in increasing the number of publications. Under such circumstances, scientists not only sacrifice quality, but also change the direction of research. The main reason for this is the publication with a higher impact factor and other formal indicators. Research is a perishable resource, and it is usually relevant at the current stage, but in any competitive environment requires constant capacity building: year after year, reporting forms for research become more complex, and this applies to the quality criteria of higher education in general. The transformation of universities into economic corporations requires a new type of teachers. In this case, the teacher, along with his research work, must participate in its implementation, in the organization of scientific logistics. In our opinion, a modern teacher of the higher education system is required to expand his worldview:

1) renewal of the attitude to scientific research works, elimination of differences between foreign requirements and requirements for professional level, foreign elements;
2) not to become a captive of the current situation, to enjoy scientific activity, its results and to be creative;
3) to believe in the need to choose new organizational strategies, and thus to understand the importance of the transition from quantity to quality in a situation where the quantitative paradigm prevails;
4) mastering virtual horizons, as well as understanding the existence of a virtual image as one of the main components of professional reputation.

5. COMMUNICATION POLICY OF UNIVERSITIES

We live in a time when scientific knowledge is being questioned and misinformation is spreading more and more rapidly, thanks to some social networks that play a key role in spreading misinformation. With this in mind, scientists working in universities must be able to actively disseminate the results of their research to a wide audience and in an attractive manner. In addition, it is important to keep in mind that deliberately distorted information can negatively affect people's behavior, both individually and as a group. This problem is difficult to overcome. Therefore, during the dissemination of accurate information, it is important to inform people in one form or another about the false information circulating around the issue. It is necessary to discover people's ideological beliefs, to be able to overcome their hesitations and to help them to do so.

6. INTERNATIONALIZATION OF EDUCATION

Cooperation with foreign colleagues is a leading activity in the development of internationalization for universities in the modern world. Most of them attach great importance to the implementation of joint research programs, the organization of dual degree programs, as well as the development of other partnerships related to the activities of foreign organizations, especially with universities in developed countries.

English Instruction (EMI) is a sign of the internationalization of higher education in most non-English-speaking countries. There is a gradual transition of teaching and learning to English, the study and teaching of academic subjects in English through the organization of students' learning of English.

The research has revealed 6 important international trends in universities:
1) restructuring of administrative management and structure;
2) improvement of teaching staff;
3) creation of international educational programs;
4) academic mobility of students;
5) distance education;
6) cooperation and partnership.

The rapid spread of the English language in the world's universities has led to another problem that is not so noticeable. Students from English-speaking countries are no longer interested in learning other languages. They are confident that they will speak and communicate in English, no matter what country they are in or where they study. Due to this, the number of courses is declining, as well as interest in courses on world culture and civilization. As a result, students from English-speaking countries have very little knowledge of the languages and cultures of other countries. The English language used in the higher education system has a significant impact on policy in this area. Thus, the United States and the United Kingdom, as well as other English-speaking countries, have strengthened their leading position in the higher education system due to their strong resources and scientific communications. In addition, as most of the world's leading scientific journals are published in the United States, researchers and scientists in this country have great advantages. The main reason for this is that the main part of the expert evaluation system is located in the United States and ensures the preparation of better articles in this environment, the development of scientific methodology. As noted earlier, at the international level and in the education system, English has significantly overtaken French, German and Spanish, and the number of applications for these languages is declining rapidly. At present, there is no doubt that English is the main academic language in the international academic community. National academic systems see the use of the English language as an important factor in an environment of internationalization and competition, and consider it important to achieve "world-class" standards.

Therefore, the dominance of the English language and its hegemony in world science, its central place in the academic system, creates great difficulties for scholars and researchers who use other languages. Therefore, our researchers and scientists can publish the results of their scientific research in national scientific journals that bring their activities in line with the criteria of internationally recognized publications.

7. CONCLUSION

1) Scientific activity in modern universities develops for three purposes: 1) Knowledge is produced through research. The University is interested in and researches everything within the power of human knowledge; 2) Research is used in the teaching process to prepare future generations knowledgeably; 3) Prepares quality personnel or specialists in accordance with the needs of society and, in particular, the labor market.

2) There are three main strategies in the international experience of creating a world-class university: 1) Increasing the level of several existing universities and transforming them into leading educational institutions; 2) Creation of a new university as a result of merging of several universities, creation of synergetic development (effect) inherent in a world-class university; 3) Creating a new university from scratch.

3) The professor or lecturer should acquaint students with the research work carried out in the teaching process. Teaching from a textbook prepared by others distracts students. The professor should organize a discussion of his scientific activity in the lesson. One cannot be a good lecturer or teacher if one does not present one's research to the public discussion of students.

4) Students need to be taught academic skills in a new way. Because it will be needed everywhere and always. This skill is multifaceted, forms critical thinking, is effective, and allows you to identify important problems.

5) In modern times, administrators who carry out the processes of evaluation and management of scientific activity mainly use the number of publications and references in scientific journals. In our opinion, the evaluation of the activities of researchers and teams should be based on the results of very serious examinations and should be carried out after the public discussion of scientific results. Elmmetric indicators published in scientific journals and calculated on the basis of the number of references can only play the role of information-auxiliary.

6) Universities need to identify new channels to inform the public, including politicians, and provide information on the fundamental role of higher education in the development of society and the country, as well as the region where the university is located. Otherwise, the university will continue to lose its principles and supporters of academic freedom, and such universities will lose trust in society and the intellectual environment.

7) Language is not only a method of communication, but also a culture. The use of English as the leading language in the higher education system in non-English-speaking countries can affect local culture and way of life, thinking. The widespread use of English also has an impact on scientific methodology, publications and their academic approaches. This is explained by a number of reasons. Thus, the editors of prestigious English-language journals are mostly scholars from English-speaking countries, and they, in turn, prefer reviewers living mainly in English-speaking countries. Even the most cosmopolitan editors and reviewers are inclined to the methodologies and approaches used in such an English-speaking academic environment. This situation puts scientists living and working in a non-English-speaking environment unfavorable in many respects. However, there is no doubt that English is now accepted as the main academic language in the international academic community. National academic systems welcome the use of the English language, see it as an important factor in an environment of internationalization and competition, and consider

it important to achieve "world-class" standards. As a result, the dominance of English and its hegemony in world science, its central place in the academic system, creates great difficulties for scholars and researchers who use other languages.

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ANALYSIS OF THE PROCEDURES AND SOURCES OF FINANCING RESEARCH AND INNOVATION

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ABSTRACT

This article discusses and analyzes the financing process of innovative scientific processes that take place in parallel with innovation processes. This process is pre-emulsive as an element of the state policy under way in this area. The structure of the sources of financing of these processes in the Republic of Belarus, as well as the expenditure from the Republican budget in this direction has been analysed in details. The main place is the allocated financial resources for fundamental and applied research, as well as those related to the financing of scientific and technical programs and the development of the material and technical base.
Keywords: Innovative development, Financing research, Belarus

1. INTRODUCTION

The article analyses the peculiarities of the activities and financing possibilities of research and innovations in the Republic of Belarus based on the studies of the main activities of specialized organizations, free statistical database of the existing funds (programmes), other organisations (Table 1). Specialized private organizations (funds) also play an important role in the development of research and innovation potential of the country. They provide funding for scientific and innovation projects in order to generate innovative ideas, their precise analysis and implementation in the practical spheres of economic and social life of the country.

2. ANALYSIS OF THE PROCEDURES AND SOURCES OF FINANCING RESEARCH AND INNOVATION

In order to receive additional, except for the budget, funds for expenditures on scientific and innovation developments it is vital to attract private organizations in allocating money for research and innovation developments on the current relevant topics for the country (region). First of all, the interests of a grant giving organization, that directly finances the expenditures on research, approves innovative developments and implements them into practice, should be considered. Examples of such organizations include "Education for future" (2021a). Association, "Priorbank" OJSC (competition of innovation projects), "Belagroprombank" OJSC (competition of "Agrobusiness 2.0" projects) and a number of other organizations financing research activity in local thematic areas.

Table following on the next page

Name	Main activities	Competitions (programmes), financing
Belarusian Republican Foundation for Fundamental Research (BRFFR) (2021b)	Providing funding for fundamental and exploratory research in the field of natural, technical, social sciences and humanities, carried out by scientific organizations and higher education institutions in priority areas of research in the Republic of Belarus.	Competitions of research papers in the following fields: - physics, mathematics and computer science; - technical science; - chemistry and earth sciences; - medical and pharmaceutical sciences; - agrarian and biological sciences; - social sciences and humanities. Applying for financial grants for the participation of scientists in foreign scientific events. Applying for financial grants of republican and international scientific events.
State Committee for Science and Technology in the Republic of Belarus (SCCT) (2021c)	Coordination of the activities of republican state authorities and research, technology and innovation organizations. Assistance for local executive and administrative bodies in the organization and implementation of regional research, technological and innovation policies. Implementation of a unified state policy in the field of international research and technology cooperation. Development of innovation infrastructure and support mechanisms for entities of innovation, contribution to the creation and development of industries based on new and high technologies. Attraction and implementation of advanced highly efficient foreign technologies. Stimulation and support of entrepreneurship development in the Republic associated with the commercialization and the implementation of research and technology achievements in the production; support of the development of research and technology information system.	Republican competition of innovation projects. Republican competition of youth innovation projects. Competitions of bilateral research and technology projects. List of scientific equipment for purchase. Development of material and technological base for the entities of innovation infrastructure.
National Academy of Sciences of Belarus (BNAS) (2021d)	Organization and coordination of basic and applied research carried out by all research entities; carrying out basic and applied research and developments; organizational and technical support for conducting state expert`s conclusion (1998)	Financing the main activity of the Academy and its subordinate institutions (the organization contains approximately 50 institutions) related to basic and applied research, expert`s conclusion, research and technology events and strengthening the material and technical base of the subordinate institutions.
Belarusian innovation fund (2021e)	Development of new innovation financing mechanisms and a system of measures that stimulate and support domestic production. Belarusian innovation fund mainly finances high technology and advanced projects.	Financing on a repayable basis (for the use of funds, interest is charged in the amount of 0,5 of the refinance rates of the National Bank of the Republic of Belarus; funds are allocated for a period of up to 7 years with the possibility to defer payment for up to 2 more years). Innovation vouchers and grants (on a non-refundable basis; innovation vouchers offering up to 25 thousand US dollars and grants - up to 100 thousand US dollars). Republican competition of innovation projects (together with the State Committee for Science and Technology). Russia-Belarus venture capital fund (up to 300 thousand US dollars investments, provided in the form of an equity entry or by issuing a convertible loan, 10-40%).
Funds of the ministries (departments) (Ministry of Education of the Republic of Belarus) (2021f)	Financing research, technology and innovation developments of the relevant industries.	Competition for grants for research aimed at scientific and technological support of the activity of the Ministry of Education (according to the list of areas that require scientific solutions). Competition of research papers of postgraduate students, PhD students, applicants and students for grants.
Regional innovation funds (Innovation funds of Brest Regional Executive Committee) (2021g)	Providing funding for research, technology and innovation projects that are of highest priority for each specific region.	An open competition of projects (works, events), which are financed with the help of innovation funds of the Brest Regional Executive Committee, with the following objectives: - to finance the implementation of innovation projects developed under State programme of innovation development of the Republic of Belarus; - to finance the implementation of research, experimental developments and experimental research in technology that contribute to the creation of new products, new (advanced) technologies, new services for the Republic of Belarus; - to finance the initiation of activities and development of material and technological base, including capital expenditures of the innovation infrastructure entities. - to finance the development of material and technological base, including capital expenditures of the industrial laboratories; - to finance science and research conferences, seminars, symposia, exhibitions of science and technology achievements, the development and publication of scientific and educational literature.

Table 1: Main activities of organizations financing research and innovations

Globalization processes, digital transformation processes, capital intellectualization, an emphasis on creating a highly technological and innovative, and therefore, a competitive product (work, service) determine the high importance of cooperation between organizations, scientists, innovators at the international level, which attracts additional financial resources, provides an opportunity to exchange the new knowledge and positive experience in the relevant

thematic areas. In order to find additional opportunities at the international level for qualitative and comprehensive research and new developments we have analysed the main activities of major foreign organizations (funds) – grant giving organizations (donors), which provide financing for research and innovation projects implementation (Table 2).

Name	Main areas and conditions of financing
Austrian Science Fund (2021h)	It is a major Austrian organization that finances basic research in the following scientific areas: natural, technical, medical, agricultural, public, humanities (around 30 financed programmes) Certain programmes have no time limits for submitting applications (accepted non-stop).
Academy of Finland (2021i)	Funding specific researchers, research groups, research organizations, and strategic research in various thematic areas.
US Civilian Research and Development Foundation (CRDF) (2021j)	Offers technological and innovative programmes aimed at stimulating economic development, finding and implementing effective commercialization, as well as developing country`s capacity for incubation and acceleration of new ideas with the help of technical assistance and intersectoral partnership in various thematic areas.
German Academic Exchange Service (DAAD) (2021k)	Funding research, internships, and educational programmes in Germany in different areas, funding strategies for internationalization of higher education.
German Research Funding Organisation—Deutsche Forschungsgemeinschaft (DFG) (2021l)	Provides funding for research projects in all areas. The emphasis is on young scientists, interdisciplinary nature of research and global cooperation.
Simons Foundation (2021m)	Provides funding both for independent and joint research projects in mathematics, physics and information technologies.
Volkswagen Foundation (Volkswagen Stiftung) (2021n)	Provides financial support to humanities and social sciences, as well as science and technology in higher education and research, stimulating them through its funding.
National Science Foundation (2021o)	Provides financial grants for research in education in most fields of science and technology and partnership agreements with educational institutions, scientific organizations, business entities and public organizations.
Japan Society for Promotion of Science (2021p)	Implements a diverse programme that includes financing of research projects, encouraging young scientists, promoting international scientific exchange and supporting reforms and globalization.
The Spencer Foundation (2021q)	Finances research in education and organization of joint scientific and practical events.
International Educational Foundation for Research in the Field of Chinese Language and Culture ("Hanban")	Provides financing for research in the field of latest educational technologies, including promotion of the Chinese language and culture.
Pan-European network for industrial high-tech R&D "EUREKA" (2021r)	Focuses on the development of market-oriented high-technology research and innovation.
European Cooperation in Science and Technology (COST) (2021s)	Provides international financing to researchers for the development of interdisciplinary research networks in Europe and beyond. The organization focuses on strengthening the innovation potential of countries in solving scientific, technological and social issues.
Belgium Research Foundation (FWO) (2021t)	Supports fundamental and strategic scientific research in all fields.
European Science Foundation (ESF) (2021u)	Aims at promoting high-quality science in Europe to stimulate progress in research and innovation.
Research Councils UK (2021v)	Offers financing and support in all academic disciplines and industries: from medicine and biological sciences to astronomy, physics, chemistry and engineering, social sciences, economics, environmental sciences, arts and humanities.
Swedish Research Council (2021w)	Finances research and research infrastructure in all fields of science on the basis of open competitions, stimulates international scientific cooperation.
Swiss National Science Foundation (SNSF) (2021x)	Finances research projects together with the countries of Eastern Europe in all fields of science, provides grants for international conferences, held in Switzerland.
Research Foundation of Bulgaria (2021y)	Provides financial support for world-class research and development of the country`s potential related to: 1. Creation of new scientific knowledge. 2. History, language, culture and national identity. 3. Stimulations of the development of natural, technical sciences, humanities and social sciences. 4. Solution to problems in economics, education, agriculture, ecology, social processes, human resources, security, defence and healthcare. The foundation performs its activities through financing national scientific programmes and research projects in higher education institutions and scientific organizations of the country following internationally recognized standards and considering the existing national scientific potential and social needs and priorities.
Mobility scheme for targeted people-to-people contacts (MOST) (2021z)	The aim of the programme is to help establish contacts between the citizens of Belarus and other member-states of the EU. It funds short-term residence permits, internships and exchange visits in the field of science, technology, business, innovation, IT, culture, etc.
EU Programme "Erasmus+" (2021aa)	EU programme that supports education, professional training, youth and sports in Europe. The main objectives within the programme include: Reducing unemployment, especially among young people; Training adults with the focus on acquiring new competencies or labour market relevant skills; Encouraging young people to participate in European democracy; Supporting innovation, cooperation and reforms; Promoting cooperation and mobility with EU member-states.
Visegrad Fund (Visegrad+) (2021ab)	Provides grants for projects that promote democratization processes and transformation in particular countries and regions, especially non-EU countries, the Western Balkans and the countries of the Eastern Partnership.
EU Programme "Horizon 2020" (2021)	The objectives of the programme include creation of scientific and technological basis for the accelerated and sustainable economic development of the united Europe, growth of its global competitiveness, increase of employment, turning the European Union states into one of the most scientifically and technologically advanced countries, provision of solutions to global issues in the field of public health, demography, energy, climate and security. The following are the programmes priorities: - advanced science; - industrial leadership; - solutions to the socially significant problems.

Table 2: Major foreign organizations (funds, programmes), which provide financing for research and innovation projects implementation (including for the applicants from the Republic of Belarus)

The analysis of foreign grant giving organizations indicates the existence of a wide range of additional opportunities for financing research and innovation of the country`s organizations. In this case, it is inevitable to take into consideration legal regulations (2021ad). When studying the opportunities for financing research and innovation it is vital to analyse each stage of funding (Fig.1).
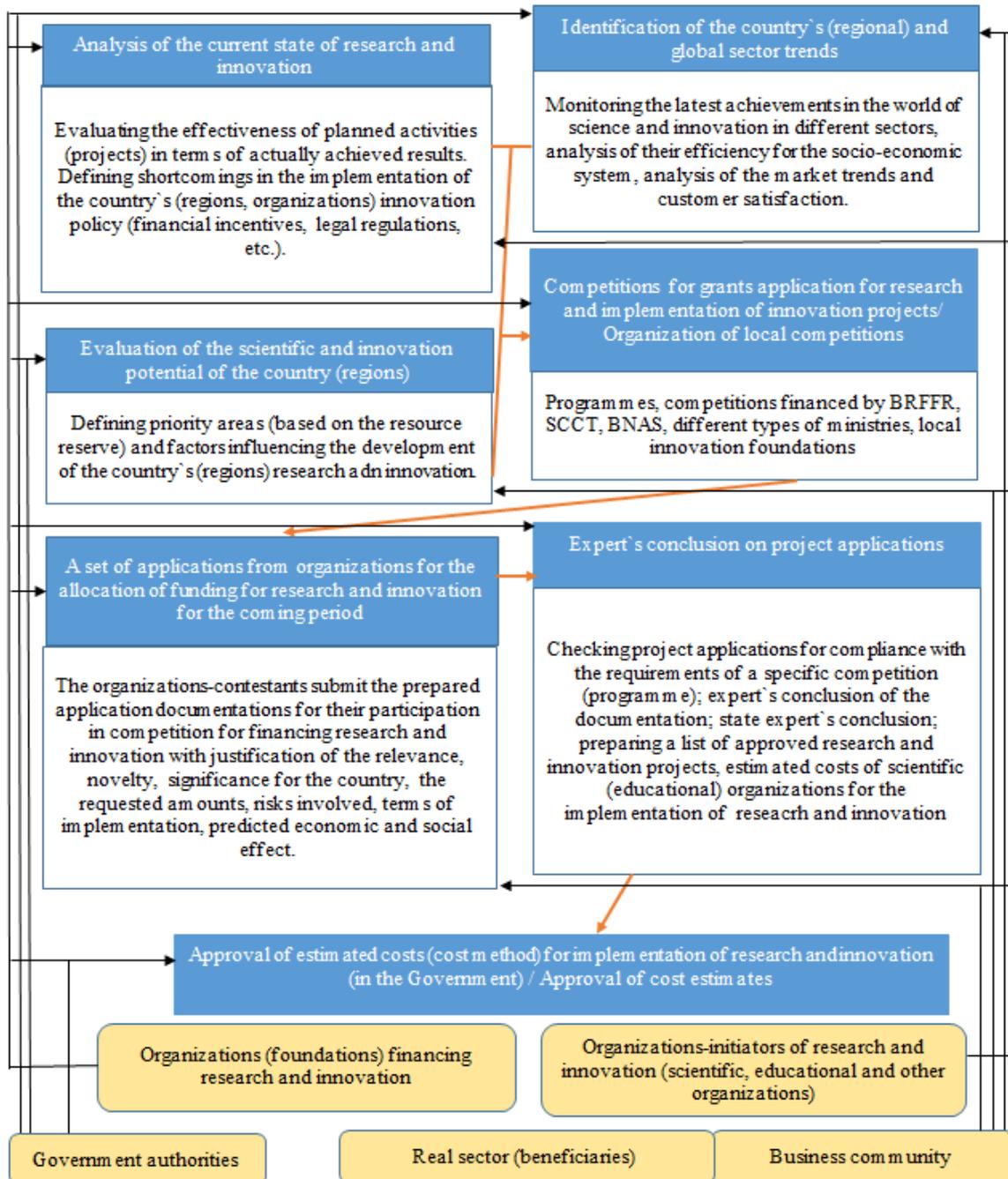
Figure 1: Organizational and structural algorithm of funding research and innovation

The procedure for providing funding for research and innovation projects of a specific organization (alliance) after the approval of the competition outcome finishes with the conclusion of agreements with certain schedule for their implementation and expected results and approved budget estimates (Fig. 2).
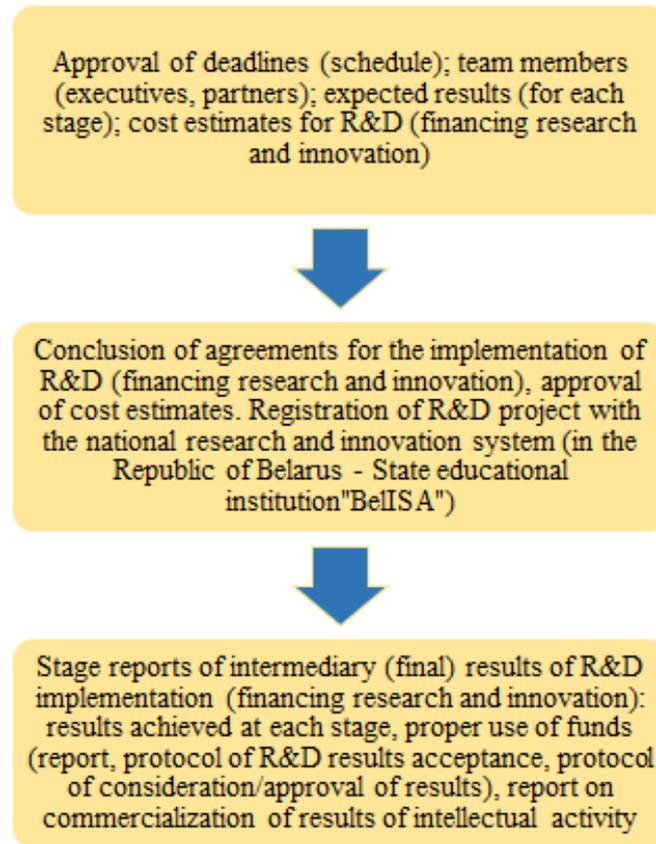
Figure 2: Procedure for providing budget funds for research and innovation

3. CONCLUSION

There are several problematic aspects in this procedure that should be pointed out for their further consideration and improvement (Terziev, Klimuk, 2021ae; 2021af; Terziev, Georgiev, Klimuk, 2021ag; 2021ah):

- The process of consideration of applications for research and innovation projects takes approximately 5-7 months, after which 2 months, on average, are needed to approve the set of documents and provide funding. The project applications contain the actual prices for the goods (works, services) expected to be purchased and the registered potential suppliers (partners). The cost estimates include specific expenditures (name of the product, price per unit and purchased quantity). This means that in the future the actual price for purchase of the established amount of specific items (work, service) will not coincide with the approved cost in the estimate. One of the ways to improve the situation could be by introducing "flexible estimate" that determines the maximum amount of expenditures on research and innovation. This estimate should be based on the results (specific tasks) expected during the process of work (that requires relative costs). In this case, detailed expenses for a specific quantity, product name or price, are used taking into account the expected modifications (for instance, price fluctuations) and risk situations.

- Very often certain tasks of research and innovation within the cooperative resource model are not assigned to a specific performer representing the sector of scientific and educational organizations, the real sector of the economy, state authorities and business. At the same time, it is advisable that organizations use a combined financing scheme for research and innovation: budget funds, personal capital and funds of other organizations (incl. foreign ones). This will increase the level of responsibility of each member organization

(performer) and compliance with the requirement of mandatory commercialization of the results of scientific and technological activity, partially or completely state-funded (2013). It would also be beneficial to agree on the acceptance of the research and innovation results and the planned use of funds to obtain them (if the expected results are obtained, then it is possible to assess the planned use of funds in a simplified way: according to the allocated amount and deadlines – according to the combined (consolidated) expenditures).

- Taking into account the fact that state funds are allocated for the coming period and are approved within the republican budget for the planned year, there is no flexibility in the distribution of resources and mobility in requests for additional funding required for high quality and fulfilment of the defined research and innovation tasks. In this case, it is advisable to create science and innovation development funds in each organization, which would finance research and innovation on the basis of periodic deduction of funds (as a fixed interest rate: e.g. 7%) based on the results of successful implementation (profit) of each research or innovation (grants for the implementation of research and innovation projects, organizational contributions from ongoing scientific and practical events, payment for editorial and publishing services, organization of exhibitions and other events).

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THEORY OF ECONOMICS IN CATEGORIES OF RISK AND UNCERTAINTY EVOLUTION OF COMPOSITION

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ABSTRACT
The rapid changes in the globalized world, the intensification of market competition, the deepening of market segmentation with a substantial increase in consumer demand and taste, the need to shorten the period of adoption of new production technologies have led to radical changes in the activities of enterprises and, consequently, in the content and strategic management systems. The main purpose of this study is to analyze the categorical characteristics of uncertainty and risk from an international practice and consider international practices to understand Azerbaijan's economic stability field. This consists of exploring the use of techniques to guarantee security. The research was carried out on the basis of research methods such as scientific abstraction, logical generalization and systematic analysis. The study found that strategic flexibility, competitive positioning, strategic segmentation, synergetic, diversification and other components of the strategic management system enable businesses to operate in a complex and changing external environment. The presence of uncertainties complicates the process of selecting optimal decisions. Innovative changes in the modern world require risky decisions, accompanied by uncertainty in the economic sphere. The limitations of the study are the need for more practical information. The practical significance of the research is to ensure the continuity of economic entities against the background of modern economic processes and determine that their development is impossible without financial stability. From this point of view, the practical significance of the work is to make certain proposals and recommendations to increase the effectiveness of decisions made in the long run in conditions of uncertainty. The originality and scientific novelty of the research is that the proposed approaches allow business entities operating in the economy to better understand the existing system of relations related to the development and implementation of strategy and, accordingly, to develop effective measures in strategic management.
Keywords: Entrepreneurship, Economic Freedom, Efficiency, Risk, Uncertainty

1. INTRODUCTION
The most important condition for efficiency in all economic systems is economic freedom. Economic freedom envisages a set of laws that give economic (producers / consumers) an autonomous, independent decision-making process. Economic freedom is the source of uncertainty and risk. Thus, the freedom of an economic agent means freedom, along with others. Uncertainty and risk are an integral component of entrepreneurship.

2. LITERATURE REVIEW
In the 17th century, R. Cantinol meant that he was a businessman at risk.
He took the commodities at a well-known price to earn profits, using the uncertainty of the economic conjugation that emerged from the market demand and volatility of the offer, but at an uncertain price.

He characterized the entrepreneur as a person who claimed the risk of residual amounts and unrealized income by taking risks that could not have been predicated on his own. (2, 427). In directive economies, the risk was given in the following forms:

- non-fulfillment of the state plan;
- in breach of contractual obligations;
- In-time delivery of products and so on

This risk, as a rule, occurred when business rules and regulations were not expected. In this case, the market conjuncture, price, and consumer behavior were unclear, making it more affordable. This risk, as a rule, occurred when business rules and regulations were not expected. In this case, the market conjuncture, price, and consumer behavior were unclear, which allowed them to earn additional revenues. A number of foreign and country economists associate entrepreneurship with innovation activities. Entrepreneurship is the ability to compete with competitiveness or to compete successfully by creating new commodities, seeking new ways to reduce costs, making goods more attractive for consumers. The innovation process, new techniques, new technology and use of new ideas are uncertain and stochastic. Innovation is always connection with risk. If the benefits of innovation in the production environment are so great that many of the conditions are met with competition, the company's costs are diminished, and if it is possible to increase sales or sell commodities at higher prices, using innovative advertising or other marketing methods. On the contrary, the occurrence of interruptions during the innovative production process will result in certain losses in the absence of a solvent demand for an innovative product. Thus, the existence of uncertainty and risk is a component of entrepreneurial activity and acts as a driving force of the economic system. The modern market economy operates under changing conditions of economic conditions, market conjuncture, market entities. The uncertainty of economic life has prompted P. Druker to call postindustrial society a "period of illegality." The instability of the economy implies the uncertainty of the economic system, and the risk is characterized by uncertainty. The definition of risk and the analysis of the economic context of the risk dictates the necessity of taking these factors into consideration when making decisions at all levels of the economy on the market. The economic theory has shown long-term disregard for the risk issue. The problem of effective deployment of limited resources in the market economy has been studied without considering the risk factor. In theoretical studies, he was simply given a border. Nevertheless, the category of "risk" is found in the works of early classical political economy representatives (D. Riakrdo, A. Smith, C. Mill). According to them, profit should also include risk premium. However, they confessed rski as a prerequisite, and interpreted it as mathematical expectations of the loss that might occur as a result of a decision chosen without a more accurate analysis. K. Marks, using the method of abstracting, used the methodology of the category system in a methodological and theoretical way that the model was uncertainty and uncertainty from the analysis of economic relations. In K. Marks' Capital work, abstracting was carried out outside of foreign trade and was viewed as a single market for the entire capitalist world and the whole market as a domestic market. (1, p.204). Thus, from the analysis, a russia-related situation arising from the change of exchange rates, political and other conditions was removed. K. Marks also came to the conclusion that all commodities were sold to their value. When analyzing the redistribution of public capital, he summarized the changes in market prices and the depreciation of market prices. This condition diminished the dynamic aspect of the economy at the current time and ultimately uncertainty and risk. "Statistical forces define levels, while dynamic forces lead to displacement."Realizing that the competitive mechanism of action required diversity in the behavior of economic agents, K. Marx did not show interest in this diversity and explained the dynamic evolution of the capitalist system.

However, despite the fact that K. Marks directly raises the risk factor from his perspective to simplify economic analysis does not mean that he completely denied the existence of a risk factor in the economy. As evidence of this, it can be noted that the formation of an insurance fund: Part of the profits, and therefore, part of the surplus value and, therefore, the surplus labor serves insurance funds." (6, p.416). A. Marshall also paid great attention to the category of risk. D. Ricardo, A. Smith, C. Mill, and Y. Senior, argued that it was a component of earnings risk. Depending on the source of capital formation, Marshall distinguished between personal and business risk. The risk of entrepreneurship "is a breakthrough in the raw and finished product market, unexpected changes in fashion, new inventions, new and powerful competitors in the areas where it operates, and so on. is conditioned by. However, there is another category of risk: "In this case, a person who is working with a debt capital falls and no one else; this type of risk can be called personal risk. " Both of these types of risk are part of the firm's total costs. "If they are themselves an insurance company for themselves" (7, p.297-298) A. Marshall also investigated the behavior of economic agents in uncertainty and risk. Employees working under risk are guided by two criteria: the amount of expected earnings and the possible removal (hesitation) of its size when selecting one or more of the possible latternities (7, p.230). However, neither the classic political economy nor the A. Marshall have been dealing with the application of the content of the "uncertainty" and "risk" categories and defining the exact boundaries between these categories. For the first time, F. Neit has been able to determine their honest boundaries. He proposed for the first time the difference between the aprior and the probability that "all indexed (identifiable) situations (except in the case of random events) differ from one another. Because it is impossible to evaluate them using apricot calculations. " "The main distinctive feature of such a probability is that it is based on the empirical classification of those events" (8, p.23-24). At the same time, this type of probability is the absence of substantive criteria for "assessment" and the inability of the classification of the situation. Each of them is unique (rare), or the number of such situations is insufficient to analyze them. F. Nayt used an aprior and "risk" to show statistical probabilities and used the term "uncertainty" to evaluate them. Thus, as F. Neit understands, uncertainty relates to the situations where it is possible to calculate even the subjective, even if it is subjective. The risk is likely to be as it is known and can be determined by mathematical methods or statistical analysis of accumulated experience. The existence of "uncertainty" for F. Nite's arguments allows the entrepreneur to earn extra profits in the future, despite competition, long-term equality and product development. Production is carried out with the exception of the consumer Thus, production factors arise as a result of the declining demand for consumed products. Therefore, the entrepreneur must compete for the price according to the product he has produced for his final product. However, it is impossible to determine the cost of the final product without knowing how much it costs. Thus, F. Nayt looked like profit from uncertainty, unlike the orthodox tract. Uncertainty and risk concepts were also interpreted by C.Cainn similarly. He considered it important to have a "risk" category to describe business activity. C.M. Based on the fact that risky decisions relate to the psychological characteristics of an economic agent, he noted that the risk of entrepreneurship occurs for "the prospect of gaining the benefit that it has calculated by the hesitation of being able to reach it". Therefore, improvement of the pre-visual level should be mutually balanced. In the mid-twentieth century, there has been a major change in the analysis of uncertainty and risk in Western economic literature. Modern economists regard the uncertainty in their works as lacking complete knowledge. Risk is defined as the possibility of removing decisions made to achieve the goal, as well as considered it choosing alternatives in uncertain situations. Formation of market relations in Azerbaijan became the prerequisite for the development of risk theories in the country's economic literature. There are so many and different ideas about the essence and nature of the risk.

Unfortunately, "uncertainty" is still beyond the scope of the country's economists' viewpoint or is simply equalized with the risk perception. The "Economical Encyclopedia" or the risk is defined as follow: "Risk (in economy and entrepreneurship – uncertainty) depends on decision-making and their realization takes place only for a certain amount of time." (10, p 688) V. Abchuk and A. Algin identify the risk as "the movement style in unclear, indefinite conditions, the life activity of economic subjects, which are related to the elimination of uncertainty". Following the traditions of the classical risk theory, V. Shakhov defined the risk as "the possibility of adverse disagreements between the plan and the actual results, in other words, the danger of an unfavorable move of an expected decision ." L. Rastriguein, B. Rausberg and other economists, they are of this opinion. However, if the risk was only associated with the negative consequences of economic activity, then the economic agent would not have the need to take risks. The above-mentioned approaches are eliminated in the works of I.T. Balabanov, L.Sharshukova, M.G. Lapusta and others. L. Sharshukova and M.G. Lapusta noted that although the result of the "risk" resulted in a loss of self-sufficiency or anticipated earnings, it was not merely the undesirable outcome of the decision. In individual options of entrepreneurship projects, there is not only the risk of not achieving the intended outcomes, but also the possibility of multiplying the expected profit. This is the essence of the risk of entrepreneurship, and it is characterized by the coordination of the planned outcomes both unwelcome displacements and opportunities to achieve extremely favorable displacements. The readiness of people to risk is explained by the fact that despite the possible losses, there are strong positive incentives - there are also opportunities for high returns. The concept of entrepreneurial risk proposed by P. Polovinkin and A. Zozuluk is of great scientific interest. Based on this concept, risk appears as a category of "recycling of all phases and moments from the acquisition of the necessary production facilities (machinery, equipment, raw materials, etc.) to the preparation and implementation of commodities." Thus, natural consequences (droughts, drowning, earthquake, strong frost, flood, etc.) have a great impact on its results at the production stage. The risk here is irrespective of the will of the person. Risk emerges not only in the attitude of man to nature, but also in the attitude of man to the means of production. The machine or equipment can be unexpectedly disrupted and may be morally outdated, due to the use of scientific and technological progress and innovations. Certain violations of the normal course of production may lead to a breakthrough growth in production in separate parts of the economy as a result of favorable weather-climate conditions or acceleration of innovations. Such a situation can happen both in the event of a demand for the additional volume of the commodity mass and in the absence of it. Thus, it can also create conditions for earning additional revenues and exposure to appropriate losses. Under the influence of unpredictable events, it may not be possible to obtain the necessary means at the right time or be forced to get higher prices than predicted. If so, the basis of the losses resulting from the final business activity is laid. On the contrary, the entrepreneur demonstrating all his skill and ability can get affordable all the necessary production and financial resources that are available to him. In this case, already in the process of obtaining necessary resources, the basis of emerging opportunities for the economic benefits is laid. Under the influence of innovation processes, new demands arise in consumption, while the volume of traditional needs changes, if the entrepreneur is not ready for it, then the opportunity to gain economic profit will be lost. The predictability and the level of preparation for such situations are reflected in entrepreneurial ability, experience and professionalism, which creates additional opportunities to increase profits. In a situation where volume of production and demand remains unchanged, portions in the distribution of material benefits and exchange (mistakes in predicting and regulating processes, changing of the conjuncture in the foreign market, etc.) may suddenly alter. In this case, the risk may be expressed in the unexpected change of the repetitive production conditions at the macro and the mezo level.

The entrepreneur also tries to take this into account in his work. However, the task is to eliminate the unfavorable effects of external factors on individual reproduction and gain additional profit by using them as much as possible in the competition. Based on this logic, P. Polovinkin and A. Zozulyuk defined the risk of entrepreneurship as "a system of economic relationships for the realization of entrepreneurial abilities in the recycling process or in some of its sub-divisions to gain additional profit" (9, p. 71-72). Study of recent studies by domestic and foreign economists on risk theory makes it possible to say that vast majority of researchers mean only the risk of entrepreneurship when analyze the nature, causes and types of risk. Consumer risks are never mentioned. However, as it is known, the purpose of business is to meet the needs of consumers (people). The degree of satisfaction of this requirement depends on the state's economic and legislative policies, the activities of entrepreneurs, and the consumers themselves (rationality and non-rationality of their actions). The current state of the economy in Azerbaijan and the ongoing global economic crisis in 2008, the scale of consumer risks is so high in many economists' opinion that it can lead to an increase of social dissatisfaction due to a small negligence. Today, the physical consumer risk in Azerbaijan is widespread. Its main causes include:

- poor quality food and industrial products;
- purchasing power of money;
- unemployment rate;
- Ecolocigal status.

Thus, it is necessary to pay attention to the consumer risk along with the risk of entrepreneurship by analyzing the category of risks. Different approaches to risk identification in country and foreign economic literature can be found in 3 groups:

- The first group includes the experts who designate the risk as the probability of displacement from planned outcomes.
- The second group authors try to focus attention on quantitative and qualitative assessments.
- Third group authors try to explore the risk through the subject's activity:
  - to act in the direction of successful activity with a hope of happy ending;
  - a way to act in dark, indefinite conditions;
  - choosing alternatives in an indefinable situation, realizing the ability to use creativity in uncertainty.

Each of the 3 approaches will allow you to identify the most important signs of the risk. By summarizing different interpretations of risk, it can be identified as a category characterizing the behavior of economic agents in uncertainty. This gives a clearer impetus to choosing the appropriate solution option within available alternatives based on the likelihood of achieving the desired outcome and the degree of displacement (positive or negative). The definition gives the necessity to take into account the activity of the subject of the risk under uncertainty. The subject of the relationship with the risk element may be individuals, households, firms, and others. It is advisable to indicate the activity of the subject of risk through the category of "behavior". More commonly used the category of "activity" to identify the risk is not so successful. The work reflects the activity of the subject, form suitable for given purpose objectively. Within the framework of the same activity, subjects behave differently. Their behavior reflects the objective necessity, even though they are quite free. In other words, in these or other situations, subjects can choose different line of behavior and can risk almost differently. The activity can incorporate elements of instability or uncertainty either immanent(internal)or subjective. However, the risk only shows itself to the specific situational reaction and behavior. Rejection of action is also a risk. It is true that not all behaviors combine risk elements.

The substance of the subject reflecting the creative activity of the subject associated only with the choice of means and methods of obtaining the goal can be regarded as a risk. Behavior is shaped and feasible to meet the needs and interests of the subject in the context of external environment. It also influences the subject in turn and requires certain actions from it. Therefore, the subject must always choose and behave accordingly. Thus, the risk is objectively natural, in other words, "risk is normal, but not one of the exceptional conditions of understanding and processes, but one of the methods of the constant state of the world, its measurement and development." At the same time, the content of the risky behavior is subjective because the risk is that the particular person chooses a certain alternative. In addition, people do not accept the same amount of risk as the size of the risk due to the diversity of psychological, ethical, ideological and other principles. Therefore, it is necessary to speak about the objective and subjective nature of the risk.

3. FINDINGS
In the future, the key to the risk is to clarify the functionality of the risk in the economy. Economic literature distinguishes the following risk functions: innovation, regulatory, defense and analytical. Risks the innovation function when the risk stimulates the search for an unconventional solution to the problem facing an economic subject. Risky decisions lead to more productivity, resulting in both the entrepreneur and consumer as well as the community as a whole. The regulatory function is contradictory and acts in two forms: constructive and destructive. Risk is generally aimed at achieving significant results by non-traditional methods. In doing so, it also helps to overcome defensive, inactivity, and psychological barriers that prevent them from seeing updates. Constructive form of the risk of entrepreneurial risk regulates itself in this. However, if the decisions are taken without taking into consideration the requirements of the development law, the risk can also be attributed to avantyurism and subjectiveism.İn this form acts as a risk-undermining factor. The defense function provides itself with the need for social protection, legal, political and economic safeguards to avoid the dangers that the self-destructive risk will be in order to maintain a stable state of the economic system. Analytical function takes a special place in the business risk function. This is due to the fact that the existence of risk necessitates choosing one of the possible options. Therefore, the economic entity analyzes all possible alternatives in the process of decision making. The concept of uncertainty is characterized by the fact that the information about the stochastic economic system and the environmental situation is not entirely or partly. According to Prof. Watszman of the University of Iorsk, the inability to understand the future and the uncertainty conditioned by it will be the central problem of science in the 21st century and will first of all decide how to limit this uncertainty. There are four main types of uncertainty reasons: "information incompatibility", mismatch in compatibility (incarceration), coincidence, counter-impact (resistance). "Information incompatibility" is conditioned by incomplete (incomplete) and asymmetric information. Additional information on all available opportunities and factors that can influence the outcome of the decisions taken leads to a decrease in uncertainty. It is not a coincidence that knowledge and information in the postindustrial society become an important strategic resource. The essence of the matter is that the term "information" is an antonym of "uncertainty". The second uncertainty of the so-called "discrepancy" is the uncertainty of the instruments used, the complexity of calculations, the restrictions on decision-making methods, the errors in insecurity and modeling, and so on. for reasons. The coincidence is one of the main reasons for the uncertainty. The source of this is that the world is endless, its infinitely complex and colorful. In the economy as in physics, the principle of uncertainty, discovered by German physicist Verner Geyzberg, operates. The essence of this principle is that, knowing the state of the tiny particle of matter in the environment, we can not accurately define the trajectory of its subsequent movement in any way.

According to N.D. Kondratyev, in the field of socio-economic life, we have to deal with more insightful concepts that can not be compared to the precise nature of the field. Here, we have less established relationships and legality, and at the same time they are given in less exact quantitative expression. Economists, as one of the reasons for uncertainty, place a special emphasis on the opposite. It provides itself in situations where the interests of the parties do not overlap (in labor conflicts, when suppliers violate contractual obligations), crash of equipment and in other cases.

4. CONCLUSION
Speaking about the dynamics of uncertainty in the modern economy, it should be noted that, first of all, in accordance with the level of market economy, the breach of contractual obligations, the timely delivery of the product, etc. the "non-conformity in skill" and the uncertainties associated with the reverse impact will be reduced. This process will, first of all, be accompanied by the strengthening of "information incompatibility" as a result of changes in market conjuncture, demand, prices and behavior of consumers. Openness of the economy and access to world markets is expected to increase the uncertainty created by global economic instability. Using the Chaos Theory Terminology, the world finishes its transition from its stationary industry to the postindustrial circle through the chain of bifurcation corresponding to Kondratyev's great economic cycle. The idea of Soros's far-sightedness in 2000 "is that capitalism will soon become deeply troubled and this will distract the system of global financial market and global trade relations system." As a result of this crisis, the world economy will lose at least a trillion dollars for various assessments. The development of such a scenario has once again demonstrated that the ongoing financial and economic crisis that has started in the world economy since 2008 and the sharp drop in the price of nifty. The uncertainty (determinant) sign is, in other words, a risk-taking environment. Therefore, increasing the uncertainty may lead to greater risk. At the same time, it is possible to speak of the non-linear cause-and-effect relation between uncertainty and risk.

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MAIN DIRECTIONS OF INCREASING THE EFFICIENCY OF BUDGETARY EXPENDITURES FOR PROGRAMS AND PROJECTS IN THE REPUBLIC OF AZERBAIJAN

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ABSTRACT

The state budget lays the groundwork for the state's economic and social goals to be realized. It regulates specific areas of spending and acts as an efficient economic regulator, but it is also an object that requires optimization, especially in the area of raising the efficiency of budget spending. This study aims to identify the key directions for improving the productivity of budgetary expenditures for programs and projects using the Republic of Azerbaijan as an example. The work examined the current state of public budget spending in the Republic of Azerbaijan, studied the experience of different countries in improving budget spending performance, demonstrated the factors influencing budget revenues and expenditures, identified opportunities and specific steps to achieve the work's target, and made related recommendations. Since the President of the Republic of Azerbaijan, Ilham Aliyev's social policy prioritizes "security of people and their interests above all," social initiatives and programs receive special attention at work. The paper also discusses how to improve the performance of projects and programs aimed at restoring territories that have been freed from the Armenian occupation.
Keywords: *State budget, the efficiency of budget expenditures, programs and projects, Azerbaijan*

1. INTRODUCTION

The budget is a financial plan for controlling the country's main socioeconomic development parameters, and it has the legal authority to compel compliance. It ensures the accumulation of state financial capital by taxing a portion of the profits of market subjects and redistributing resources forcefully to achieve optimum economic and social efficiency parameters. It also serves as a mechanism for controlling the country's financial and economic activities, as well as a framework for the authorities' exercise of power. The Republic of Azerbaijan's (AR) long-term growth involves maintaining budgetary balance through the use of an efficient budget system, increasing the efficiency of economic processes, and structuring budget expenses rationally, among other things. The state budget represents the amount of financial support that the state needs and sets clear spending goals. This work aims to examine the current state of state budget expenditures and identify opportunities for increasing their effectiveness, based on the enormous importance of the budget in the creation of the Republic of Azerbaijan's statehood. The research's methodological base was developed by the dialectical method of thought, the systems approach, formal logic concepts, economic analysis and synthesis approaches, and inductive and deductive learning techniques.

2. THEORETICAL VIEWS ON THE ESSENCE OF BUDGET EXPENDITURE AND THE PROGRAM BUDGET

The word "budget" has many meanings. One of the most basic meanings is that it is a type of education that involves the expenditure of funds, in this case, public financial resources. In certain situations, the budget's spending side is used to fund national services (investment, economic, development of industrial and social infrastructure, etc.).

As a result, state budget expenses reflect economic ties related to the allocation and use of the state's centralized monetary funds for sectoral, targeted, and territorial purposes. Budgetary expenses are divided into two categories: qualitative and quantitative. The qualitative characteristic of budget expenses reflects their economic existence and intent, while the quantitative characteristic reflects their worth. Since ancient times, people have been discussing the nature of the budget and its key components (treasury revenue and expenditure). Xenophon (430-335 or 354 BC) and Mark Thulius Cicero (106-43 BC), for example, made important contributions to the formation and advancement of the doctrine of the ancient states' revenue and expenses (Pasichnik, 2005). T. Men, J. Locke, T. Hobbes, L. von Seckendorf, S. Pufendorf, and I. Yusti present general treasury theory problems in their works (Kirilenko, 2000). The meaning of the sovereign's revenue and expenditures was discovered by A. Smith (1962). A. Wagner's works are dedicated to achieving equity in the distribution of income and resources in the world, and to determining who the government should use funds for this purpose. A. Wagner (1958) proposed a law on the constant increase in government spending (Wagner's law) in 1892, according to which the constant increase is attributed to three key reasons: Economic (scientific and technological progress, and as a result, an increase in state allocations in science, various investment projects, and so on); historical (throughout history, there has been a significant expansion of the state's social functions (pension insurance, population assistance in natural disasters and catastrophes); sociopolitical (throughout history, there has been a significant expansion of the state's social functions (pension insurance, population assistance in natural disasters and catastrophes); (the state resorts to issuing a state loan to finance unforeseen expenses, year after year an increase in the size of public debt and interest on it, in other words, the cost of servicing of it). To preserve economic stability, John Keynes (2007) suggested that the government participate in budget control, i.e., the government should play a regulatory position based on "efficient demand." His definition of deficit financing means that to boost aggregate demand during a crisis, the government must increase spending; on the other hand, when the economy overheats, the government must cut spending. This will assist in the management of the income-to-expense ratio. The neoclassical school's theorists (R. Slow, J. Kenrick A. Robbins, and others), defending the fundamental concept of the state's non-interference in the economy, advocated a decrease in overall government expenditure while modifying its structure by increasing the share of spending on education and research. Human capital projects received special consideration. The economic nature of the budget was considered in Soviet times through the state's interests, planned economy, and Marxist-Leninist ideology. K. Marx (1958) argued that to minimize the state's debts, it was important to curtail its expenses, or that to reach a fiscal balance, it was necessary to levy emergency taxes on the wealthier classes. In today's market economy, where resources are scarce and material needs are limitless, a constant regulation of economic processes is needed, and when determining the degree of regulation, it is important to consider economic development cycles. Azerbaijan forms its national economy on market principles and in compliance with its adequate requirements after regaining sovereignty. As a result, it should build its budgetary policy in compliance with the provisions formulated by market economy economic principles and business laws. Payment for social services is common in a capitalist economy, but in the AR, state subsidies for the disabled and the poorest strata of the population, social security of people, the development of non-production facilities, and so on are given at the cost of budgetary expenses. -the state's territorial structure; the country's and regions' socioeconomic development levels; the country's economic and social situation; the government's financial policy; society's development priorities; budgetary funding methods, and so on. The need to continually improve the quality of life of the Republic of Azerbaijan's citizens puts the challenge of increasing the productivity of budget pending before the country's government.

Other states had previously faced this issue, and they attempted to fix it by changing the budgetary process management system. In this regard, the word "performance budgeting" emerged in the 1930s of the twentieth century, based on which the term "new public management" originated, the meaning of which is the optimality of expenses directed at government administration. As a result, the modern public administration format focuses on budget spending performance, while conventional budgeting focuses on budgetary tools (input-oriented), first and foremost, the sum of budget expenses. The program budget has several advantages over the traditional one: it allows you to focus budget expenditures on politically defined and strategically important goals of the country's socio-economic development; it allows you to form a direct link between short-term and long-term budget planning and forecasting; it ensures a strong relationship between the state's strategic plans and the budget; it increases the responsibility in the public sector of ministries and departmentsfor the productive and effective use of resources(Shash, 2014, p. 4). The budget program is a systematized collection of activities aimed at achieving a particular objective and mission, which is proposed and implemented by the manager of budget funds by the roles assigned to him (Milenky & Demidov, 2015, p. 558). "A program is a government project grouped about a particular set of targets," according to the Organization for Economic Cooperation and Development. Program budgeting proposes applying cost-benefit analysis to allocation decisions, allocating costs to services, and measuring program success against objectives. This idea will be extended to all government operations under the programmatic classification, according to the proposal (OECD, 2006). The idea of a program budget is viewed from different perspectives: financial public authorities and economists see it as a tool that helps them to simplify and improve decisions on budgetary resource allocation, while members of the administration and experts on the subject of public administration performance see it as a mechanism for increasing efficiency (Milenky & Demidov, 2015, p. 558). Simultaneously, domestic and international scientists describe the nature of program budgeting in some ways. Two key methods can be differentiated as a result of their generalization: in the first, the nature of program budgeting is viewed as a budget preparation method, and in the second, as a mechanism of investing budget funds that are directly linked to performance. The implementation of program budgeting necessitates a range of major changes in the state's financial operations, including the restructuring of all financial systems, reorganization of administrative structures, increased professionalism in all financial activities, and new competencies of public finance specialists. At the same time, another significant aspect to consider is that the transition to the program budget represents a current trend in which the strategies and resources for handling public and private finances are increasingly convergent (Shash, 2011). The program budgeting mechanism has evolved: while it began as a formal auxiliary factor in preparing budget expenses, it has now evolved into an integral part of the budget process in many countries, ensuring the relationship between budget expenditures and results and establishing the preconditions for the system's successful functioning. The government is in control. The program budget is unique in that all or almost all expenses are included in the programs, and each program is specifically related to one or more strategic outcomes of the state's operations. In this regard, the United States, the United Kingdom, Germany, New Zealand, and many other countries consider its use to be a top priority in the modernization of public finance. The definition of program budgeting is used to achieve the following objectives, according to a review of developed world experience: promoting the measurement of the overall cost of program activities; improving fiscal control efficiency; improving the performance of the state apparatus by redistributing powers in the sense of the implementation of specific programs; and ensuring continuity between the budgets of governmental agencies(Afanasyev etal).

3. EXPENSES OF THE PROGRAM BUDGET OF THE AZERBAIJAN REPUBLIC

The program budget is a method for planning budget spending on a fixed timeline. It is based on achieving the objectives and completing the tasks outlined in the country's long-term socio-economic development concept. At the same time, the program budget ensures that the mechanism of allocating public funds is linked to the outcomes of projects developed by strategic objectives. For many international budget schemes, the program budget is no longer an innovation, but it is now regarded as one of the most promising instruments for increasing the efficiency of public spending. Although the use of the program budget in Azerbaijan is still in its infancy, once it is fully implemented in the country, there will be the opportunity to correlate the spent budget funds with the results obtained, allowing the state's budgetary system to be optimized and budget expenditures to be more efficient. Budgetary expenses are classified as funds distributed by budgetary classification from the state budget, the budget of the Nakhchivan Autonomous Republic, and local budgets to meet the requirements stipulated by legislation, according to article 1.1.12 of the Law of the Azerbaijan Republic "On the Budgetary System." Various factors affect the formulation of the framework and content: the state's administrative-territorial structure; the country's and regions' level of socio-economic growth; the country's and regions' economic and social situation; the government's financial policy; society's development priorities; budgetary funding strategies, and so on. Budget expenses are categorized according to certain parameters to assess their importance and significance in the country's economic growth. An expenditure classification, which is a grouping of expenditures and revenue based on homogeneous characteristics, is used in public finance. Azerbaijan currently has a single budget classification, which was approved by the Cabinet of Ministers of Azerbaijan on October 15, 2018. It consists of a division of budgetary revenues and expenditures by functional, fiscal, and administrative categories. According to operational statistics, state budget revenues in 2020 totaled 24,124.0 million manats, up 102.3 percent from the estimate of 24.679.2 million manats, up 461.1 million manats or 1.9 percent from 2019. In 2020, the approved estimate of 1990.4 million manats, or 8.1 percent more than in 2019, was surpassed by 96.1 percent, or 26.416.3 million manats (Information, 2020). President of the Republic of Azerbaijan Ilham Aliyev has focused on the social well-being of the country's citizens since the beginning of his presidency. Throughout the pandemic, he consistently stressed that citizens' health and well-being take precedence over the economy. In this regard, funds were distributed in 2020 at a higher rate than in 2019: 1.9 times, or 814.0 million manat, for health spending, and 36.2 percent, or 828.1 million manats, for social safety and social security. The state budget allocated 36.5 percent, or 9652.0 million manats, to social expenses (wage fund, pensions, and social benefits, drugs, and food), which is 1890.7 million manats, or 24.4 percent, more than in 2019(Information, 2020). The Republic of Azerbaijan's state budget has set aside 1985.6 million manats for measures to tackle the coronavirus (COVID-19) pandemic in 2020. 612.5 million manats of these funds were used to pay extra fees to medical staff participating in the coronavirus war, to buy required medical supplies and equipment, medications, to raise beds and maintain specialist hospitals, and to reimburse the costs associated with the provision of services in quarantine facilities. Simultaneously, 1.334.1 million manats were set aside to fund steps to mitigate the effects of the global pandemic on the Republic of Azerbaijan's population, macroeconomic stability, jobs, and economic entities (Information, 2020). The Republic of Azerbaijan's state budget has set aside 1985.6 million manats for measures to tackle the COVID-19 coronavirus pandemic in 2020. 612.5 million manats of these funds were used to pay additional fees to medical staff participating in anti-coronavirus initiatives, to buy required medical supplies and equipment, medications, to raise beds and maintain specialist hospitals, and to reimburse costs associated with the provision of facilities in quarantine institutions.

Simultaneously, 1.334.1 million manats were set aside to fund steps to mitigate the effects of the global pandemic on the Republic of Azerbaijan's population, macroeconomic stability, jobs, and economic entities (Information, 2020). On December 31, 2020, President of the Republic of Azerbaijan Ilham Aliyev approved the law of the Republic of Azerbaijan "On the state budget of Azerbaijan for 2021". According to this law, revenues will be 25,427,000 manats in 2021, and expenses will be 28,543,000 manats, with centralized incomes of 24,621,550 manats, local revenues of 805,450 manats, centralized expenses of 27683368.0 thousand manats, and local expenses of 859.632 thousand manats (https://president.az/articles/49859). In 2021, the state budget deficit is projected to hit 3116.0 million manats at the most. In 2021, the government's budget deficit is expected to be 4.1 percent of GDP, down 0.6 percentage points from 2020. The oil sector will account for 54% of state budget revenues, while the non-oil sector will account for 46%. (Turan. az). The price of $ 40 per barrel is used as a price guide in budget estimates for crude (Bayramov, 2021). Expenditures for general public services were determined for AZN 4159765076.0, for defense and national security - AZN 4585806638.0, for the judiciary, law enforcement agencies and the prosecutor's office - AZN 2092827281.0, for education - 3277655549.0 azn, for healthcare - 1409000546 0 azn, 3692746545.0 azn for social protection and social welfare (of which 289724358.0 azn will be spent directly on social protection), 418169237.0 azn for culture, art, information, physical education, 262,848,166.0 azn for housing and communal services, 943035597.0 azn for agriculture, 275 542,039.0 azn for environmental protection, 5947474,995.0 azn for economic activity. The cumulative number of expenditures not mentioned in the main parts would be 1,478,128,331.0 azn. In the state budget for 2021, a new line of spending was introduced: it is intended to ensure a significant return to the territories reclaimed from the occupation to rebuild and repair cities and villages, as well as to build modern infrastructure in these areas. The state budget has set aside 2.2 billion azn for these purposes (https://president.az/articles/49859, Ministry of Finance of the Republic of Azerbaijan). In 2021, 61.10 azn of budget expenditures will be spent on current expenses, 29.20 azn on capital expenditures, and 7.70 azn on servicing public debt for every 100 azn of budget expenditures (Turan. az). A comparison of Azerbaijan's budget revenues and expenses per capita with those of its neighbors (Table 1) reveals that it has the lowest financial stability in the country in terms of non-oil budget revenues per capita (Turan. az).

Countries	Budgetary income per capita in US dollars	Budgetary expenditures per capita in US dollars	Defense and security expenditure per capita in US dollars
Azerbaijan	1477	1658	266
Azerbaijan (excluding oil revenues)	676	759	-
Georgia	1135	1309	-
Russia	1752	2005	288
Turkey	1670	2126	372

Table 1: Comparison of Azerbaijan with neighboring countries in terms of budget revenues and expenditures per capita

4. WAYS TO INCREASE THE EFFICIENCY OF RESULT-ORIENTED BUDGETARY EXPENDITURES IN THE REPUBLIC OF AZERBAIJAN

The issue of raising the productivity of public spending in all fields of budgetary operation has been relevant in recent decades. Ordinary savings will not suffice to solve this problem; new budgeting methods and the development of realistic technology for making successful budget decisions are needed.

Many countries around the world use performance-based budgeting - RBB - for this reason, with the target-oriented approach as the primary tool. RBB is a budgeting approach that varies from projected budgeting. It establishes a clear relationship between budget spending and final results when used. "Budgeting ties funds committed to concrete results," according to the Organization for Economic Cooperation and Development (OECD, 2008). The program-target strategy entails developing a program budget to achieve the desired outcome while also assisting in the correct allocation of budget funds (Bayramov, 2020). The phrases "program budgeting" and "performance-based budgeting" are often used interchangeably in the economic literature. This is not entirely valid, in our view, since "performance-based budgeting" is a wider term. It is a planning, budgeting, and budgetary control mechanism that ensures the allocation of budgetary funds based on the social significance of the anticipated and real effects of their use, while also taking into account the goals of state economic policy. The preparation of budget spending, in turn, to provide public goods, may be done using a variety of budgeting approaches. As a result, one of the ways to incorporate a performance-based budgeting framework is to use the program-target approach (Sugarova, 2012). It should be noted that there is no clear answer to the issue of increasing the productivity of government expenditure and, as a result, the optimal position of government spending in the economy. Each country reacts in its unique way, based on its development model. Developing countries are thought to need a "tight fiscal policy," in which the budget deficit causes a "squeezing out impact" of private investment and inflationary pressures in the economy, and therefore cannot be tolerated. However, it is stressed that it is also a method for effectively stimulating an economy that has experienced a downturn in the implementation of traditional Keynesian economic and fiscal policies (Spiegel, 2006, p. 15). The world experience of countries with a developed budget system (the United States, Canada, the United Kingdom, Australia, France, and Sweden) have shown that using the program-target method of budget planning on a large scale increases flexibility in budget resource management, reduces costs and improves the efficiency of public services, and increases transparency and openness of government (Budgeting, 2002). In turn, the OECD countries' experience demonstrates that RBB production occurs very differently in each region, taking into account the specific characteristics of the national economy and the public administration system (OECD, 2008). Economists define four areas for using the program budget based on a review of foreign experience: 1. The program budget facilitates the assessment and comparison of the cost-effectiveness of alternative measures aimed at achieving specific government goals as a tool for policy analysis; 2. The program budget improves the government's work by expanding the operational independence of heads of departments and their structural divisions; 3. The program budget facilitates the assessment and comparison of the cost-effectiveness of alternative measures aimed at achieving specific government goals as a tool for policy analysis (Afanasiev, 2010). The Republic of Azerbaijan's state budget is mostly funded by the oil sector, with contributions from the Oil Fund and tax revenues from the oil industry. Instability in the global economy and dramatic volatility in energy prices (a decline in world oil and natural gas prices below the level set in the country's budget) put the country's macroeconomic targets at risk. This might exacerbate the lack of internal financial capital and make securing foreign financial resources for expected economic growth more difficult. Violations of the budgetary sphere's stability and balance create a gap between the revenue and expenditure sides of the budgetary sphere (Guliyeva, 2020, 2019, 2012). As a consequence of the above, the need to increase the productivity of budget expenses through RBB is becoming more pressing. To accomplish this, we believe it is important to take steps in the following areas: creating a legislative and regulatory framework for the implementation and use of RBB; improving the structure of government by removing duplicative roles of government bodies; improving the standard of financial management; improving the process for managing state property; and establishing a comprehensive system for managing state property; improve the

treasury support process for budget funds; ensure the growth of the contract system in the field of procurement of goods, works, and services for state needs by converting all public procurement into electronic form, ensuring their accountability and transparency; improve the efficiency of the provision of social services; provide advanced training for employees (electronic budget); establish observable metrics for evaluating the effects of budgetary activities; include reviews of budget expenses in the list of key financial documents; change the budget classification to include details on performance; and so on. The experience of other countries indicates that implementing RBB opens up a plethora of possibilities for improving the quality of government spending. In this regard, there are two options for transitioning to RBB at the governmental level in AR: In the first, the transition is carried out in phases (gradually), but simultaneously in all ministries and departments. In the second example, coverage is restricted (optional) to a small number of ministries and departments, with the remaining ones eventually covered. Since BORne is easy, fast, and inexpensive to implement, it necessitates careful planning.

5. CONCLUSION
Finally, it should be remembered that there is currently a structural overhaul of the budgetary mechanism in world practice, and new approaches to budgeting are being implemented. There is no straightforward answer to the question of increasing the productivity of government expenditure and, as a result, the optimal position of government spending in the economy. Each country reacts in its unique way, based on its development model. The use of the program-targeted form of budget planning improves the productivity of budget spending, according to the world experience of countries with a defined budget structure. The Republic of Azerbaijan's state budget is primarily funded by the oil sector. Sharp volatility in energy prices (a drop in world oil and natural gas prices below the level set in the country's budget) put the country's macroeconomic goals at risk. It is important to fully utilize RBB to smooth out the impact of negative factors on the Republic of Azerbaijan's state budget and improve the efficiency of budget expenditures.

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AZERBAIJAN HEALTH ECONOMICS IN THE CONTEXT OF DIGITALIZATION OF SOCIETY

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ABSTRACT

The digitalization process, covering all spheres and industries, has been actively introduced into healthcare. Health today has become a valuable category, an indicator of the country's economic development, a strategic indicator. From this point of view, the introduction of innovative technologies to improve the health indicators of the population is a necessity. Public health protection is one of the leading components of world development. In this area, the backbone elements of the digital economy find their direct application. The proliferation of artificial intelligence is proceeding at different rates depending on the direction. In healthcare, it used in the analysis of medical data, the selection of therapy, patient control, the preparation of predictive analytics for more effective prevention, improvement of the quality of treatment, rehabilitation, to remind the need to undergo procedures and tests, to warn the patient and his loved ones in critical cases, to stimulate a healthy lifestyle. Digital in medicine and pharmaceuticals has led to a change in consumer behavior associated with an increase in demand for complete and reliable information. The patient is no longer a passive participant in the medical diagnostic process; he becomes active and independent, developing the strategy and tactics of his treatment together with the attending physician. Digital health is delivering good results in terms of quality of care, as well as providing more efficient and convenient services. This is especially important for patients belonging to vulnerable groups of the population. In the context of the coronavirus pandemic, the digitalization process has accelerated at a record pace. The pandemic has forced people to use remote methods of receiving medical care: worldwide, the volume of telemedicine services has increased 15-20 times. Additional attention was drawn to the use of robots, whose activities implied the introduction of 5G (with minimal data transmission delays). The experience of using telemedicine for managing patients during a pandemic increases the investment attractiveness of telemedicine. However, users need to be in control of their data and know who is using it and why to ensure that their data is protected and confidential. It is also very important to unify the information interaction of various information systems and resources.
Keywords: digitalization of healthcare, medical robots pandemic, telemedicine, pandemic

1. INTRODUCTION

The digitalization process, covering all spheres and industries, has been actively introduced into healthcare as well. Nowadays, health is a strategic index and an indicator of the country's economic development. From this point of view, it is necessary to introduce innovative technologies to improve the health indicators of the population. Digitalization ensures the availability and high quality of medical services received, contributes to an increase in life expectancy and improves its quality, while significantly rationalizing costs. The importance of digitalization in healthcare was especially pronounced against the backdrop of a pandemic, as a result of which the pace of its implementation had to be increased to the maximum. This made it possible to rapidly spread information, to unite scientists and government agencies in order to develop optimal tactics for the prevention and treatment of the disease. The digitalization of healthcare has covered almost all countries of the world to some degree. The leader among the CIS countries can be called Estonia, where 99% of social spheres are digitalized.

Azerbaijan is a part of an integrated globalizing society and global trends are familiar to us. Since the proclamation of the Azerbaijan Republic as an independent state, the healthcare sector has gone through several stages of reform.

2. REFORMS IN DIGITAL HEALTH SPHERE IN THE AZERBAIJAN REPUBLIC

In 2011, Azerbaijan launched the Health Sector Reform Project (with the support of the World Bank), which included the development of a strategy for the creation of an Integrated Health Information System. It included the following information systems:

- System of electronic medical ID-cards of citizens.
- Information system for management of the hospital.
- The system of infectious diseases.
- The system of the blood bank.
- Hospital activity tracking system (which unites 468 medical organizations, including private ones).
- The system of ambulance operators.
- Personnel management system.
- Register of medical certificates.
- Digital medical journals [2, p. 79].

The e-health portal offers 39 e-services, including 8 services for medical professionals, 15 services for legal entities, and 8 services for the public [3]. In general, the market is occupied by suppliers of Medical Information Systems (MIS) and telemedicine systems. A number of e-health business models have been implemented in the private sector, for example, Mediclab, SOS, Grand City Hospital, and Turkish American Medical Center [2, p. 81]. On October 21, 2005, the introduction of the "Electronic Health Card" was decided by a corresponding decree of the President of Azerbaijan, Ilham Aliyev. On the basis of this degree, "the Rules for the Application of the Electronic Health Card System" were prepared, approved by the decision of the Cabinet of Ministers in 2006. The first owners of electronic health cards were newborns. Hereafter, the system covered all children's medical institutions under the name "Electronic health card for newborns". The main goal in the application of the "Electronic Health Card" system is to improve the monitoring system of the citizens' health through the preparation of appropriate electronic registers and the creation of a bank of operational data on people's health [4]. All data on health (medical history, examinations, treatment, information on medications taken, vaccinations, etc.) are collected at the Center for Health Informatization in the electronic information system "VESKS" ("Electronic Health Card of Citizens") and displayed in the card of each person. The center carries out the necessary changes in medical institutions, conducts training for employees, and provides the necessary technical support. Recently, telemedicine has become widespread, which makes it possible to distantly diagnose, treat and monitor the condition of patients. This becomes especially important in critical situations when a person's life depends on quick and clear decisions. The main areas of telemedicine are the following: telemedicine consultations, tele-education, online broadcasting of operations, remote biomonitoring, home telemedicine. Patients' lack of confidence in the security of their personal information becomes an important problem when receiving such services. In Azerbaijan, the concept of "telemedicine" is a new concept, which was introduced in 2017. The majority of online services include consultations of patients by specialists in the regions. An important direction in digital healthcare is online monitoring of the patient's condition, which allows him to maintain his health outside the medical institution. This is especially useful for elderly or single patients. Changes in indicators initiate patients to call an ambulance and at the same time to relatives. Digitalization in healthcare contributes to the enhancement of the proposed products and their adaptation to the needs of patients.

For instance, in the insurance sector online purchases are growing, as well as purchases through applications. Almost all insurance companies support online insurance through websites and calls. A local insurance company, A-group suggests that "20% of clients submit documents for obtaining insurance compensation online, through the application. According to experts, online purchases of insurance will reach 30-60% of all transactions within 3 years" [6]. Moreover, mobile applications present multiple useful features for patients, such as finding the nearest clinic or pharmacy, choosing the route, finding specialist, evaluating the service of a doctor and the clinic on a five-point based scale, saving test results, application for reimbursement, calculation of the cost of a policy, calling of an ambulance by simply pressing the SOS button (the ambulance will find you by geolocation), turning on a reminder about taking medications, etc. Accumulation of digital data contributes to the emergence of new technologies, particularly, intelligent medical decision support systems, improvement of existing algorithms and protocols. Simultaneously, scientists agree that artificial intelligence is just a tool that doctors can utilize and does not exempt them from any responsibility. Currently, pharmacies are completely digitalized, however, the coverage in hospitals and clinics is not complete. At the same time, the digital literacy of the population could be assessed as low, and relatively, the usage of health cards is low as well. As a matter of fact, the majority of citizens find it difficult to obtain data, even with cards in hand. "National Strategy for the Information Society for 2014-2020" [5], as well as maps for the main sectors of the economy [7] are strategic documents in this area. There is not any specific strategic plan or document for digital health. In general, the studies of the current condition and potential of eHealth of Azerbaijan, Belarus, Georgia, Moldova, and Ukraine under the EU initiative, focused on creating a set of benchmarking indicators reflecting the key benefits of harmonization with EU markets, show that the level of eHealth development in Azerbaijan is approximately 50% of the EU reference level according to the majority of indicators. The smallest gap is noted for the indicator of privacy, awareness, security due to the sufficient clarity of the country's legislative and regulatory environment. The biggest gaps are identified for Big Data and innovation indicators. The country performs slightly better than the region according to most indicators. The eHealth marketplace is open to all local and international vendors which have a significant impact on the sector (e.g. Siemens, GE). In general, the market is occupied by suppliers of Medical Information Systems (MIS) and telemedicine systems. The private sector has implemented a number of eHealth business models such as Mediclub, SOS, Grand City Hospital, and Turkish American Medical Center [1, p. 71]. Contemporaneously, the transition to digital health care is becoming especially significant and even necessary according to the transition to compulsory health insurance in the country. Digitalization will make it possible to use the available funds more efficiently and effectively, improve the quality of treatment, and create new incentives for workers and patients. Therefore, according to the Minister of Health of Azerbaijan Republic, "the creation of a continuous e-infrastructure of health care will save 60 Million AZN of budgetary funds in 2020, or 7% of budgetary spending on health care" [1].

3. DIGITAL HEALTH CHALLENGES AND RISKS

Introducing revisions to the number and qualifications of workers. Healthcare facilities can invest large resources in digital health but cannot fully exploit its benefits if they do not adapt other systems and processes. There are fears that telemedicine will reduce the number of healthcare workers in the industry. However, British researchers have calculated that a one-time reduction in medical personnel in the context of the development of digital health will give a twofold increase in IT specialists and engineers who come into the industry to solve problems not directly related to medicine. In addition, the introduction of innovations requires a detailed analysis, as it is a serious financial investment.

On the other hand, innovation in healthcare and other areas is not the same thing.

In terms of intervention in the long term, the results of which can manifest themselves in the long term. However, there is another important aspect of digital health capabilities related to privacy. The problem of obtaining clean and complete datasets must be resolved; Likewise, privacy issues in the collection and storage of data and issues related to patient consent also require rigorous requirements. Whereas earlier data were stored in strictly defined in regulated health registers in hospitals or in the archives of doctors, that now access to this information is possible via the Internet, smartphones, which makes their security vulnerable. Also, the presence of centralized data makes it possible to obtain very serious information not only about one patient, to use it, but also about groups of the population, the whole population. Data and device regulations are gaining in importance. For example, within the Commission on the UN System of at least different types of normal bodies, the regulatory domain of digital health is:

1) Data-management including data-protection and quality regulations, standards and governance mechanisms - collectively ensure the safe and ethical collection, use and sharing of digital health data
2) Medical-device regulations- approval and use of safe, cost-effective and highquality – but also highly diverse – digital health solutions.
3) Regulations governing the delivery of medical care - enables medical practices to be supported and enhanced by digital health solutions [8].

4. CONCLUSION

Thereby, the main prospects of healthcare digitalization are the following:

- ensuring the transparency of the healthcare system, reducing the level of corruption and medical errors;
- promoting coordination and continuity in treatment, improving the quality of treatment;
- implementation of the correct separation of patient flows;
- increasing the productivity of medical workers;
- minimization of temporary losses;
- creation of a unified information space and a wide database;
- reducing the number of duplications;
- increasing the responsibility of the population to their own health care;
- increased competition in the field;
- making comprehensive and objective monitoring of the activities of doctors;
- increasing confidence in the health care system;
- increasing the activity of the population in managing their own health;
- development of new improved standards based on the existing base, as well as the introduction of artificial intelligence in the process of diagnosis and treatment;
- increasing motivation of health workers;
- more efficient use of limited health care resources.
- At the same time, the digitalization of healthcare is associated with a number of problems:
- like any innovation, it requires significant financial resources;
- lack of necessary personnel;
- possible increase in unemployment;
- hacking of information systems, programs, cyber fraud;
- technological problems.

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ECONOMIC PROSPECTS FOR THE GROWTH OF AZERBAIJAN NON-OIL SECTOR IN THE LIBERATED TERRITORIES OF THE REPUBLIC

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ABSTRACT

For nearly 30 years, Armenians controlled 20% of the Republic of Azerbaijan's territory (Nagorno-Karabakh and neighboring regions). Azerbaijan was able to regain its territorial integrity by military means in the fall of 2020. The economic value of restoring Azerbaijan's territorial integrity cannot be overstated. Azerbaijan's economy suffered tremendously as a result of the occupation. For several years, this nation has been refused access to the wealth found in these territories. By restoring territorial integrity, Azerbaijan will be able to completely exploit the region's economic potential in the production of these tools. Management, defense, infrastructure, social services, and economic growth are all part of the process of restoring and developing the liberated territories. The most important contribution of the liberated territories to the growth of the economy of the Republic of Azerbaijan, in our view, can be made primarily through the development of agricultural product production and processing, as well as the development of specialized tourism. Agricultural production is crucial for the country's food self-sufficiency and diversification of exports. Domestic tourism growth has the potential to become a vital link in the Republic of Azerbaijan's long-term economic development. The Republic of Azerbaijan is well-known for its ample fuel and energy resources. High prices for fuel and energy services have been an impetus for the republic's economic growth in recent years. However, considering the high instability of fuel prices, this situation poses a significant threat to the economy's stability. The acceleration of the economy's non-oil and gas sector's rate of growth is especially significant in this regard. The liberated territories' economic contribution will be critical to Azerbaijan's long-term economic growth, especially in the non-oil field.
Keywords: *Republic of Azerbaijan, the economic potential of the region, the development of agricultural production, specialised tourism, the non-oil sector*

1. INTRODUCTION

The Republic of Azerbaijan (AR) is a sovereign state whose territory (Karabakh and neighboring regions) was occupied by the Parmians for nearly 30 years. Azerbaijan was only able to liberate over 300 settlements from occupation and reclaim its natural resource-rich lands as a result of a successful war. Gold, copper, mercury, semi-precious stones, marble-tuff, mineral waters, medicinal mud, and other deposits can be found in the liberated territories. Before the occupation, over 700,000 Azerbaijanis lived in seven regions around Nagorno-Karabakh, who became refugees in their own country and had their homes erased from the face of the earth. According to official records, 700 historical and cultural monuments, 927 libraries, 808 cultural centers, 85 music and art colleges, 22 museums with more than 100,000 objects, four art galleries, four theaters, and two concert halls were built during the occupation [1]. The President of Azerbaijan, Ilham Aliyev, has announced that whatever the cost to the country, everything that has been lost will be restored. Azerbaijan has already built a master plan for the rehabilitation of all cities that have been liberated from the occupation, as well as major infrastructure projects.

2. MEASURES AIMED AT REDUCING THE DEPENDENCE OF THE ECONOMY ON OIL AND GAS SECTOR OF THE REPUBLIC OF AZERBAIJAN

The liberated territories have a lot of economic potential in addition to historical and cultural significance. And the new economic value generated by incorporating these territories into the country's economy will far outweigh any financial costs that the Azerbaijani government has borne and will continue to bear without hesitation or financial strain. It is expected to carry out activities in four stages to ensure an integrated approach to the reconstruction and growth of occupied territories. The first stage entails resolving issues of management and stability, as well as infrastructure; subsequent stages entail resolving issues of social services, as well as economic recovery and growth [2]. The building of the Fizuli-Shusha highway was the first project initiated in the liberated territories. The President of Azerbaijan, Ilham Aliyev, laid the "first stone" at the beginning of this initiative. He also mentioned connecting Nakhchivan with the rest of the country as a priority task (the Nakhchivan Autonomous Republic, which is part of the AR, was cut off from the rest of the country during the occupation). For the return of Azerbaijani refugees to their homeland, residential homes, schools, hospitals, administrative buildings, and modern infrastructure will be constructed soon. As a result, after restoration, the formerly occupied territories will be able to contribute significantly to the country's economic growth. Since the Republic of Azerbaijan is rich in fuel and energy resources, mineral fuel, lubricants, and related materials accounted for 90.7 percent of its exports in 2019, a decrease of 1.1 percent from 2018, but an increase of 0.7 percent over the previous five years [3]. Given that fuel prices are subject to significant volatility and are dependent on the global climate (as was the case during the COVID-19 pandemic), this situation poses a serious challenge to the economy's stability. High prices for fuel and energy services have been a driving force behind Azerbaijan's economic growth in recent years, but like the real world shows, this cannot continue indefinitely. The acceleration of the economy's non-oil and gas sector's rate of growth is particularly important in this regard. Because of the decrease in oil prices, the country recorded a gross domestic product of 72.432.2 million manats in 2020, which is down 4.3 percent from the previous year. The economy's non-oil and gas sector added value decreased by 2.6 percent, while the oil and gas sector added value by 7.0 percent [4]. Figure 1 depicts the growth rates of Azerbaijan's GDP overall, GDP from the oil and gas sector, and GDP from the non-oil and gas sector from 2001 to 2019. (5), (6) The graph demonstrates Azerbaijan's GDP's dependency on oil price fluctuations. For the studied period, the highest growth in the oil and gas sector occurred in 2005 and 2006, when oil prices were at their highest.

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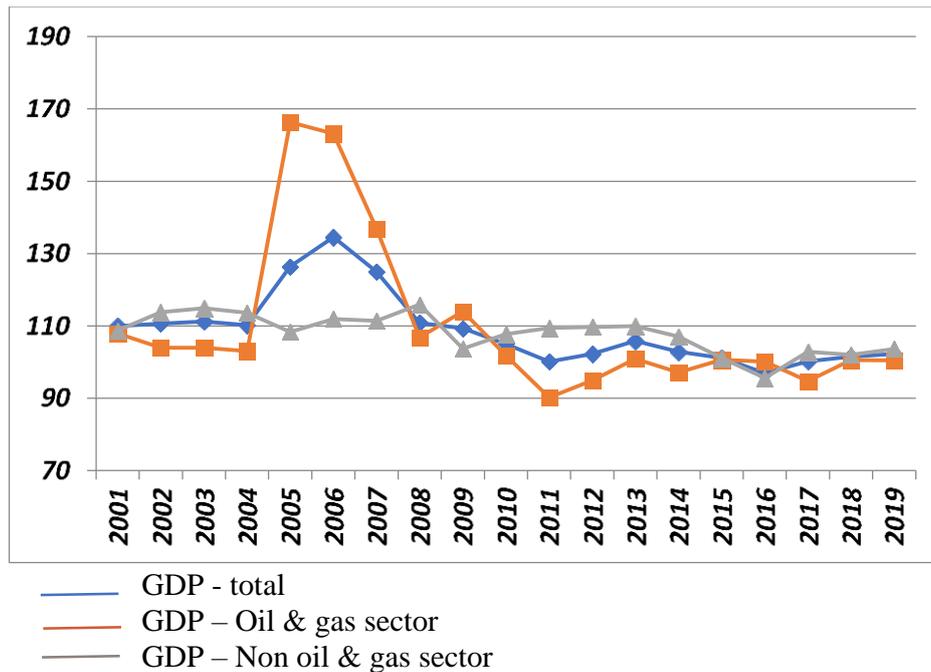
Figure 1: Growth rates of Azerbaijan's GDP, as a percentage of the previous year

Several years ago, the President and Government of the Republic of Azerbaijan took a range of steps aimed at stabilizing the economy to minimize reliance on the oil and gas industry. For example, the development concept "Azerbaijan 2020: a look into the future" is based on an export-oriented economic model, to raise competitiveness and improve the economy's structure to boost non-oil export growth [7]. The President of the Republic of Azerbaijan Ilham Aliyev accepted the Road Map of the National Economy and its Main Industries on December 6, 2016, to grow export potential [8]. The roadmap includes the following strategic roadmaps: the development of the Republic of Azerbaijan's national economy; the development of the oil and gas industry (including chemical products); the production and processing of agricultural products; the production of consumer goods at the small and medium-sized enterprise level; and the development of heavy industry and mechanical engineering; logistics and trade development; affordable housing development; technical education and training development; financial services development; telecommunications and information technology development; utility development (electricity and heat energy, water and gas) development [8].

3. THE MAIN DIRECTIONS OF THE CONTRIBUTION OF THE LIBERATED TERRITORIES TO THE ECONOMY OF THE REPUBLIC OF AZERBAIJAN

Out of all the strategic road maps, we believe that the territories reclaimed from occupation shortly will contribute the most to the country's economy by 1. developing agricultural production and processing, and 2. developing specialized tourism industry. Agriculture, forestry, and fisheries will account for 6.9% of GDP in 2020 [4]. Agriculture, forestry, and fishing's share of GDP (along with other sectors) have changed dramatically since independence: from 26.50 percent of value-added in 1990 to 5.72 percent in 2019. From 1990 to 2019, the highest share of agriculture, forestry, and fishing was 45 percent in 1994, and the lowest was 7.09 percent in 2006 [9]. This share is likely to rise as agriculture develops in the liberated territories (where animal husbandry, plant growing, horticulture, and fruit growing, among other things). The fact that the President of Azerbaijan, Ilham Aliyev, ordered the autumn sowing to be carried out in these territories confirms this possibility. As a result, the Roadmap's goal of a substantial increase in the share of agricultural products by 2025 will be reached [8].

The Indices of the amount of agricultural production in Azerbaijan for 2000-2019 [10] are shown in fig. 2. As can be seen in this graph, agricultural production in the AR is inconsistent, which can be attributed to a variety of risks (technogenic, natural, etc.) that must be effectively managed for the industry to achieve financial stability [11].
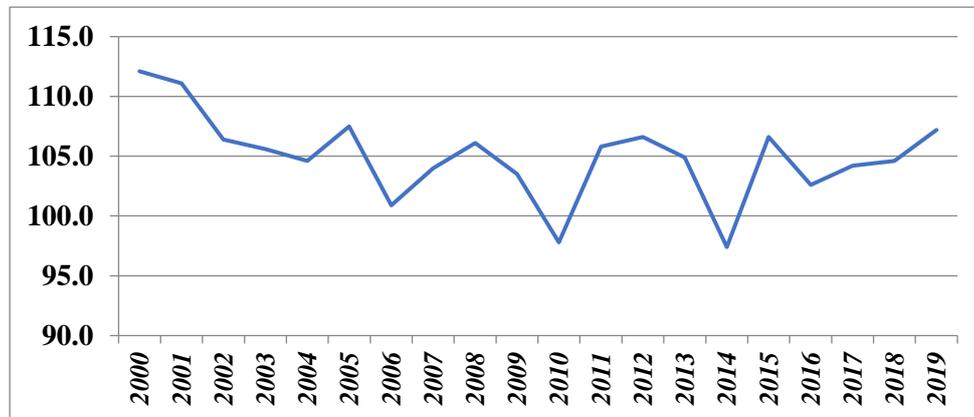
Figure 2: Indices of the volume of agricultural production of the AR (in constant prices), 2000-2019 (in% to the corresponding period of the previous year)

Well-developed agriculture allows for the processing of a wide range of foods. This is particularly important for the country's food self-sufficiency and diversification of exports. Many countries have started to work in this direction as a result of the COVID-19 pandemic. Due to the need for the country's self-sufficiency in food, the issue of developing agriculture in the territories liberated from the occupation is undoubtedly topical. For the growth of the tourism sector, Azerbaijan has a rich cultural, historical, and natural heritage. Travel and tourism contributed 7.2 percent of Azerbaijan's GDP in 2019 [12], but the COVID-19 pandemic caused a significant drop in this sector. According to Azerbaijan's State Border Service, the country received 720.3 thousand foreigners and stateless persons from 155 countries between January and October 2020, which is 3.7 times less than the same timeframe in 2019 [13]. Before the pandemic, the country's tourism growth was mainly focused on foreign tourism, even though the country has a range of favorable conditions for domestic tourism development. Azerbaijan's tourist resources contribute to the growth of virtually all major types of tourism, even in the liberated territories. As a result, domestic tourism growth has the potential to become a critical link in both the overall and non-oil and gas sectors of the Azerbaijani economy. To boost the growth of domestic tourism, new tourist routes covering a wide range of topics must be created. The key subject in the liberated territories should be the Armenian occupation. The importance of this subject is supported by Azerbaijani President Ilham Aliyev's view. "When rebuilding cities, each of them should have lost places so that no one forgets this," he says. Along with memorial complexes and monuments commemorating our victory, occupation museums should be built... These museums should portray a wide image of Armenia's occupation policy. At the same time, each city and area should be portrayed separately there, so that Azerbaijanis will never forget, and visitors from other countries will see which barbarians we fought against, and from what catastrophe we saved our lands and the South Caucasus" [2]. The need to grow business tourism - the so-called MICE industry (Meetings Initiatives Exhibition): business meetings, gatherings, conferences, exhibits, and so on - should be considered in this context. The creation of MICE to establish conditions for a direct demonstration of the effects of the Armenian occupation on the international community. Already, many people, including Azerbaijanis and foreign visitors, want to visit the liberated territories and learn about the current situation there. Rural tourism can play a unique role in the growth of tourism in the liberated territories.

Here, ethnographic tourist villages based on the Asian model "National Village" can be created, complete with a way of life, folklore, and historical sites unique to Azerbaijan. Since the liberated territories have mineral water and medicinal mud, the growth of medical and health tourism cannot be overlooked. The construction of health resorts (spa centers) would enable the growth of tourism throughout the year.

4. CONCLUSION

The reconstruction of the territories liberated from Armenian occupation would necessitate significant financial resources, but it will undoubtedly be accomplished. Along with the allocation of funds from the Republic of Azerbaijan's state budget, funds for the reconstruction of Karabakh and adjacent regions have been created, and Armenia will be kept financially responsible for anything that is lost, destroyed, or plundered in Karabakh and the surrounding regions. Azerbaijan has already begun the process of filing a claim in international courts. It should also be noted that the International Monetary Fund and the World Bank forecasted a 1.7-2 percent increase in RA GDP in 2021, but AR's macroeconomic indicators for 2021 were developed with the following consideration: "large-scale restoration work in the liberated territories would become a driver for the non-oil sector and the economy as a whole, and thus for AR's macroeconomic indicators for 2021." Simultaneously, budget revenues are estimated using a conservative estimation of AzeriLight oil's average annual price of $ 40 per barrel, but oil is becoming more expensive: on February 6, 2021, it was $ 60.51 per barrel [14]. If this trend continues, Azerbaijan's budget revenues will grow, and the country will be able to speed up the reconstruction of Karabakh and adjacent regions, with the restored territories playing an important role in the country's institutional transformation and long-term growth.

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DINAMIC MODEL OF GROSS DOMESTIC PRODUCT TWO CONTROLS

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ABSTRACT

One of the indicators of the country's economic growth is the gross domestic product (GDP), and one of the factors of economic growth is capital. The main criteria and source of economic development is economic growth. Economic growth is a sustainable increasing tendency of the main indicators of national theory production (GDP, GNI). Furthermore, absolute value and growth per capita are also considered. In economic and statistics, various indicators are used to measure the volume of national production. The most important of these is gross domestic product (GDP). GDP is expressed by monetary unit of the final products and services produced in the economy. Here should be taken into account the fact that GDP comprises final products and services produced within the particular country. In this work, was created the dynamic model that demonstrates the dependence of GDP on investments and oil price in case of Azerbaijan economy. This approach provides an opportunity for strategic planning of GDP for the country. In this work, to achieve the desired level of GDP, the volume of investment and oil price are used as the independent variable in the dynamic model. But as indicated above, many other factors affect GDP. We chose two of them: the amount of investment and oil price. But even so, the dynamic model of the optimal GDP trajectory yielded good results. Further research will take into account the other most influential factors on GDP. In this case, a dynamic model of the optimal trajectory of GDP will give even more adequate results.
Keywords: macroeconomics, gross domestic product, investments, dynamic model, model of the optimal trajectory of GDP

1. INTRODUCTION

The main criteria and source of economic development is economic growth. Economic growth is a solid stimulant for the growth of the main indicators of national production (GDP, GNI). Furthermore, Absolute value and growth per capita is also kept in mind. In economic theory and statistics, various indicators are used to measure the volume of national production. The most important of these is gross domestic product (GDP) [4, 6]. GDP is an expression in monetary unit of the final products and services produced in the economy. This refers to the final products and services produced within the borders of a particular country. Three main methods are used to calculate GDP:

- Added value method (method of production). With this method GDP is determined by the sum of added values on the cost, wages and income generated in the production process and characterized by the actual share in the final product in this enterprise for all sectors and types of production.
- By expenses. Using this method, the volume of GDP is calculated as the sum of all expenses in society (daily expenses of the population, investments of producers, expenses of the government on goods and services), net exports (balance of imports and exports of the country);
- Calculation of GDP by income - the total amount of all income in the company (excluding the wages of workers being paid from the state budget, as long as their wages are paid from the state budget), property income, income, interest on capital, depreciation, rent payments.

There are objective and subjective factors of economic growth. Objective factors are factors that directly and finally affect the rate of economic growth. Subjective factors are indirect factors affecting the scale and pace of economic growth. The objective factors of economic growth are the following:
- increase in the volume and quality of fixed capital;
- changes in production technologies;
- increase in the volume of economic resources;
- increase in entrepreneurial activity of the population;
- increase in the quantity and quality of labor resources;
- Activization of the needs of the population, leading to increase in production volumes.

Subjective factors of economic growth are the following:
- expansion of the credit system. Since, the activation of this system allows the population to consume as much as possible. This, in turn, stimulates production.
- Reduction of monopoly in the markets for products and services. This, in turn, activates entrepreneurial activity;
- Reducing the cost of production resources. This process increases production and prices. This in turn allows for growing demand.
- Tax cuts. Tax cuts lead to an increase in overall economic activity.

At the present stage of economic development, economic growth affects the following factors:
- Natural resources directly affect economic growth. The value of these resources is growing every day, since resource resources are limited;
- Population growth, increase in labor resources;
- increase in capital within the borders of the country. The increase in capital creates opportunities for increasing production and scale, conducting new scientific and technical research and investing in human resources;
- scientific and technological progress, which is the basis of economic growth, as scientific and technological progress contributes to the transition of the quality of economic development to a new level.

The relationship between economic growth factors within the national economy is becoming more complicated. In such a situation, the main goal of the state is the effective use of existing economic factors to promote economic growth to benefit the general populace [9]. As mentioned above, many other factors affect GDP. We chose two of them: the amount of investment and oil price. Such as, the main part of GDP consists of revenue from oil-gas industry in case of Azerbaijan [3]. One of the indicators of a country's economic growth is gross domestic product (GDP), and one of the factors of economic growth is capital. In this work, we will build a dynamic model that demonstrates the dependence of GDP on investment in the country's economy and oil price.

2. THE DINAMIC MODEL OF GDP WITH TWO CONTROLS
Consider the following task: how much investment and oil price should be in a certain year to achieve the desired level of GDP after a certain period of time?
To do this, consider the following task:

$$J = \sum_{i=0}^{N} (x_{des\,i} - x_i)^2 + \sum_{i=0}^{N-1} (u_{1i}^2 + u_{2i}^2) \to \min \qquad (1)$$

$$x_{i+1} = Fx_i + G_1 u_{1i} + G_2 u_{2i} + v, i = \overline{0, n-1} \qquad (2)$$

$$x(0) = x_0 \qquad (3)$$

Here,

x_i is the amount of GDP in the i-th year;

$x_{des\,i}$-the desired amount of GDP in the i-th year;

u_{1i} is the amount of investment in the i-th year;

u_{2i}-the oil price in the i-th year;

F, G_1, G_2, v-are defined numbers.

Suppose $x_{des\,i} = 0$ for $i = \overline{0, N-1}$ and $x_{des\,N} = x_{des}$. Then formula (1) can be written as following form:

$$J = (x_{des} - x_N)^2 + \sum_{i=0}^{N-1} (x_i^2 + u_{1i}^2 + u_{2i}^2) \to \min \qquad (4)$$

The functional (4) can be written in general form as following:

$$J = \frac{1}{2} q(x_{des} - x_N)^2 + \frac{1}{2} \sum_{i=0}^{N-1} (k_0 x_i^2 + k_1 u_{1i}^2 + k_2 u_{2i}^2) \to \min \quad (5)$$

$$x_{i+1} = Fx_i + G_1 u_{1i} + G_2 u_{2i} + v, i = \overline{0, n-1} \qquad (6)$$

$$x(0) = x_0 \qquad (7)$$

Here, $q > 0$, $k_0 \le 0$; $k_1, k_2 > 0$ are coefficients, F, G_1, G_2, v was defined with least square method, and N is the number of years. For this, we construct an extended criterion of quality $\bar{J}$ [1,2,4,6-8]. To do this, we add systems of equations with coefficients $\lambda(i)$ [1, 7] to function J:

$$\begin{aligned} \bar{J} = \frac{1}{2} q(x_{des} - x_N)^2 \\ + \sum_{i=0}^{N-1} \Big[\frac{1}{2} (k_0 x_i^2 + k_1 u_{1i}^2 + k_2 u_{2i}^2) \\ + \lambda_{i+1}(Fx_i + G_1 u_{1i} + G_2 u_{2i} + v - x_{i+1}) \Big] \end{aligned} \qquad (8)$$

We use the following notation:

$$\phi(x(N)) = \frac{1}{2} q(x_{des} - x_N)^2$$

$$H^i = \frac{1}{2} (k_0 x_i^2 + k_1 u_{1i}^2 + k_2 u_{2i}^2) + \lambda_{i+1}(Fx_i + G_1 u_{1i} + G_2 u_{2i} + v)$$

We can rewrite (8) as such:

$$\bar{J} = \frac{1}{2} q(x_{des} - x_N)^2 - \lambda_N x_N$$
$$+ \sum_{i=1}^{N-1} \left[\frac{1}{2}(k_0 x_i^2 + k_1 u_{1i}^2 + k_2 u_{2i}^2) + \lambda_{i+1}(F x_i + G_1 u_{1i} + G_2 u_{2i} + v) - \lambda_i x_i \right]$$
$$+ H^0$$

We get the following problem:

$$\bar{J} = \frac{1}{2} q(x_{des} - x_N)^2 - \lambda_N x_N$$
$$+ \sum_{i=1}^{N-1} \left[\frac{1}{2}(k_0 x_i^2 + k_1 u_{1i}^2 + k_2 u_{2i}^2) + \lambda_{i+1}(F x_i + G_1 u_{1i} + G_2 u_{2i} + v) - \lambda_i x_i \right]$$
$$+ H^0$$
$$\rightarrow min \tag{9}$$

$$x_{i+1} = F x_i + G_1 u_{1i} + G_2 u_{2i} + v, i = \overline{0, n-1} \tag{10}$$
$$x(0) = x_0 \tag{11}$$

To solve the problems (9)-(11), i.e. to find the values $\lambda_i,(i = \overline{0, n+1})$, $u_{ji},(i = \overline{0, n-1}, j = \overline{1,2})$ and $x_i,(i = \overline{0, n})$, we need to solve the following system of equations [2]:

$$\frac{\partial H^i}{\partial x_i} = \lambda_i \tag{12}$$

$$\frac{\partial H^i}{\partial u_{ji}} = 0 \quad j = \overline{1,2} \tag{13}$$

$$\frac{\partial \phi}{\partial x_N} = \lambda_N \tag{14}$$

From this we obtain:

$$\lambda_i = k_0 x_i + \lambda_{i+1} F \tag{15}$$

$$0 = k_1 u_{1i} + \lambda_{i+1} G_1 \tag{16}$$

$$0 = k_2 u_{2i} + \lambda_{i+1} G_2 \tag{17}$$

$$\lambda_N = q(x_N - x_{des}) \tag{18}$$

$$x_{i+1} = F x_i + G_1 u_{1i} + G_2 u_{2i} + v \tag{19}$$

And from (16) and (17) we find:

$$u_{1i} = -\lambda_{i+1} G_1 k_1^{-1} \tag{20}$$

$$u_{2i} = -\lambda_{i+1}G_2k_2^{-1} \qquad (21)$$

Using (19) and (20) in equation systems (15)-(18) we obtain,

$$x_{i+1} = Fx_i + G_1u_{1i} + G_2u_{2i} + v \quad i = \overline{0, n-1} \quad (22)$$

$$\lambda_i = k_0x_i + \lambda_{i+1}F \qquad (23)$$

$$u_{1i} = -\lambda_{i+1}G_1k_1^{-1} \qquad (24)$$

$$u_{2i} = -\lambda_{i+1}G_2k_2^{-1} \qquad (25)$$

$$\lambda_N = q(x_N - x_{des}) \qquad (26)$$

Using (24) and (25) in (22) we obtain:

$$x_{i+1} = Fx_i - \lambda_{i+1}G_1^2k_1^{-1} - \lambda_{i+1}G_2^2k_2^{-1} + v, i = \overline{0, n-1}$$

In (23) we do the following conversion:

$$F\lambda_{i+1} = -k_1x_i + \lambda_i$$

Based on these transformations, we obtain the following system of equations:

$$\begin{cases} x_{i+1} = Fx_i - \lambda_{i+1}G_1^2k_1^{-1} - \lambda_{i+1}G_2^2k_2^{-1} + v, i = \overline{0, n-1} \quad (27) \\ F\lambda_{i+1} = -k_1x_i + \lambda_i \quad (28) \end{cases}$$

Here we find:

$$\begin{cases} x_{i+1} + \lambda_{i+1}(G_1^2k_1^{-1} + G_2^2k_2^{-1}) = Fx_i + v, i = \overline{0, n-1} \quad (31) \\ F\lambda_{i+1} = -k_0x_i + \lambda_i \quad (32) \end{cases}$$

We write the final system in form of matrices:

$$\begin{bmatrix} E & G_1^2k_1^{-1} + G_2^2k_2^{-1} \\ 0 & F \end{bmatrix}\begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} = \begin{bmatrix} F & 0 \\ -k_0 & E \end{bmatrix}\begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix}.$$

From this we get x_{i+1} and λ_{i+1}:

$$\begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} = \begin{bmatrix} E & G_1^2k_1^{-1} + G_2^2k_2^{-1} \\ 0 & F \end{bmatrix}^{-1}\begin{bmatrix} F & 0 \\ -k_0 & E \end{bmatrix}\begin{bmatrix} x_i \\ \lambda_i \end{bmatrix}$$
$$+ \begin{bmatrix} E & G_1^2k_1^{-1} + G_2^2k_2^{-1} \\ 0 & F \end{bmatrix}^{-1}\begin{bmatrix} v \\ 0 \end{bmatrix} \qquad (33)$$

Then, from (33) we obtain:

$$\begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} = \begin{bmatrix} F + k_0 * (G_1^2k_1^{-1} + G_2^2k_2^{-1}) * F^{-1} & -(G_1^2k_1^{-1} + G_2^2k_2^{-1}) \\ -F^{-1}k_0 & F^{-1} \end{bmatrix}\begin{bmatrix} x_i \\ \lambda_i \end{bmatrix}$$
$$+ \begin{bmatrix} v \\ 0 \end{bmatrix} \qquad (34)$$

We introduce the following notation:

$$B = \begin{bmatrix} F + k_0 * (G_1^2 k_1^{-1} + G_2^2 k_2^{-1}) * F^{-1} & -(G_1^2 k_1^{-1} + G_2^2 k_2^{-1}) \\ -F^{-1} k_0 & F^{-1} \end{bmatrix}$$

Then, (34) can be written as such:

$$\begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} = B \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix} \tag{35}$$

Then:

$$\begin{bmatrix} x_{i+2} \\ \lambda_{i+2} \end{bmatrix} = B \begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix} = B^2 \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + B \begin{bmatrix} v \\ 0 \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix}$$

$$\begin{bmatrix} x_{i+3} \\ \lambda_{i+3} \end{bmatrix} = B \begin{bmatrix} x_{i+2} \\ \lambda_{i+2} \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix} = B^3 \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + (B^2 + B + B^0) \begin{bmatrix} v \\ 0 \end{bmatrix}$$

From here we can simply write:

$$\begin{bmatrix} x_{i+k} \\ \lambda_{i+k} \end{bmatrix} = B^k \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + (B^{k-1} + B^{k-2} + \cdots + B + B^0) \begin{bmatrix} v \\ 0 \end{bmatrix} \tag{36}$$

And so, (36) can be written in the following form:

$$\begin{bmatrix} x_N \\ \lambda_N \end{bmatrix} = B^N \begin{bmatrix} x_0 \\ \lambda_0 \end{bmatrix} + (B^{N-1} + B^{N-2} + \cdots + B + B^0) \begin{bmatrix} v \\ 0 \end{bmatrix} \tag{37}$$

We introduce the next notation:

$$B^N = \begin{bmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{bmatrix},$$

$$\begin{bmatrix} f_1 \\ f_2 \end{bmatrix} = (B^{N-1} + B^{N-2} + \cdots + B + B^0) \begin{bmatrix} v \\ 0 \end{bmatrix} \tag{38}$$

So, (37) can be written as:

$$\begin{bmatrix} x_N \\ \lambda_N \end{bmatrix} = \begin{bmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{bmatrix} \begin{bmatrix} x_0 \\ \lambda_0 \end{bmatrix} + \begin{bmatrix} f_1 \\ f_2 \end{bmatrix} \tag{39}$$

From this we get:

$$\begin{cases} x_N = b_{11} x_0 + b_{12} \lambda_0 + f_1 \\ \lambda_N = b_{21} x_0 + b_{22} \lambda_0 + f_2 \end{cases} \tag{40}$$

If we add condition (26) here, we obtain the following system of equations:

$$\begin{cases} x_N = b_{11} x_0 + b_{12} \lambda_0 + f_1 & \text{(41)} \\ \lambda_N = b_{21} x_0 + b_{22} \lambda_0 + f_2 & \text{(42)} \\ \lambda_N = q(x_N - x_{des}) & \text{(43)} \end{cases}$$

The values of f_1 and f_2 are defined from (38). Considering (41) and (43) in (42) we get:

$$\lambda_0 = (b_{22} - qb_{12})^{-1}(x_0(qb_{11} - b_{21}) - (qf_1 - f_2) - qx_{des}) \quad (44)$$

x_0 is given to us as an initial condition, and λ_0 can be calculated from (53). Using this, we can calculate $\lambda_i, (i = \overline{0, n+1})$, $u_i, (i = \overline{0, n-1})$ and $x_i, (i = \overline{0, n})$. Values of $\lambda_i, (i = \overline{0, n+1})$ and $x_i, (i = \overline{0, n})$ can be calculated from expression (23), and $u_{ji}, (i = \overline{0, n-1}, j = \overline{1,2})$ from expression (24) and (25).

This approach was applied for Azerbaijan based on statistical data (Table 1):

Year	GDP (mln. US)	Industry Investment (mln. US)	Oil price (Azerilight US)
2006	20983.00	4931.15	65.9868
2007	33050.30	5431.21	73.38
2008	48852.50	5304.62	98.73
2009	44297.00	4015.69	62.87
2010	52909.30	5359.07	81.2997
2011	65951.60	6827.72	115.2
2012	69683.90	7694.27	114.673
2013	74164.40	9559.72	111.963
2014	75234.70	9739.29	101.4788
2015	52996.80	5450.75	54.2096
2016	37862.80	5619.13	46.45
2017	40867.90	6240.87	55.8
2018	47112.90	4998.35	73.6
2019	48174.20	5445.88	66.87441
2020	42607.20		43.32821

Table 1: The amount of GDP, investments in the industry of Azerbaijan and oil price (Azerilight) in 2006-2020.

On the base of statistic datas (Table 1) was defined F, G_1,G_2 and v by least square method [5]:

F= 0.999, G_1= 0.0000981, G_2= 0.004778, v=0

It's clear that from table 1 x_0 =20983.00. Problems (5)-(7) were developed in MATLAB Programm Packets with coefficients k0=-3000, k1=0.05, k2=3000000, q=100000, x_{des} = 400000. Following results were found (Table 2):

Table following on the next page

Year	GDP (mln. US)	Model Values of GDP (in million US)	Industry Investment model values	Oil price model values, US	λ_i
	x	x_{model}	u_1	u_2	
2006	20983.00	20983.00	4.65E+07	3.77E+01	-23714194154.45
2007	33050.30	25514.39	4.63E+07	3.76E+01	-23674920074.53
2008	48852.50	30031.07	4.62E+07	3.75E+01	-23621998897.31
2009	44297.00	34530.44	4.61E+07	3.74E+01	-23555461136.46
2010	52909.30	39009.90	4.59E+07	3.72E+01	-23475345154.74
2011	65951.60	43466.87	4.57E+07	3.71E+01	-23381697141.89
2012	69683.90	47898.79	4.54E+07	3.69E+01	-23274571088.01
2013	74164.40	52303.09	4.52E+07	3.67E+01	-23154028752.40
2014	75234.70	56677.24	4.49E+07	3.64E+01	-23020139627.99
2015	52996.80	61018.71	4.46E+07	3.62E+01	-22872980901.26
2016	37862.80	60922.42	4.42E+07	3.59E+01	-22712637407.75
2017	40867.90	65198.01	4.39E+07	3.56E+01	-22552422565.16
2018	47112.90	69436.01	4.35E+07	3.53E+01	-22379207745.31
2019	48174.20	73633.99	4.32E+07	3.50E+01	-22193092803.29
2020	42607.20	77789.51			-21994185030.25

Table 2: Model values of GDP, investment on industry and oil price in case of Azerbaijan

A visual comparison of the model GDP values and statistic GDP values to achieve the desired level is given in Figure 1.
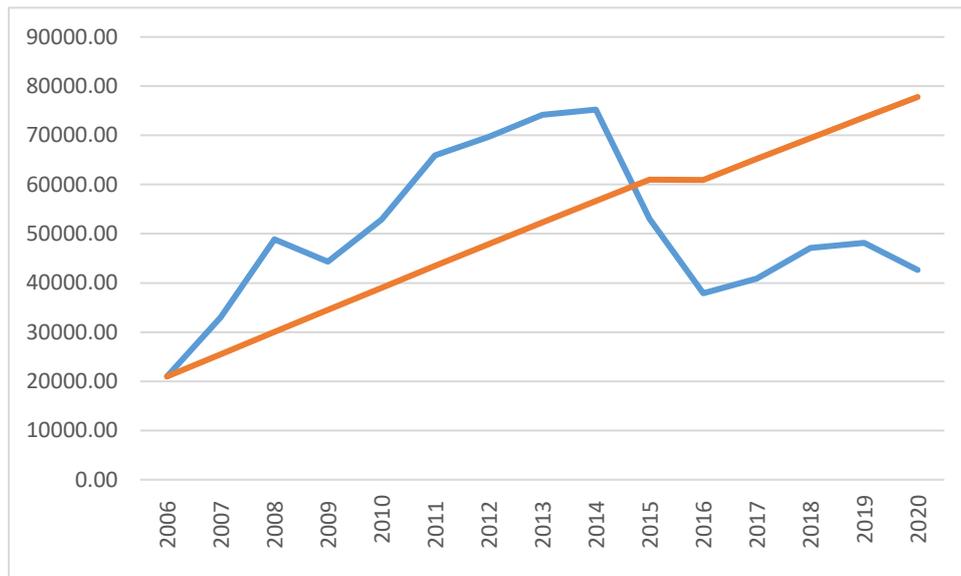
Figure 1: Comparison of model values (red line) and statistical values of GDP(blue line) in case of Azerbaijan

3. CONCLUSION

This approach provides an opportunity for strategic planning of GDP for the country. In this work, to achieve the desired level of GDP, the volume of investment and oil price are used as the independent variable in the dynamic model. But as indicated above, many other factors affect GDP. Such as, the main part of GDP consists of revenue from oil-gas industry in case of Azerbaijan. We chose two of them: the amount of investment and oil price. But even so, the dynamic model of the optimal GDP trajectory yielded good results (see Table 2 and Figure 1).

Further research will take into account the other most influential factors on GDP. In this case, a dynamic model of the optimal trajectory of GDP will give even more adequate results. Many parameters of the incoming model are approximate. Therefore, in the future, work can be developed with fluctuations in parameters - in other words, the study of stability with respect to the change in error (see [4]). Another direction for research is the application of pattern recognition methods with predetermined threshold numbers. In this case, the classification problem is obtained (see [9]).

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IMPROVING STATE SUPPORT FOR THE DEVELOPMENT OF THE COTTON SECTOR IN AZERBAIJAN

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ABSTRACT

After the privatization of agricultural lands, the development of cotton growing was neglected, cotton-related sectors declined, and competitiveness in this area almost completely fell down. The role of the cotton complex in the economy of our country, the wide opportunities in the value chain are explained in the economic literature. Taking into account the needs and requirements for agricultural products in the natural and climatic conditions of Azerbaijan, high-yield cotton production has been identified on up to 100,000 hectares. However, the stimulation of raw cotton production at the expense of the budget causes farmers to show interest in the field. In this regard, the article emphasizes the importance of stimulating the development of the cotton industry and increasing the competitiveness of products in the value chain in the domestic and foreign markets for the national economic interests of the country and the need to improve state support in this area. Improving state support can stimulate the development of the cotton sector, lay the foundation for the sustainable development of light industry, one of the most important sectors of the non-oil sector of the economy, and help increase the level of development. It should be noted that the problem of further development and competitiveness of the cotton complex, increasing the economic efficiency of the sector is complex and multifaceted, which requires a comprehensive study of organizational and economic issues of dynamic development of its raw material base, improvement of cross-sectoral economic bases and mechanisms, while also making it necessary to improve state support. In other words, the article analyzes and recommends to improve the support for the development of intersectoral relations, to stimulate the production of raw cotton not by budget funds, but by revenues from the production of value chains, and to improve state support in this direction. At the same time, the article aims to improve state support, improve the integrated cotton complex products and integration processes of technological processes in the country from raw cotton production, primary processing, fiber to the final product of the value chain and focus on some kind of protection of the primary source, i.e. raw cotton producer.
Keywords: *agriculture, cotton growing, state support, stimulation, income growth, and development*

1. INTRODUCTION

Relevant reforms are being carried out for the development of the agrarian sector, noting that the role of the agrarian sector in the economy of each country is of special importance, both in a market economy and in a planned economy. All over the world, agriculture is not only a sector that meets the needs of the population and industry in food and raw materials, but also a strategically important sector that ensures the country's food security and protects the country from economic pressures. From this point of view, the agrarian policy aimed at increasing the production of agricultural products is one of the foundations of the normal existence and progress of society. Therefore, supporting the development of the agricultural sector and production is the most important task of the state's economic policy. The implementation of agrarian reforms in Azerbaijan, the orientation of the country's economy in accordance with the conditions of a market economy has led to the emergence of new forms of economy and their regulatory framework. According to our research, although some progress has been made in the agricultural sector, the development of agriculture is below potential and the economic

efficiency is not so high. As a result, the interest of villagers, especially the younger generation, in agriculture is declining. One of the main reasons is the sharp difference in incomes between urban and rural areas, the existing socio-economic infrastructure does not meet modern requirements, the cause of low employment and so on. Apparently, there are many reasons, and farmers do not have the opportunity to overcome these difficulties (causes) on their own. In fact, the main causes do not depend on them. It should be noted that the leading role of state regulation in the development of rural infrastructure, research and design, education and training, information and consulting support, development of agricultural market infrastructure and market regulation, foreign trade should be unequivocally accepted. Because the development of this area is impossible without state support. That is, it makes investors and other entrepreneurs with capital power think first and foremost - to build a business faster and make a profit. In the second case - in the absence of indirect regulatory intervention by the state, monopolies in this area and violations of consumer rights are inevitable. Therefore, the system of state regulation that supports the prices and incomes of producers should stimulate efficient production, use the achievements of intensive technologies and be the motive for productive entrepreneurship and labor.

2. SIGNIFICANCE OF STATE REGULATION OF COTTON COMPLEX

One of the main reasons for the decline in cotton production in Azerbaijan was the liberalization of prices for all agricultural products in the first years of reform. Because the approach was wrong with the idea that prices are free and that they will be regulated by the ratio between supply and demand in the market. Independent economic activity in a market economy has shown that non-regulation of prices leads to the gradual collapse of production, increasing monopolies, weakening the agricultural sector, which is important for the country's economy, and ultimately reducing the interest of producers in this area. Due to the fact that state regulation in Azerbaijan was not fully formed in the 2000s, the areas in decline were viticulture, tobacco, tea and cotton. The low price offered for raw cotton in the market and the untimely payment of money to producers further reduced the interest in this field, and as a result, the area under raw cotton fell sharply. According to statistics, 295.5 thousand hectares of cotton were planted in the country in 1985, this figure decreased to 101.2 thousand hectares in 2000, 30.2 thousand hectares in 2010 and 18.7 thousand hectares in 2015. Theoretical research and the experience of developed countries through market economies show that the state's priority in regulating the national agrarian economy is to provide comprehensive assistance to the development of the agrarian sector, to reliably protect agricultural producers from threats from domestic and foreign sources (3. Page 235). In order to overcome the crisis in agriculture, subsidies have been introduced since 2016 in order to stimulate the production of relevant products that are considered strategic products at the expense of budget funds. Subsidies were provided for 0.1 manat per kg of raw cotton, 50 percent of the cost of fuel and motor oils (50 manat per hectare), 70 percent of the cost of mineral fertilizers and biohumus, 70 percent of the cost of pesticides. In accordance with paragraph 2.4 of the "Rules for subsidizing agricultural production" approved by the Decree of the President of the Republic of Azerbaijan No. 759 dated June 27, 2019, the Agrarian Subsidy Council approved the planting, yield and decided to determine seed ratios, seed and seedling quotas, and planting needs (4). According to the decision, with a base amount of 200 manat, the sowing coefficients for cotton fields in 2020 were set at 1.2 manat and the sowing subsidy at 220 manat. If a farmer produces 30 quintals of produce per hectare, the total amount of subsidy he will receive is 520 manat, which is higher than the previous subsidy. It is obvious that the state is trying to regulate the production of raw cotton by introducing and improving the subsidy mechanism. The target indicators of Section 5 of the "Strategic Roadmap for the production and processing of agricultural products in the Republic of Azerbaijan" envisage an increase in cotton production in 2020, as well as processing by at

least 4 times compared to 2015 (1. p. 49). This means 140.8 thousand tons of raw cotton, and due to the stimulus measures taken, 336.5 thousand tons of cotton were produced, which is 2.4 times more than the target. At the same time, according to the results expected from the implementation of the "State Program for the Development of Cotton in the Republic of Azerbaijan for 2017-2022", the goal is to increase raw cotton production to 500,000 tons in 2022 (2). However, it has been determined that it is economically viable to plant cotton on up to 100,000 hectares. This means that 50 quintals of raw cotton per hectare must be collected to achieve the goal. As noted, in 2020, 336.5 thousand tons of cotton was produced. Productivity in the cotton-growing regions of Azerbaijan is given in Table 1.

Table 1: Productivity in cotton growing regions of Azerbaijan in 2015-2019

	2015	**2016**	**2017**	**2018**	**2019**
Across the country	**18.8**	**17.3**	**15.3**	**17.6**	**29.5**
Samukh	16.3	23.1	8.8	23.1	-
Goranboy region	7.0	17.9	13.9	18.3	23.5
Calilabad region	23.0	15.5	20.0	28.6	25.8
Beylaqan region	18.3	19.9	18.4	22.9	30.3
Agcabadi region	15.5	24.2	21.5	23.3	30.7
Bardə region	28.3	23.2	26.3	26.3	33.7
Neftchala region	11.5	12.8	8.2	14.4	31.6
Bilasuvar region	20.6	20.0	21.8	18.9	29.9
Salyan region	14.4	12.5	13.2	14.7	33.3
Yevlax city	34.7	26.0	15.8	21.2	26.4
Agdash region	8.1	11.6	12.3	11.8	-
Ujar region	20.2	5.9	9.4	7.2	19.3
Zardab region	1.0	10.8	13.0	15.5	23.2
Kurdamir region	4.6	11.6	12.4	13.4	23.1
Imishli region	25.0	21.5	9.7	13.6	26.3
Saatlı region	15.0	15.0	15.0	19.3	30.4
Sabirabad region	11.3	12.6	12.1	13.2	29.2
Hajiqabul region	-	15.2	8.3	9.0	14.4
Fuzuli region	4.5	10.3	10.4	10.6	20.4
Agdam region	19.8	21.4	20.6	18.8	28.1
Tartar region	16.2	22.5	27.0	24.8	34.8
Agsu region	-	9.4	11.2	7.6	9.9

Source: stat.gov.az State Statistics Committee

Analysis of statistics shows that productivity in Samukh, Goranboy, Zardab, Kurdamir, Agdash, Ujar, Hajigabul and Agsu regions is much lower than productivity in the country as a whole. In 2020, productivity increased by 33.6%, and the sown area was 100.3 hectares. Due to low economic efficiency, cotton planting was stopped in 2019 in Samukh and Agdash districts. At the same time, in 2019, in other regions with low productivity, the area under cotton accounted for 10% of the total sown area. In our previous research, we noted that productivity below 30 quintals in Azerbaijan is not economically viable. Taking into account that the cost per hectare is 850 manat, the income obtained with the new subsidy rule for 30 quintals of product is 1520 manat per hectare.

3. ECONOMIC IMPORTANCE OF RAW COTTON PRODUCTION

Although cotton growing was once one of the mainstays of the agrarian sector of the economy and the agro-industrial complex of the republic, in the current situation this position has fallen by almost three times. The interrelation of natural, climatic, organizational, technological and economic factors determines the complexity and diversity of conditions for the development of cotton growing. It should be noted that cotton yarn is one of the most valuable crops in agriculture. Many factors affect the world production and consumption of cotton fiber, namely: oil prices, which affect the cost of synthetic fibers; the state of the world economy, the policy pursued by this or that state. However, the leading indicators of price volatility are productivity or quality indicators that may decline due to weather or other conditions, which may result in failure. Worldwide, cotton production is used on an area of 25-35 million hectares. When examining the volume of cotton grown in the world, it should be noted that both the sown area and the cotton crop in the world tend to fluctuate. This fluctuation mainly varies according to supply and demand in the world market. In Azerbaijan, it has become a participant, albeit with a small share, by offering cotton fiber to the world market. It should be noted that although the main goal is to make cotton production a more important sector for Azerbaijan's domestic economy, it has not yet been fully achieved. Azerbaijan's cotton exports for 2017-2019 are given in Table 2.

Table 2: Azerbaijan's cotton exports for 2017-2019

	2017			2018			2019		
	Quantity, tons	Amount Min USA Dollars	The cost of a ton, USA Dollars	Quantity, tons	Amount Min USA dollars	The cost of a ton, USA Dollars	Quantity, tons	Amount Min USA dollars	The cost of a ton, USA dollars
Cotton fiber	22024.9	32555.7	1478.1	52512.1	79529.9	1514.5	86190.6	122365.6	1419.7
Cotton yarn	7028.6	15922.6	2265.4	9488.5	23667.8	2494.4	12803.3	30155.1	2355.3

Source: stat.gov.az State Statistics Committee

Analysis of statistical data shows that the export of cotton fiber in 2019 increased by 3.9 times compared to 2017 and by 64.1% compared to 2018. According to the State Customs Committee, the export of cotton fiber in 2020 amounted to 97578.15 tons, and the proceeds from the sale amounted to 131930.21 thousand US dollars, which is 7.8% more than the previous year. Calculations show that in 2019, 69814.3 tons of cotton yarn could be purchased from the cotton fiber produced, and according to current prices, the proceeds from its sale could amount to 164433.8 thousand US dollars. This means a 34.4% higher return on cotton fiber exports that year. Therefore, the development of production in the value chain, along with meeting domestic demand, and exports are more cost-effective. Therefore, state regulation should not only cover the production of raw cotton, but also the development of the cotton industry as a whole. The dynamics of production on the value chain in the cotton complex in Azerbaijan in 2018-2020 is given in Table 3.

Table following on the next page

Table 3: Production dynamics of the value chain in the cotton complex in Azerbaijan in 2018-2020

| | Unit of measurement | 2018 | 2019 | 2020 | in 2020 | |
					% Compared to 2018	% Compared to 2019
Cotton fields	min ha	132.5	100.1	100.3	75.7	100.2
Cotton picking	min ton	233.6	295.3	336.5	144.0	114.0
Cotton fiber production	min ton	61.0	85.0	78.5	128.7	92.4
Production of cotton yarn	min ton	24.7	34.8	46.7	189.1	134.2
Export of cotton fiber	min ton	52.5	86.2	97.6	156.2	113.2
Export of cotton yarn	min ton	9.5	12.8	9.0	94.7	70.3

Source: Fiber and yarn exports in 2020 were based on the data of the State Customs Committee, and other indicators were based on the data of the State Customs Committee.

According to statistics, cotton production increased by 44.0%, although the area under cotton decreased by 32.2 thousand hectares over the past three years. This is primarily due to the fact that appropriate steps have been taken to develop intensive cotton growing in Azerbaijan. That is, in addition to the use of more productive weavers, in addition to traditional cultivation, the experience of China and Turkey is used. For example, in Ujar region, cotton was planted on 10 hectares in accordance with Chinese technology. Drip irrigation system was also used here. The main feature of this technology is that, unlike traditional cultivation, it is possible to grow twice as much (200-220 thousand) plants per hectare, which means the production of 50-60 quintals per hectare for the average yield. However, the application of this technology in the country still does not seem realistic. In addition to cotton fiber, cotton is valued as a valuable product in the raw. Thus, after taking the fiber, it is partially used for planting and mainly used to obtain various products, especially oil. The obtained oils are used for food and technical purposes. Refined cottonseed oil has a very high nutritional quality and is almost equal to olive oil, so it is widely used in the canning industry. It is also used in the preparation of margarine, artificial oils, laundry and toilet soaps, industrial oils and drying oils. It is used to make glycerin, stearin and a number of other products. The remaining jam and the remaining food after the cottonseed oil is taken is a good concentrated feed for some pets. Gossypol produces polymers, varnishes, heat-resistant coatings, medicines, dyes and some other materials from the core of cotton seeds. Gossypol resin (resin), a waste product of the cottonseed industry, is very heat-resistant and can be used for the production of heat-resistant varnishes, and for the production of molds in castings. Can be used for hard road surfaces as a polymer additive derived from cotton resin used to produce highly durable products. Research shows that the production of raw cotton is not only used for cotton fiber and cotton yarn, but also to buy more products, which are always in demand. Therefore, the development of cotton production in the value chain is more cost-effective.

4. RESULT

Forms of state support for agriculture should create appropriate conditions for the organizational and economic activities of commodity producers, including the conditions of optimal use of credit and budget funds, because the fact that agricultural producers have small production areas and their profits are not enough to meet the needs of large-scale reproduction. Cotton growing is one of the export-oriented industries in the country. This product is mainly grown in the Aran economic region. Cotton fields are suitable for growing cotton due to the large number of sunny days in this economic region. At present, the development of cotton growing and subsidies from the budget increase the production of raw cotton, but is accompanied by a number of serious and unresolved problems that hinder the more progressive

and efficient development of the industry. Among these problems are the lack of use of innovative technologies by small cotton farms, which produce the bulk of raw cotton in the country, and difficulties in irrigation, which has led to low productivity in many farms. On the other hand, the cotton fiber is mainly exported from raw cotton, which indicates the weak development of the cotton complex in the value chain. The existing problems in the cotton industry, the implementation of cotton production in small areas hinder the development of industry and the cotton industry as a whole. For the development of the cotton complex, the development of local productive seed production, improvement of agricultural technology, strengthening the material and technical base, improvement of the lending mechanism, development of social infrastructure of raw cotton producers are priority areas for further development of cotton growing. Our research shows once again that the deepening of the production of raw cotton, i.e. the development of the value chain, is the main source of development of the cotton complex. However, there is no specific mechanism or concept in this direction. The development of local scientific technologies is a key condition in this direction. The development of local industrial-based scientific technologies increases the competitiveness of cotton production by stimulating its development along the value chain. As production deepens in the cotton complex and in return for providing state support to the processing industry, it is expedient to develop a concept for improving the mechanism to support raw cotton producers. We believe that the development of such a concept will not only provide the domestic market with cotton products, but also have a positive impact on increasing the range of export products.

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ANALYSIS OF FACTORS AFFECTING THE LEVEL OF TAX BURDEN AND TAX ENVIRONMENT IN REPUBLIC OF AZERBAIJAN

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ABSTRACT

The main purpose of the analysis is to study the fiscal mechanisms in the economy of Azerbaijan, their assessment and determination of the tax burden. The research was carried out based on several research methodologies including comparative analysis, systems approach, and logical generalization. In the course of the study, the dynamics of such fiscal indicators in the Republic of Azerbaijan as the tax burden, the coefficient of tax elasticity, the marginal tax burden were analyzed, and the factors influencing them were studied. As a result of the study, the fiscal indicators of Azerbaijan's economy for a specific period were assessed, and in this regard, relevant results were obtained. Limitation of the study is the need for more practical information. The practical significance of the research study lies in obtaining information on the level of fiscal indicators in the Republic of Azerbaijan and providing practical assistance in determining the optimal level of taxation.
Keywords: *Tax burden, Tax elasticity coefficient, Marginal burden, Taxation system, Gross domestic product, Corporate tax*

1. INTRODUCTION

Taxes, being a fiscal tool for the formation of the state budget, ensure the fulfillment of the obligations assumed by the state to finance the social-economic policy pursued in the country. In the implementation of fiscal policy, taxes have a significant impact on the growth rate and structure of GDP and the process of attracting investment to the economy. Using tax mechanisms, the state actively interferes in the individual consumption and solvent needs of the population, the level of economic development of the regions and various activities. Achieving an effective tax system, being one of the main conditions for economic stability, makes it necessary to identify favorable options in different situations. In this case, one of the main goals is to balance the interests of the state with taxpayers [4]. One of the main points of attention during the tax reforms implemented in the Republic of Azerbaijan in recent years is the measures taken to reduce the level of the tax burden. The main purpose of this article is to assess the impact of tax reforms carried out in the country, as well as fiscal multipliers on the level of the tax burden. In general, the factors affecting the level of taxation at the macroeconomic level can be combined into 4 groups: political, economic, legal and social. Political factors include the country's fiscal policy, which has a direct impact on the level of taxation. Economic factors are the reasons arising from the economic situation in the country, which affect the formation of the tax base for specific taxes. Legal factors can also be considered as legislative factors. This includes the formation of the legislative framework in the field of taxation. Social factors are reflected in the redistributive function of taxes [6].

2. ANALYSIS OF THE TAX BURDEN LEVEL IN THE REPUBLIC OF AZERBAIJAN AND THE FACTORS INFLUENCING IT

As it has been noted, the tax burden affects regional and sector development, business and investment decisions of individual entrepreneurs, including foreign investors and it plays an important role in tax decision-making, as well as in planning the tax policy of the state, determines the competitiveness of the tax system. From this point of view, the analysis of the tax burden level in the Republic of Azerbaijan and the factors affecting it is of great importance. The dynamics of the tax burden indicator in the Republic of Azerbaijan in 2016-2020 is reflected in Table 1.

Years	2016	2017	2018	2019	2020
GDP (mln. manats)	60425,20	70337,80	79797,30	81681,00	72432,2
Tax receipts (mln. manats)	7015,2	6971,7	7415,5	7672,6	7387,2
Customs receipts (mln. manats)	2291,7	2608,8	3253,1	4408,6	3938,2
Compulsory social benefits (mln. manats)	1950,2	2125	2362,3	2502,8	3504,5
Total receipts (mln. manats)	11257,1	11705,5	13030,9	14584,0	14829,9
Tax burden (in percent)	18,63	16,64	16,33	17,85	20,5

Table 1: Dynamics of the tax burden indicator in 2016-2020
(Source: Statistical indicators of Azerbaijan 2020. Calculations have been made by the author.)
Note: The rates of receipts to the social protection and unemployment protection funds provided in the relevant budgets have been taken) [13,14,15].

A glance at graph reveals, the level of the tax burden during the period under review ranged from 16.33% to 20.5%. The dynamics of change of this indicator during the analysis is shown in the graph below.
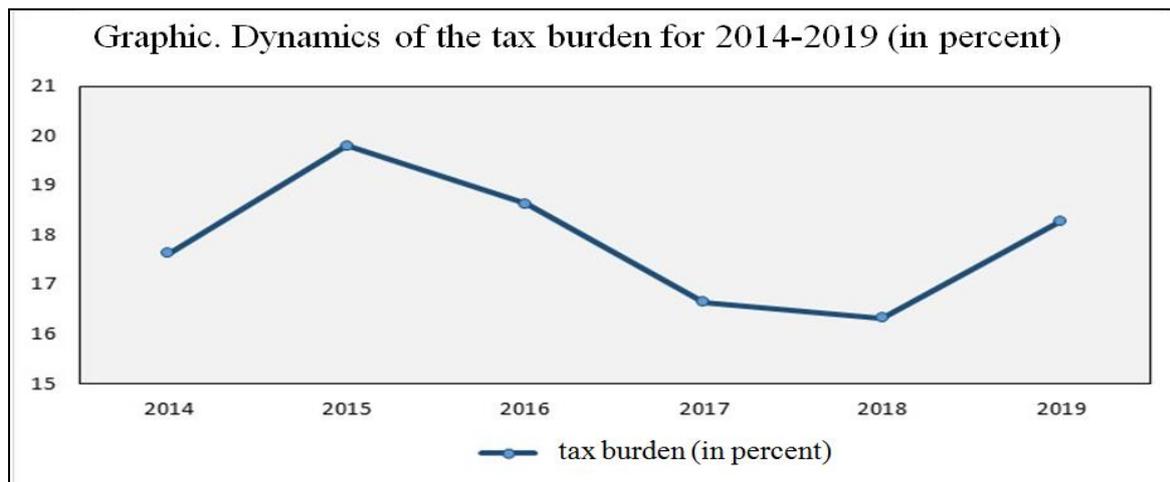
Figure 1: Dynamics of the tax burden for 2014-2019 (in percent) [6,7]
(Source: Compiled by the author)

In the absence of any increase in tax rates, the increase in the level of this indicator in 2020 can be explained by the expansion of the tax base as a result of reforms and the prevention of tax evasion. It should be noted that in recent years, the share of agricultural products in GDP is

more than 8%. However, if we consider that this area is exempt from other taxes except land tax, then the tax burden in the country will be 22.3 % in 2020. If we compare the level of the tax burden in the Republic of Azerbaijan with the level of the tax burden in some post-Soviet republics, we can conclude that it is quite low. Let's visualize this comparison in following diagram.
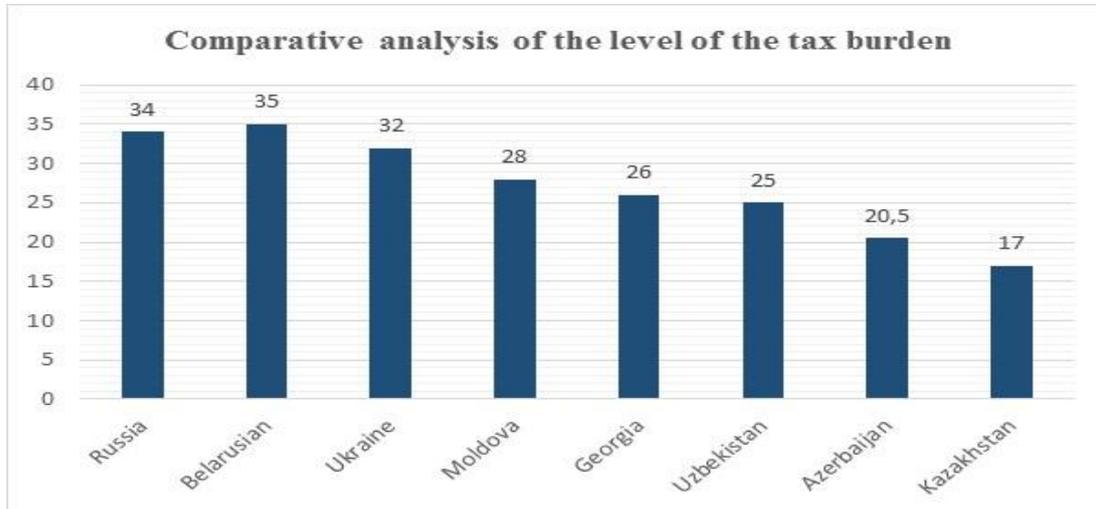
Figure 2: Comparative analysis on the level of the tax burden [6]

As depicted in the diagram, the level of tax burden in the Republic of Azerbaijan is higher than in Kazakhstan only among the countries compared. Tax rates also have a significant impact on the level of the tax burden [1]. Comparison of corporate income tax, personal income tax, value added tax and compulsory social benefits in the above-mentioned countries can be shown through Table 2.

Country	Korporate income tax	Value added tax	Personal income tax	Compulsory social benefits
Russia	20	20	13	30
Belarusian	18	20	13-16	35
Ukraine	18	20	18	22
Moldova	12	20	18	1,23-45,63
Georgia	15	18	20	6
Uzbekistan	15	15	12-20	15-25
Azerbaijan	20	18	14-25	25
Kazakhstan	20	12	10-20	10

Table 2: Comparative analysis of tax rates (%) [8, 9, 10].
(Source:https://www.osiaf.tj/uploads/files/Rahmatov_vebinar_Nalogovaya_nagruzka.pdf)

The rate of VAT in the Republic of Azerbaijan is only higher than the rate in Kazakhstan among countries mentioned above. The rate of corporate income tax is higher than in other countries, except Russia and Kazakhstan. The rate of personal income tax and compulsory social benefits can be considered average compared to the above-mentioned countries [8, 9, 10]. The low level of the tax burden in Azerbaijan can be explained by a number of factors, provided that the rates of basic taxes do not differ sharply. First, the use of tax potential is still not at the desired level, the scope of tax benefits is wide, the existence of special tax regimes, and so on.

3. ANALYSIS OF FACTORS AFFECTING THE TAX ENVIRONMENT IN AZERBAIJAN

Assessing the impact of changes in GDP on the level of tax revenues encourages the development of measures to identify gaps in the tax field and eliminate them. From this point of view, it is important to determine the degree of sensitivity of taxes to macroeconomic changes. The main indicator of this is the elasticity of taxes. This indicator is defined as follows

$$E_Y^X = \frac{\Delta X}{X} \bigg/ \frac{\Delta Y}{Y}$$

Here, E_y^x - x is the coefficient of elasticity of x according to y.

X - initial level of tax revenues.

ΔX-increase in tax revenues.

Y - the amount of the studied factor.

ΔY- an increase in the studied factor.

Years	2017	2018	2019	2020
GDP (mln. manat)	70337,8	79797,3	81681,0	72432,2
Changes in GDP	9912,6	9459,5	1883,7	9248,8
Tax receipts (mln. manat)	9580,5	10668,6	12081,2	11325,4
Change in tax revenues (mln. manat))	273,6	1088,1	1412,6	755,8
Tax elasticity coefficient	0,179	0,845	5,609	5,223

Table 3: The dynamics of changes in the tax elasticity coefficient in the Republic of Azerbaijan for 2017-2020 [13].
(Source: Statistical indicators of Azerbaijan 2020. Calculations were made by the author)

As it can be seen, there has been a significant increase in the price of the ratio over the last 4 years. Thus, while the price of this indicator was less than one in the previous 2 years, in 2020 it was 5,223. This means that a 1% change in GDP changed the tax revenue by 5.2%. In other words, the volume of production is very sensitive to the tax burden. This also leads to the conclusion that the level of use of tax potential will increase. One of the indicators of the impact of changes in GDP on the level of tax revenues is the marginal rate of taxes. At the macroeconomic level, the marginal tax burden is the amount of additional tax paid per unit of GDP growth and is defined as the percentage of the change in GDP to the change in tax revenue [3].

Years	2017	2018	2019	2020
Changes in GDP (mln. manat)	9912,6	9459,5	1883,7	9248,8
Changes in tax revenues (mln. manat)	273,6	1088,1	1412,6	755,8
Marginal tax rate (percent)	2,76	11,5	79,99	8,17

Table 4: The dynamics of changes in the marginal tax burden in the Republic of Azerbaijan for 2017-2020 [13].
(Source: Statistical indicators of Azerbaijan 2020. Calculations were made by the author)

As it can be observed, the marginal tax burden has increased sharply during the period under review. Thus, while in 2017 the additional increase in the tax burden against each additional increase in GDP was 2.76%, this figure was 11.5% in 2018, 79.99% in 2019 and 8,17% in 2020 accordingly. It can be concluded that identifying hidden sources of taxation, expanding the tax base, eliminating the shadow economy have yielded positive results in 2019. In 2020, the decrease in GDP as a result of pandemic has led to the decrease in level of marginal tax rate [11, 12]. It is known that tax changes have a multiplier effect.

Thus, changes in tax rates have a direct impact on the income of the population, the level of aggregate student and GDP. The tax multiplier allows to estimate the impact of these changes on GDP [2, 5]. The tax multiplier is a negative quantity because the increase in taxes reduces the level of aggregate income. At the same time, the multiplier effect of taxes is less than the multiplier effect of public procurement. This can be explained by the fact that while changes in public procurement have a direct impact on aggregate demand, changes in taxes have an indirect effect on it. The tax multiplier, defined as the ratio of the final propensity to consume to the final propensity to accumulate, shows how many units of change in total income as a result of 1 unit change in taxes. The dynamics of the tax multiplier in the Republic of Azerbaijan for 2015-2019 was as follows.

Years	2015	2016	2017	2018	2019
Income of the population (mln. manat)	41744,8	45395,1	49187,9	53688,6	56769,0
Expenditures of the population (mln. manat)	34963,4	39775	44498,4	48513,1	51927,4
Collection (mln. manat)	6781,4	5620,1	4689,5	5175,5	4841,6
Recent propensity to consume (in percent)	83,76	87,62	90,47	90,36	91,4
Last propensity to collect (in percent)	16,24	12,38	9,53	9,64	8,6
Tax multiplier	5,16	7,08	9,49	9,37	10,63

Table 5: Dynamics of tax multiplier change for 2015-2019 [13].
(Source: Statistical indicators of Azerbaijan 2020. Calculations were made by the author)

The dynamics of the tax multiplier shows that the multiplier effect increased during the period under review, i.e. the impact of taxes on GDP increased. In 2015, this figure was 5.16, whereas in 2019 it more than doubled to 10.63. The above confirms that the work done to identify non-tax sectors of the economy, the "shadow economy" and to raise taxes, is effective and bears fruit.

4. CONCLUSION
Determining the impact of the level of the tax burden on various aspects of the country's economy provides a basis for judging whether the level of taxation corresponds to economic realities.

1) As a result of the analysis of the dynamics of the tax burden, it was determined that in the last two years, its level increased by 3 percent, from 16.64 percent in 2017 to 20.5 percent in 2020.
2) At the same time, as a result of the research, it was determined that the marginal tax burden increased sharply, from 2.76 percent in 2017 to 79.99 percent in 2019. The decline in this indicator in 2020 can be explained by the decline in GDP due to the pandemic.
3) In the absence of sharp differences in the rates of main taxes, the low level of the tax burden in Azerbaijan can be explained by some factors, such as the low level of use of the tax potential, wide range of tax benefits, and the presence of special tax regimes.
4) The tax elasticity coefficient increased from 0.179 in 2017 to 5,609 in 2019, and 5.223 in 2020. This leads to the conclusion that the level of use of the tax potential for the analyzed period has increased. The decline in this indicator in 2020 compared to 2019 can be explained by the decline in GDP due to the pandemic.

5) The tax multiplier in 2015 was 5.16, but in 2019 it more than doubled to 10.63. This confirms that the work done to identify non-tax sectors of the economy, the "shadow economy" and to raise taxes, is effective and bears fruit.

6) After the adoption of the Tax Code, income tax, value added tax, income tax rates have been significantly reduced, there has been no change in the level of tax rates, significant discounts have been provided to certain categories of taxpayers, and significant measures have been taken to reduce the tax burden. These changes can be explained by several factors, such as expansion of the tax base, prevention of tax evasion, detection of hidden tax sources, reducing the size of the shadow economy, increasing control over taxpayers, achieving legalization of salary payments.

7) During the analyzed period, the multiplier effect of taxes increased and their sensitivity to changes in GDP increased, which once again confirms the effectiveness of tax reforms.

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GLOBAL ENERGY SECURITY: PROBLEMS AND PROSPECTS

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ABSTRACT

Entering the 21st century, the world community pays more and more attention to solving global problems of energy security, which determine not only the pace of socio-economic development, but also the survival humanity in the future. Although modern civilization is the result of the functioning and interaction of many areas of society (industrial and agricultural production, science, information technology, education, etc.), it is energy that is the basic and at the same time its most vulnerable link. The consequences of the unexpected "disappearance" of the energy industry will appear instantly, and the scale of the losses will be catastrophic. Oil in the 20th century became the "blood" of the world industry and disruptions in its supply repeatedly led to national and world economic crises. Over the past 40 years, the consumption of natural fuel resources (oil, gas and coal) has increased 2.5 times, and they make up almost 90% of the global energy balance. Various forecasts appeared for the development of world energy after a significant depletion of natural resources. The global character of problems of energy security necessitates the creation of the world control system of energy resource balance for the benefit of humanity. The article is devoted to those particular problems which allow presenting the modern panorama and contours of the future development of world energetic, and also to understand tasks facing the world community.
Keywords: *demand and consumption, energy security, global energy balance, risks and threats*

1. INTRODUCTION

The security problem is one of the central in the theory and practice of international relations and is located in field of view of researchers and statesmen. This problem is complex, its content and methods of support depend on the historical stage of development of society. Today, such types of security are distinguished as state (national), public, industrial, economic, energy, informational, personal. Energy security is part of the national security of the state. The problem of energy security arose at the beginning of the 20th century. with the development of technological progress and the wider use of oil, gas, coal. 1973 oil crisis when the Arab for political reasons, exporting countries imposed an embargo on oil supply (to European countries, USA, Canada and Japan,supporting Israel during the Doomsday War in its conflict with Syria and Egypt), laid the foundation for the study of energy as source of conflict. The current stage of development of world energy is characterized by the emergence of new global challenges and deepening old contradictions that reinforce threats to the reliable functioning of the world energy sphere. Problems of energy security of the XXI century. go beyond oil supplies and cover a wide range of issues. Today, the most consumed energy resources are hydrocarbons; electricity, nuclear fuel and renewable energy sources (RES) are also used. Amid growing competition for access to limited resources there is an increase in state control in the field of energy. Currently, the energy sector of many states regulated in accordance with energy strategies, formed under the influence of national characteristics, geopolitical goals, provision of own energy resources. As a result of this, there are a large number of diverse definitions of the concept of "energy security" presented in official documents of states and international

organizations, monographs and scientific articles. For a better understanding of the various approaches, some experts suggest considering energy security at three levels: energy security (1) of individual states, (2) groups of states and (3) global, or international, energy security. UK Department of Energy and Climate Change says energy security can be divided into immediate security at the physical level, price security and geopolitical security. It is generally accepted in the context of energy security to distinguish two groups of countries: countries - producers of energy resources (as a rule, these are their export countries) and consumer countries (importers of resources). You can add another group to them - transit countries (as a rule, they are also consumers), for which are primarily commercial and political from transit through their territory of oil and gas pipelines and energy networks. Most energy security research reflects the problem of consumers. For consumer countries, the main tasks of ensuring energy security are the diversification of supplies, the introduction of energy-saving technologies, the creation of strategic raw materials, development alternative energy sources. For most energy importers it is supply security that is the most important aspect and is most often discussed in documents and research. Security of supply and energy services depends on how well the infrastructure and communications chain is in place, consisting of energy production, its transportation, transformation, processing, distribution all the way, and finally use. Security threats to supplies may vary in different ways: depending on the type of negative impact, time frame and origin of the problem. They can become inadequate production facilities, technical or operational errors, weather events or hostile acts, such as terrorist attacks, blockades, wars. Besides the undetermined legal status of a geographical object may interfere with the exploitation of resources. Moreover, supply security is often analyzed using quantitative and qualitative methods. Indicators include, for example, import dependency ratios, diversity indices (including energy sources and suppliers market) and economic valuation of the impact (power outages), as well as price spikes. For example, D. Yergin believes that the modern energy security system is aimed only at overcoming problems in exporting countries in case of supply disruption. From point consumer perspective, supplying countries put pressure on the international energy market, using energy resources to satisfy their political and economic interests. The 1973 energy crisis is always cited as an example. Manufacturing countries (exporters), in turn, are interested in reliable and uninterrupted demand, market expansion sales of resources, as well as the maintenance and development of its fuel and energy complex. From their point of view, the key issues of energy security are the diversification of markets, conclusion of long-term sales contracts, maintenance energy infrastructure, attracting investments for the development of the industry, improving applied technologies, increasing export revenues. For them, the external aspect of energy security is demand security. For energy-exporting countries, security of demand can be as important as ensuring reliability and security of supply. In these countries, the economy and the state budget are highly dependent on revenues from energy exports. For example, the oil industry accounts for 42% Saudi Arabia's GDP, 87% of budget revenues and 90% of exports. For budget reasons, maintaining a stable income, it is of great interest to exporting countries, and price volatility is a major concern. However, conflicting opinions may arise between producers and consumers regarding the price level and the optimal rate of exploration. The International Energy Agency (IEA), which unites consumer countries, sees energy security as uninterrupted access to energy sources at an affordable price.The task of the Organization of Petroleum Exporting Countries (OPEC) is to maintaining the stability of oil markets to ensure regular deliveries of petroleum products to consumers and receipt stable income by producers. In turn, the Group World Bank defines energy security not only as the use of energy at affordable prices, but also its stable production. Unequal resource provision also affects the formation of various approaches to protection methods states in the energy field and very often causes conflicts over access to resources, while at the same time speaking an incentive cause of global interaction of all countries.

Consumers and energy suppliers, despite a number of disagreement, interested in cooperation and stability global energy market. At the beginning of the XXI century. energy the sphere is faced with new challenges - environmental degradation, increased risks of energy transportation, depletion of readily available sources, a sharp increase in hydrocarbon consumption in developing countries, the need for large investments in the development of new deposits, etc. Solution these issues require coordinated action by the entire world community. However, there are a number of factors that create difficulties for cooperation in the field of energy and the formation of a common system of international energy security.

2. ENERGY SECURITY RISK FACTORS

The main risk factors that negatively affect energy security should include: economic, political, technological and environmental risks, cyber attacks on the production, supply and transmission of energy systems.

2.1. Economic and political risk factors

International conflicts over access to limited resources can be attributed to the political aspects of energy. Current or potential conflicts over small islands and water areas, such as the South China Sea and the Arctic, are often associated with the existence of potentially valuable energy resources. In addition, it is often claimed that US military action in the Middle East, for example, in Iraq, dictated by the desire to control energy supply. There is also the point of view that US intervention does not so much provide for their own energy interests, but rather supports the idea of global leadership and guarantees the preservation of the universal interests of world capitalism as a whole. The economic importance of energy can help countries strengthen their geopolitical position. Some analysts say that Chinese investment is sometimes exchanged for political support for common political positions on the world stage. In addition, embargoes, sanctions or blockades against energy suppliers have been used from time to time (for example, against Iran and Iraq) to achieve political goals. One of the important aspects of the relationship between energy and security is the absence, in addition to Western Europe, of regional security systems, which leads to additional difficulties in building a cooperative model of cooperation between consumers and producers of energy resources.

2.2. Technological risk factors

The second area of security and reliability threats emanating from energy systems is based on the physical and technological properties of energy, leading to various natural / technical risks dangers and threats. Damage to hydroelectric dams, oil tankers, gas storages and nuclear power plants resulting from technical and operational errors can have devastating consequences. These facilities also serve as potential targets for terrorist groups. In addition, there is a risk of nuclear proliferation, as the process of enrichment of nuclear fuel is closely related with the potential to produce nuclear weapons. Nuclear waste can also be targeted by criminal groups (possibly for the purpose of illegal sale or as an object of blackmail) or by terrorists.

2.3. Environmental risks

Recently, security issues have often been discussed in relation to climate change. Burning fossil fuels is a major contributor to climate change. Climate policy measures to reduce fossil fuel use can also lead to the emergence of conflicts between states and new security threats. The tragic events that highlighted the relationship between ecology and energy have intensified this problem. Such events, which caused enormous damage to both the environment and energy, were: the accident at the Chernobyl nuclear power plant in 1986, the oil spill by the Exxon Valdez supertanker in Alaska in 1989 and in the Gulf of Mexico in April 2010, and the accident at the nuclear power plant " Fukushima-1 "as a result of the tsunami in 2011. Exacerbating

environmental concerns increasingly concern the international community and force states to consider the environmental aspect when developing national approaches to energy security. In the framework of this "ecological" direction, the concept of "green energy" appeared as an opportunity to preserve the environment and prevent climate change. This includes the use of renewable energy sources, the transition to natural gas as a less polluting type of fuel, and the introduction of energy-saving technologies. Cyber attacks on power supply facilities, production systems and oil and gas refining can also cause enormous environmental damage. Over the past decades, the digital revolution has changed the world so much that in cyberspace small hacker groups can wage war against entire states. Therefore, many countries have already developed the doctrines of digital warfare and are paying attention to the preparation of their cyber troops. In 2007, in the small town of Oak Ridge, Tennessee, USA, a unique experiment was conducted: experts from the National Security Agency (NSA) simulated in the "national laboratory" a blow to the Iranian nuclear program without missiles, combat aircraft or bunker bombs. Their weapon was the computer virus "Stuxnet", which increased the speed of centrifuges to enrich uranium until they collapsed. At the same time, no distinction is made between internal and external security, between civilian goals and the military, since not only the military, but also other life support facilities, primarily energy, can become a theater of military operations. It is obvious that the indicated risks and inconsistency of positions of participants in international energy relations pose a threat to the energy security of many countries of the world, and unilateral selfish actions can lead to the use of energy as a weapon.

3. COLLABORATION OPPORTUNITIES

Despite the differences in the approaches of different countries to ensure energy security due to national specifics, as well as various risk factors, there is a real need and an objective possibility of combining efforts the world community to develop a unified strategy for international energy security. To the general tasks of ensuring energy security, requiring cooperation and integration, include: joint participation in the extraction, processing and transportation of energy resources, technology exchange, investment in new projects. The external global aspect is related to overcoming common all the dangers that hinder the effective functioning of the global energy market and the equal access of countries to energy resources. This global aspect is the most vulnerable spot in the world power system. Uneven energy development in the world yet deepens the contradictions between developed and developing countries. However, the formation of such relationships, which are characterized by a balance of interests between all market participants, it is a complex political task requiring political will for its decision and willingness to share common risks. And although the world community today still cannot agree on coordination of their actions in the common energy market, sooner or later he will have to look for common ground for wide cooperation in this area, as the problems of ensuring energy security will become in the coming years even more urgent as the spectrum of threats expands. Currently, the international community has not developed a common understanding of the concept of "energy security", and in some cases the meanings that are invested in it are directly opposite to each other. Number of countries try to offer the widest possible approach, taking into account different interests, agree that at the moment energy security cannot be considered in isolation from the process of globalization. Thus, over the past two decades of research in energy security have evolved from classic studies on oil supplies for industrialized countries, before exploring the wider and more diverse problems of energy. Different approaches of states to addressing international energy security create additional difficulties in its provision. Further search is needed for a common framework for understanding. energy security and mutually acceptable strategies various actors of energy relations for cooperation in solving global problems in this area.

3.1. Global energy security

The problem of energy security has become especially acute in connection with the processes of globalization of the world economy, the negative impacts of energy systems on the environment, as well as the depletion of traditional energy resources. the planet. All these factors pose a threat to the sustainable development of civilization. The energy arsenal has a large set of primary natural energy sources. To prevent "energy" conflicts and ensure energy security of the world community in the interests of present and future generations the transition from energy independence of countries to energy is inevitable interdependence and cooperation. The fundamental provisions of international cooperation in the field of future global energy are as follows:

1) Reliability and transparency of oil and gas reserves data as a basis long-term forecast of their production volumes. In 2000, leading international organizations - Asia Pacific Center for Energy Research, EU Statistical Bureau, Latin American Energy Organization, International Energy Agency, OPEC and the UN Statistics Department - proposed to use a single international mechanism for collecting and standardizing data on world oil reserves. This program (since April 2003 it is officially called Joint Oil Data Initiative, JODI) provides the greatest transparency of information on what oil reserves the world community has.

2) Ensuring international access to world energy resources is the most important energy security problem. To solve it, it is planned to develop uniform international rules for the participation of oil corporations as in the development of oil and gas fields in different parts of the world, and in large transnational infrastructure projects. Expansion of interstate and intercontinental networks transporting oil, gas and electricity is paramount in creating a single global energy space.

3) Ensuring predictability of the international oil and gas market through expanding the practice of long-term contracts, developing a dialogue between consumers and energy producers to establish affordable prices.

4) The intensification of international cooperation in the energy sector is possible only with the approximation of national regulatory frameworks in areas of environmental management, environmental protection, energy conservation and energy efficiency.

5) Export diversification and maximum protection of exploited oil and gas fields, transportation networks and oil storage facilities from technological disasters and terrorist acts.

Recent decades have been characterized by the expansion of international cooperation in the oil and gas sector, which is an important factor in global energy security. In 1991, the International Energy Forum (IEF) was established. Once every 2 years, the IEF holds sessions at which multilateral discussions and consultations are held on the development of world energy, energy markets and energy security with the participation of more than 70 countries - major oil producers and consumers. An active role in the work of the MEF belongs to OPEC and the IEA, which allows balancing the interests of the world's largest groups of oil producers and consumers. So, in 2005, after the devastating hurricane Katrina, the IEA turned to OPEC with a recommendation to increase oil production, which was done. At the end of 2005, at the initiative of the Indian Minister of Oil and Gas, Mani Shankar Ayyar, a round table was convened in New Delhi with the participation of representatives energy departments of India, China, Russia, Japan, South Korea, Kazakhstan, Uzbekistan, Azerbaijan and Turkey, which discussed the problems of creating in the near future a single Asian oil and gas network based on the interdependence of countries - consumers and producers of hydrocarbons. The international cooperation of the leading countries of nuclear energy is expanding. In the near future, many countries are implementing programs for the construction of a new generation of

nuclear power plants; in the medium term, a global nuclear program will be formed to prevent the proliferation of nuclear weapons and preserve developing countries' access to nuclear technology. The development of the global nuclear industry will strengthen global energy security.

3.2. Providing humanity with energy in the long run

Ensuring the energy security of the world community in the interests of present and future generations is a prerequisite for the development of world energy. Energy rationalism is the most important component of the development of mankind in the XXI century. Due to energy saving in the middle of the century, it is forecasted to save 6 billion tons per year. t, which is equivalent to modern oil and gas production, and by 2100 - 18 billion t. tons, that is, more than the entire modern world energy balance - 14 billion tons. t. Energy conservation will save a significant amount of natural resources for future generations. In the period 2050–2100. repeated growth of the coal and nuclear industries will continue, and the importance of renewable energy sources will also increase. Energy production using oil and gas will remain at the level of 2050. New discoveries, especially in nuclear physics, will lead to gigantic changes in the energy sector, but their potential cannot be estimated even hypothetically. Given that the construction of new generations of reactors poses increasingly complex scientific and technical problems, it becomes clear that it will take many decades for their industrial implementation.

4. CONCLUSION

The most important elements of global energy security are the following:

- Diversification of energy sources, that is, the economy should not be excessively dependent on any one energy carrier, the monostructure of the energy balance is unacceptable.
- Ecological acceptability, that is, the development of energy should not be accompanied by an increase in its negative impact on the environment.
- The rational consumption of traditional hydrocarbon resources, that is, the use of fossil fuels in the energy sector, should not lead to its shortage for the chemical industry.
- The transition from simple supplies of raw materials to international cooperation in the field of energy processing, the exchange of latest technologies, a wide cooperation in the investment sphere, as well as in the development of modern energy saving standards.
- High rates of development of renewable energy sources will reduce the global economy's dependence on oil and gas supplies and minimize energy transportation costs.
- Intensification of international scientific research in all energy sectors.

Ensuring the energy security of the world community can be achieved only taking into account long-term benchmarks and long-term forecasts and should be based on the results of global monitoring of the planet's energy resources and their use. Further integration of states in solving scientific and technical problems will contribute to the successful implementation of innovative technologies. In many areas of energy, the creation and implementation of major programs will be required, similar to international developments in the creation of spacecraft or a fusion reactor. At the beginning of the XXI century. a single global energy space is being intensively formed - the guarantee of human energy security. For greater dynamism of this process in the coming years, it is necessary to develop a methodological, regulatory and organizational basis for world energy. The main task of the second stage is in 2015–2030. start implementation of projects within the framework of the unified international fuel and energy complex management program. At the third stage, on the basis of long-term public-state programs, the system "Energy - Economics - Nature - Society" should be developed, the basis of which is called to become "green" energy.

A similar global program of the XXI century can be created under the auspices of the UN with the wide participation of representatives of government, business, respected scientists and public organizations. In the XXI century. oil, gas and coal will remain the main sources of global energy. The high efficiency of these energy sources is of great importance for the sustainable development of mankind. At the same time, the global energy development strategy should take into account the prospects of using environmentally friendly energy sources and the latest technologies for their development, which will guarantee the energy security of our civilization. The world community must make a grandiose scientific and technological breakthrough in the development of the energy of the earth's interior, the ocean, the sun, space and the peaceful atom. Only then can we satisfy the growing demand for clean, plentiful, reliable and safe energy - the basis of a high standard of living, a developed economy and culture, international and national security. We are obliged to multiply this source of vitality and transfer it to the reliable hands of our descendants.

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TOURISM AS AN OPPORTUNITY FOR REHABILITATION OF ORIGINAL FAMILY CRAFTS (TRADITIONAL CRAFTS) IN CROATIA

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ABSTRACT
It is often pointed out that Croatia is a country rich in cultural and historical heritage, which is true, as is the fact that Croatian cultural heritage abounds in traditional crafts, but despite that fact, currently only 18 such crafts are registered in Croatia. From this fact it can be concluded that there is no adequate care or approach in the restoration, preservation and promotion of traditional crafts. On the other hand, tourism can be an excellent platform for the rehabilitation of original family crafts, ie traditional crafts, but care should be taken that one-time profit is not the only motivation and that the renewal of traditional crafts is approached in a systematic and organized manner, in accordance with guidelines for the concept of sustainable development. Namely, if the renewal of these activities is approached spontaneously and superficially, more harm than good is done, while, on the other hand, the renewal of traditional crafts can generate profit on several levels and can be a significant contribution not only to tourism but also to economy and culture. social communities and countries in general.
Keywords: traditional crafts, original family crafts, cultural tourism, tourism

1. INTRODUCTION
Traditional crafts are in many ways an important component of the cultural heritage of one (or more) nations, or a country, but they also present activities that, if not taken care of adequately, can quickly and easily slide into oblivion, pushed out of the scene because of the mass, industrial production and new technologies that enable faster, simpler and cheaper production. However, there is still a demand and need for traditional crafts and their products, and on numerous examples, in the world and in our country (some of which are listed in this presentation) it has been proven that excellent synergies can be achieved by traditional crafts and tourism. Here we are dealing with the questions of how this synergy can be achieved, how it is achieved and what are the problems that are most often encountered in this process. We will explain what exactly traditional crafts are and why it is necessary to rehabilitate them, also we will analyze the current situation in Croatia in terms of traditional crafts, and explain how traditional crafts fit into the tourist offer, study several examples of rehabilitation of traditional crafts (or attempts) from practice and present some real potentials for rehabilitation and connect the implementation of traditional crafts in tourism and contemporary tourism trends.

2. WHAT EXACTLY ARE TRADITIONAL CRAFTS AND WHY THEIR REHABILITATION IS NEEDED

The phrase "traditional craft" in everyday speech is mostly associated with some - usually extinct - art of making a particular object, so the discourse related to traditional crafts is slowly sliding into the realm of fairy-tale memories of some bygone times. Such a perception not only does not correspond to the real picture, but it also presents a stereotype that makes it difficult to adequately valorize and implement traditional crafts in modern economic and market structures. It is clear that industrial production, which enables faster, simpler, and, ultimately, cheaper production, has supplanted handicraft, manufacturing, wherever possible, but it is also a fact that traditional production often provides higher quality of the product itself and special, personalized approach which are also factors that increase the competitiveness of products, even (or especially) in today's global market. For example, one of the activities that is considered a traditional craft - handmade furniture - is practically completely marginalized today thanks to the industrial production of furniture. Thus, on the one hand, the customer is able to choose and order custom-made furniture at the convenience of his home with just a few mouse clicks and at very reasonable prices that will arrive at his home address in just a few days. This presents a really big advantage for the customer. But, on the other hand, there is a certain charm - or additional emotional satisfaction - in the approach in which the customer, for example, enters a small workshop in person, explains his idea to the craftsman, possibly shows him a sketch, and with that same craftsman he perfects that sketch, chooses materials, colors, shapes and, then, perhaps most attractively, participates in the making process itself. The final product, that particular item that the customer will one day bring to his home, provides a completely different experience than the item that was packaged to the customer's home address. The customer can also, when we talk about industrial production, personally go to the furniture store itself and choose and take home the item he wants on the spot. But whether the customer personally chooses the item in a physical store or online - the whole experience cannot be compared to the experience when the customer orders the production of a particular item from a master, a traditional craftsman. Although an item ordered or bought in a specialty store can be both nicer and cheaper, and even though the process from ordering to the finished product is much shorter in that case, the fact remains that making a piece of furniture with an old master is a special experience because of that extra emotional moment. Also, very often the quality of such a product exceeds a commercial, mass-produced piece of furniture (we are talking, of course, about products of the middle price category, not about designer furniture which is a separate category both in price and quality of workmanship). This example cannot and should not be applied to all traditional crafts, nor is the rule always applicable, but the point is to illustrate as clearly as possible the value that traditional crafts (still) have, and this can be summarized as follows: industrial product in most cases for the customer it is easier to purchase, with faster delivery and lower price, but the product ordered by the customer from a traditional craftsman has additional value, and often higher quality (although usually accompanied by a higher price) that the industrial product can not replace, not even simulated. Analogous to the comparison of e-mail and letters: e-mail is faster, cheaper (relatively free) and in every sense a more convenient way of written communication, but writing and sending a letter, and especially receiving it, is a special experience and e-mail, with all its advantages will never be able to evoke "this and that feeling" (of course, modern man will mostly use e-mail, letter maybe sometimes or even never, but there will always be individuals who, aware and eager for just "this and that experience", will reach for paper, pen, envelope and postage stamp). And it is precisely this particular "feeling", ie provoking the same, that is a new marketing trend, and even an imperative, as Marc Gobé suggests in his Ten Commandments of Emotional Branding (2001) in which he says that the time has passed when it was enough to satisfy customers only at the primary, functional level, and now it is not even enough to fulfill the functional and

aesthetic needs of the customer, but there is a completely new need and a completely new task for marketing experts, ie manufacturers - this need refers to the customer's desire to connect with a certain product (or service), so the producer must strive to create a special "experience" for the customer, to awaken "that certain" certain emotion, to offer something new, more personal, more intimate ... To have a "story". And traditional crafts, implemented in the tourist offer or on their own, certainly have this "story" that has a huge potential to influence the deepening of the emotional connection between the product and the customer, the tourist. So, it is inevitable that there is a need and that there is a demand for products that can offer traditional crafts - as in the example we gave, it is the need to order a piece of furniture from an old master (who inherited his craft from his ancestors, and the whole gives the story extra weight) as well as the need to sometimes send a letter or postcard instead of an email. Regardless of the more pragmatic, practical and comfortable ways of production, communication and living in general that the 21st century offers and enables (and in part imposes), the need for such products, which, in fact, as Gobé perfectly explained, are not just products but also certain "experiences" still very much exist, and as long as that need exists, traditional crafts make sense, and - although they are pushed to the margins of the market, ie supply and demand - they still have something to compete with, and these are primarily quality and that extra emotional aspect. Precisely because of this added value that industrial, mass production cannot replace or offer (but also due to the action of other factors), traditional crafts have recently attracted attention again, which, in the midst of the consumer-capitalist lifestyle, they have somewhat lost. Globalization brings great and numerous changes, and one of them is the growing importance of cultural heritage as a carrier of regional development and as a subject of interest not only for tourists but also for the entire community (Horjan, 2010). Therefore, developed countries are making more and more efforts to improve the preserved traditional crafts, and rehabilitate the extinct ones, and Croatia is doing the same, supporting the development and preservation of national, regional and local traditional crafts through various programs and incentives. A special legal act, the Ordinance on Traditional and Artistic Crafts (Official Gazette 112/2007), was created, and the Croatian Chamber of Trades and Crafts, in accordance with this Ordinance, assigns a special mark to traditional and artistic products and services; holders of this sign are provided with special treatment, ie various benefits with the aim of preserving, nurturing and recognizing the local traditional and artistic culture. According to the Ordinance on traditional or artistic crafts, "traditional crafts are crafts that require special knowledge of craftsmanship and skills in performing activities and which are performed with a predominant share of manual labor, which rely on patterns of production and work techniques, purpose and form traditional cultures, and in that sense they can symbolize local, regional or national identity "(Ordinance on traditional or artistic crafts, Official Gazette 112/2007). Furthermore, under traditional or artistic crafts "can be classified those crafts that are used in the process of making products or providing services and newer technologies, using more modern tools in some stages of production to make the job easier and faster, but provided that such means-aids do not devalue the aesthetic level and character of a traditional or artistic product or service "(Ordinance on traditional or artistic crafts, Official Gazette 112/2007). Also, according to the Ordinance, "products that have been produced in crafts for generations and are now used as souvenirs in the tourist offer of Croatian cultural heritage can also (...) be considered traditional or artistic crafts" (Ordinance on traditional and artistic crafts, Official Gazette 112/2007). In the Republic of Croatia, the following activities are classified as traditional crafts: cooperage, glassmaking, forging, locksmithing, turning, carving, restoration and handmade furniture, pottery, production and assembly of ceramic kilns, production of ceramic items, fur, gunsmithing - engraving, production of vessels, production of straw and wicker products, belt-making, repair of footwear, gingerbread making, weaving on a loom, processing and processing of wool, knitting, production of autochthonous souvenirs that

maintain the tradition of each region, watchmaking, goldsmithing, letter painting, sewing, musical instrument making, wig-making, hat-making, puppetry, bookbinding and other similar activities. In order for an activity to receive a certificate and a mark of traditional trade, it is necessary for it to meet certain criteria, as required by the Ordinance: "Certificate can be obtained only by active trades that have a registered activity in which the product is classified, product group, one or more services. submits an application for the status of traditional or artistic craft. A certificate of trade shall be issued to a craftsman who owns a trade for a product, group of products, one or more services or activities performed in a traditional or artistic manner. " As far as the mark itself is concerned, "traditional or artistic products may be marked with a sign in the form of a sticker or pendant with the indication: product of traditional or artistic craft. The number of the issued Product Certificate must be written on the mark. "(Ordinance on traditional or artistic crafts, Official Gazette 112/2007).

3. TRADITIONAL CRAFTS IN CROATIA

Croatia has a rich cultural and historical heritage, which is often emphasized and which is not just a phrase but a fact. Thus, the conclusion is imposed that Croatia has a rich heritage in terms of traditional crafts, ie traditional crafts and skills, which is somewhat true. Namely, according to the list of traditional crafts in the Register of Cultural Heritage of the Republic of Croatia, only 18 traditional crafts are registered in Croatia (we can only assume that there are many more, ie not all of them are registered).

R. BR.	NAME OF TRADITIONAL CRAFT	PLACE
1	Traditional craft of making Slavonian-Srijem cloth garments	Antin
2	Traditional blacksmithing and weaving Stjepan Legac	Berek
3	The art of making shingles to cover roofs	Delnice
4	Traditional craft for wool processing and making rolled family garments Čolakovac	Gradište
5	Traditional footwear craft Kruh Vuk	Ivanić-Grad
6	Traditional craft of making Slavonian-Srijem Šokac hats	Ivankovo
7	The art of making traditional children's toys from the area of Hrvatsko zagorje	Krapina
8	Traditional hand wheel pottery in Potravlje	Potravlje
9	Traditional fur trade Vlatko Gribl	Slatina
10	Traditional rope craft Antun Knez	Slatina
11	Traditional pottery of the island of Iž	Veli Iž
12	Gingerbread craft from the area of northwestern Croatia and Slavonia	More settlements
13	Traditional pottery in the area of northwestern Croatia	More settlements
14	The art of making Slavonian leather vests	More settlements
15	Bakery trade Trajković	Zagreb
16	The art of making and repairing stationery as part of a trade Peroklinika	Zagreb
17	The art of making a sixth umbrella in a traditional craft Cerovečki	Zagreb
18	The art of handmade and repairing watchmaking watches Lebarović, Zagreb	Zagreb

Table 1: List of traditional crafts in the Register of Cultural Heritage of the Republic of Croatia (Ministarstvo kulture Republike Hrvatske (2018.)

As can be seen in Table 1, and as we have already pointed out, a smaller number of traditional crafts are registered in the territory of the Republic of Croatia than in reality there are such crafts. For example, the making of carnival masks in the Kvarner area is not registered as a traditional craft, although this activity is certainly a traditional craft, ie cultural property, cultural heritage.

The fact that a certain traditional craft is not registered as such does not necessarily mean that it is not vital - it may even participate in tourism as part of the tourist offer, as a tourist attraction, but based on observations of the current situation in Croatia regarding traditional crafts, it is with considerable certainty, that the fact that certain traditional crafts are not registered as such often, if not most often, means that as such they are not recognized or implemented in the tourist offer, at least not in the way they could be, or in the way that their potential fully utilized. What exactly does this mean in practice? That despite the fact that such crafts in some way exist in the community, as a cultural asset, their real value is much greater than what they are currently represented, and their potential without an organized, systematic approach can not be used either fully or properly. For example, the making of carnival masks in Rijeka and Kvarner has its role in the context of carnival customs, but the fact that this activity is not registered separately, as a traditional craft, limits individuals and groups who make these masks - to begin with, they are not able to get institutional support. organizational, financial, etc., to the extent that they could have been registered as traditional trades. It is possible, and very likely (certainly to be hoped for) that there are many examples of successful maintenance, renewal and promotion of traditional crafts in Croatia despite not being institutionalized, but, on the other hand, the fact remains that a large number of them - given that Croatia, as a country of rich cultural and historical heritage, has only 18 registered traditional crafts - precisely because of the lack of institutional, or at least some other type of organizational and financial support, is being forgotten.

4. WHY AND HOW TRADITIONAL CRAFTS ARE ATTRACTIVE IN THE CONTEXT OF TOURIST OFFER

Traditional crafts and their products do not have only useful and aesthetic value - they are, in fact, a reflection of a particular culture, bearers of customs and characteristics of the way of life of the inhabitants of a particular area, a specific reflection of a location, community, its past, value system, identity. This is where, as far as tourism is concerned, the greatest value of traditional crafts, especially those that directly reflect the customs of a particular region or city, such as, for example, making gingerbread hearts associated with Zagreb and its surroundings, or making carnival masks for Kvarner and others. For tourists, a visit to a traditional craft allows direct contact with the customs and identity of the destination they visit - it is a true, direct experience of the culture of the people, the community and as such is irreplaceable and invaluable. "Today's tourists also want to escape from the uniform offer they are exposed to, they are looking for authentic experiences and they want to get to know the locals in their everyday environment. This type of offer certainly includes a trip to the holder of intangible heritage, either to the workshops of craftsmen or to the houses of connoisseurs of certain traditional skills." (Horjan, 2010.). Research shows that cultural tourism is one of the fastest growing sectors. "There has always been a complex relationship between tourism and culture, ranging from open conflicts to peaceful coexistence or to cooperation as the most desirable but rare form of relationship. Today, they are connected everywhere in the world. Heritage, cultural and natural, is seen as an important driver of tourism and local development. Whether it is related visiting monuments of past periods, historical locations, nature parks, traditionally based open-air museums or the spaces of masters of intangible heritage, heritage is included in the tourist offer. Local communities have also become aware that their regional operational or strategic development plans must include culture and heritage as an important factor." (Horjan, 2010.). The importance of cultural heritage, and the traditional crafts is only to some extent recognized by the creators of the tourist offer in Croatia, so the traditional craft has become part of the tourist offer, or part of cultural tourism. However, to what extent this is happening in Croatia in - for tourism and for traditional crafts - the right direction, is a question to which, for the benefit of both, the answer should be known as soon as possible, but it requires complex

reflection and detailed analysis of the current situation on the ground. Because, although some traditional crafts are really revived for tourism and thanks to it, many crafts are only used for tourism purposes, which means that their rehabilitation is approached partially, superficially and exclusively for profit, so the result of such rehabilitation is actually just a simulation of a traditional craft. cosmetically brought to perfection, but essentially only at the level of a one-time seasonal show. Confirmation of this statement can be obtained all along the Croatian coast during the tourist season, at numerous stands that simulate traditional crafts and products (and customs, but this is a completely different topic) solely to attract tourists and quick, one-time earnings, so products that are offered are often low-quality copies of original products. Such an approach tarnishes the image of traditional crafts and products, as well as the image of national tourism in general. At the same time, since tourism is one of the most profitable branches of the economy in Croatia, significant financial resources can be invested in the renewal of traditional crafts because the final products will pay for themselves very quickly, and further earnings should be enough to set aside rehabilitation, either of the same or some other traditional craft. However, in order to truly develop a quality and sustainable strategy for the rehabilitation of traditional crafts in the context of tourism (as well as outside it), it is necessary to approach this issue more systematically and seriously. To begin with, it is necessary to conduct detailed field research of the current situation, as well as a potential analysis, and then also a demand analysis. As part of this paper, such extensive research cannot be conducted, so below we will analyze several examples of synergies between traditional crafts and tourism and rehabilitation of traditional crafts, in Croatia and in the world, and then highlight key good and bad practices to discuss and suggest what to do and how to it, regarding the issue of synergy between tourists and traditional crafts (and their renovation) in Croatia.

5. EXAMPLES AND POSSIBILITIES OF REHABILITATION OF TRADITIONAL CRAFTS IN CROATIA

5.1. Project Craftattract

This project was initiated by the institution Museums of Hrvatsko Zagorje and its partners. The full name of the project is Traditional crafts - new attractions for cultural tourism, so the very name summarizes the essence and goal of the project - rehabilitation of traditional crafts as new attractions in the field of cultural tourism. One of the authors of the project, Goranka Horjan, whose article has already been quoted in this presentation, states the following (Horjan, 2010.): "At a series of expert meetings, the need to preserve traditional culture, and more and more intangible heritage, has been discussed, and on that occasion the authenticity of expression and the need for knowledge transfer are most often discussed. In doing so, the most basic elements are often neglected, which are a prerequisite for these activities to be successful. We can summarize them in three essential aspects - context, space and time. Traditional culture decades ago or centuries ago was part of everyday life - one that can no longer exist today. It took place in a certain area at a certain time, and all manifestations of that culture had their meaning in the lives of the people of that time. Today's time in the same space has a different everyday life and it is understandable that we cannot look for identical forms of behavior and activities in it." Horjan very concisely and lucidly emphasizes the core of the problem - the fact that traditional crafts primarily belong to another time, but there is the potential of their implementation in modern times, not only in the context of tourist offer but also in the context of cultural content in general. Therefore, it is extremely important that the traditional culture is seen in the current context, these are the foundations of its preservation and promotion, and even rehabilitation. Precisely such questions, as well as questions about the transfer of knowledge, ie where and if there is enough motivation to transfer skills and knowledge related to traditional crafts to new generations, are problematized through the CRAFTATTRACT project. The project also received financial support from EU funds.

Research within this project found that "fewer and fewer people are able to do traditional work using their own hands. It's not just about crafts - even simple everyday tasks require a certain skill that today's generations don't have. This way they don't just lose traditional knowledge but also one's own inventiveness" (Horjan, 2010.).Putem ovog projekta, mladima su tradicijski zanati predstavljeni na neposredan i atraktivan način – izvan učionica i drugih formalnih okruženja te u izravno kontaktu s majstorima. Takav pristup pokazao je da kod mladih ljudi itekako postoji potreba za razvijanjem vlastitih vještina, a u kontekstu obnove tradicijskih obrta (Horjan, 2010.). The project achieved a number of goals, including the following: creating a compatible database of traditional crafts and skills, building new attractions in the border area and introducing new tourist destinations, presenting master workshops in museums, creating new tour routes through specific thematic programs. Also, a network of partnerships was created that included various stakeholders, especially those who are not particularly connected, such as, for example, traditional craftsmen of the older generation and students of secondary schools. (Horjan, 2010.). Thus, traditional crafts in this case served not only as a way to enrich the tourist offer, but also as a general way to enrich the cultural scene and the offer of the social community and outside the context of tourism. This is extremely important because it is the right way for traditional crafts to come back to life, not only during the tourist season or for tourism events, but in the long run, with the aim of reviving old skills and crafts in the community as stocks and tourism and cultural as well as economic offerings. This project laid a great foundation for the rehabilitation of traditional crafts in Croatia and showed that the renewal of traditional crafts greatly contributes to tourism and that there is a huge potential in this segment.

5.2. Adriatic dry stone walls

Drywall construction is a skill that has long been, compared to other traditional skills, perhaps the most neglected, and the revitalization has been experienced in recent years, thanks to the initiatives of individuals and associations. One of the associations that is most committed to the preservation, documentation and promotion of dry stone walls, as buildings and as construction skills, and as heritage, is the association Dragodid from the island of Vis. The association was founded in 2007, but the members of the association have been active since 2002, when the first international drywall workshop was held in the village of Dragodid near Komiža on Vis. Today, thanks to this association, such workshops are held throughout Croatia, and the association, in addition to organizing drywall construction workshops, also conducts drywall heritage research in cooperation. Thanks to such initiatives, this almost completely forgotten skill, which has left a huge impact - primarily as architecture - especially on our islands and along the coast, is revived, as a cultural heritage, and at the same time as a tourist attraction. Efforts to revitalize this exceptional skill have also led to the recent entry of drywall art into the UNESCO Representative List of the Intangible Heritage of Humanity in November 2018, in response to a joint international nomination of Cyprus, France, Greece, Croatia, Italy, Slovenia, Spain and Switzerland under the name *Art of dry stone walling*, *knowledge and techniques* (Udruga Dragodid, 2018.). Precisely because of its specificity, neglect and actuality, this presentation also analyzes drywall architecture - although it does not belong strictly to the category of traditional crafts (although it should by all parameters) - as a traditional skill that is currently being rehabilitated, and in the context of tourism. in this context), and it is precisely this approach that is key to the success of that rehabilitation itself. In addition to workshops and other described initiatives related to the preservation and promotion of drywall architecture, by the association Dragodid, and activists from the Croatian drywall and geoinformation scene, in 2013 was launched and opened a public inventory of Croatian drywall heritage, at http://suhozid.giscloud.com/. "The list is open to any contribution that expands or deepens the picture of drywall phenomena and their spread along the eastern Adriatic coast and its

hinterland. We are interested in every wall, every building, every settlement that has kept the elements of construction in its environment with stone lace and lookout points from which we can experience it. We are also interested in other traces of human use of space, such as chapels, altars, stećak tombstones and other stone markers, wells, ponds, limestone remains and ancient roads." (Suhozid.hr, 2018.). Drywall architecture is especially preserved on Croatian islands, so, for example, only in the area around Vela Luka on the island of Korcula, according to estimates, from about 10,000 to 30,000 (and probably more) kilometers of drywall (Žuvela, 2008), the so-called. meja (mostly from the word "međa" - "border"), a kind of stone walls, built without any binder. If there are so many of them in that area alone, it is possible that there are up to 100,000 kilometers of them on the whole island. *Meje* were built by generations of island farmers, to protect the land from erosion, landslides, floods and drainage, but also to mark the boundaries between estates. This skill has been passed on informally, from generation to generation, for hundreds of years. And the skill itself has been brought to perfection so much that the exceptional durability of these facilities has been achieved - despite the fact that it is a construction without the use of binders, "dry". Besides borders, specific field shelters were built in the drywall technique, resembling round houses; specifically on Korčula, torets, bunje and vrtujci have been preserved. Vrtujci are specific to the western side of the island, the part that gravitates to Vela Luka, which is one of the areas that are richest in dry stone heritage (Juvanec, 2006.). Today, there are only a dozen carousels (Dragojević-Ćosović, 2006), and their appearance and form are particularly interesting, so, among other things, they are a tourist attraction. However, in this case, the institutions are not very interested in the restoration, preservation and promotion of drywall, which is not only the case here but throughout Croatia, so the revitalization and rehabilitation of drywall heritage in Vela Luka is the association Velavno stvaralastvo Vela Luka documentation, renovation and promotion of drywall, in the way that the above-mentioned association Dragodid does, and workshops on drywall construction are also planned. It is possible that the use of drywall for tourism purposes will ultimately motivate institutions to support such initiatives and rehabilitate the art of drywall construction. Dry stone walls in the area of Vela Luka municipality, as well as in the whole island of Korcula (and as elsewhere on the islands and the coast of Dalmatia) are proof of great perseverance and exceptional construction skills and as such are a unique example of Croatian traditional architecture and vernacular architecture so they deserve support, even if the reason for that is the enrichment of the tourist offer.

5.3. Wooden chests from Ivanec and surroundings

Making wooden chests, an art for which the Ivanec region was once known before the Second World War, is today one of those traditional crafts that has completely disappeared. There are, however, initiatives that could result in the relaunch of this tradition. From 2008 to 2010, a research called Wooden Chest - the forgotten treasure of the Ivanec region lasted in order to try to revitalize this old art for which the Ivanec region was once known. The project was implemented by the research section of the student cooperative of the Ivan Kukuljević Sakcinski Elementary School in Ivanec, and the result of the research and the entire initiative is a reawakening of interest in this extinct traditional craft (Jagić, 2011.). Today on the pages of the Tourist Board of the City of Ivanec you can find the section Screening in which this traditional craft is described as an important part of the culture of the area, but apart from the meaning that screening had in the past of this area, no initiative related to the present or future of this art. Apart from the Škrinjara section, which was formed as part of the rehabilitation project of this traditional craft, it is not known whether the potential hidden in the tradition of making chests in Ivanec and its surroundings is recognized by some other organization, association, etc., but there is no doubt that this traditional craft has great potential, in economic and especially in tourism terms.

Firstly, it has a very good background - a long tradition is what is always valued and which strengthens confidence in product quality, and secondly, the market is certainly not saturated with handmade, high quality wooden chests that have their functional, ie useful, but also aesthetic value , and, ultimately, that special "emotional" value, "feeling" or "experience", which we mentioned at the beginning of the exhibition and which today's customers are looking for and appreciating. The mentioned research Wooden chest - forgotten treasure of Ivanec region, as part of the rehabilitation project, the art of making wooden chests in the area of Ivanec and its surroundings, resulted in many knowledge about this art which are documented and preserved and as such represent a very good basis for possible rehabilitation of this old Croatian craft. The production of wooden chests is especially related to Kraševac: "The production of wooden chests was practiced in several villages in the Ivanec region, and the most common was in the village of Kraševec, one of the most important centers of chesting in Croatia and the former Yugoslavia. The Kraševec chest center is also important because the production of wooden chests in this settlement lasted until the 1950s, which was not the case with any other chest center. (...) In Kraševac, the production of wooden chests lasted longer than in other areas, namely, the literature records the fact that back in 1947, the chest of drawers Ćiril Videc (Kraš) from Kraševac made a wooden chest for grain ... " (Jagić, 2011.). Given the above, it would be logical to continue the revitalization of this art in this area, for tourism purposes, but by no means only and exclusively for tourism purposes.

6. HOW TRADITIONAL CRAFTS FIT IN CONTEMPORARY TOURIST TRENDS

One of the most famous islands in the world, the Italian Murano, is known precisely for the art of making glass, and because of its traditional craft - handmade glass. The tradition of making glass on Murano (which is actually an archipelago - consists of seven islands connected by bridges) is over 700 years old, and Murano is a world-famous tourist destination because of this tradition. The exceptional tourist popularity of Murano can be attributed exclusively to the tradition of glassmaking, which is exactly where this destination built its brand, because - without a doubt - Murano is a brand, not only tourist, but also cultural. The way Murano has built its popularity on the basis of glass production, which is actually a traditional craft, is not the only such example - there are many destinations that have become a cultural and tourist brand thanks to the traditional art they nurture; for example, in the Middle East, destinations are known for making carpets, in the Far East for silk, in Venice for masks, etc. Undoubtedly, we can conclude that the role of traditional crafts in tourism is extremely large - if treated and used in the right way. Therefore, the synergy of traditional crafts and tourism can bring multiple benefits to both parties involved - traditional crafts will benefit by being rehabilitated, and tourism will benefit through the enrichment of the tourist offer. There are many examples of traditional crafts in Croatia that can be rehabilitated for tourism purposes, the problem arises if these crafts are renovated exclusively for tourism purposes because in that case there is a danger that the craft "lives" only a few months a year and its restoration is superficial. Another problem we noticed by observing the situation in Croatia is the fact that, despite the huge potential, very few examples of successful and adequate rehabilitation of traditional crafts for tourism can be singled out. Furthermore, and this is the third problem to be singled out, most examples of these positive practices exist thanks to individuals and associations - state institutions in this area do not offer a clear strategy or systematic, organizational and other support. Croatia is, as it is constantly pointed out - with good reason - a country of rich cultural and historical heritage: Istria is known for blacksmithing, bottle and basket weaving, woodworking and pottery, Lika also for pottery, Knin and surroundings for knitting and basketball, islands Brač and Korčula by stonemasonry, Ivanec, as we have already mentioned, by chest, the village of Vidovec, Zelovo and Hrvatsko zagorje by the traditional art of making wooden children's toys... But there are only 18 registered traditional crafts in Croatia.

It is obvious that the preservation and promotion of traditional crafts in Croatia is not carried out adequately, so it is necessary to first investigate why this is so and offer applicable solutions to the identified problems. One part of traditional crafts has been rehabilitated thanks to tourism, which is a good practice, but there is also a problem - a number of such projects are done superficially and seasonally, which is not an adequate way to restore and preserve traditional crafts. In any case, the potential is certainly much greater than realized. And how exactly can traditional crafts in Croatia fit into modern tourist trends? Recent research shows that modern tourists are looking for new forms of tourist offer, and these new forms are most often associated with the fact that modern tourists through travel and vacation want to compensate for the shortcomings or drawbacks of a modern lifestyle that is dynamic and fast. Therefore, the modern tourist pays more and more attention to his health, ecological products are increasingly in demand as well as destinations far from mass tourist gathering places. Modern tourism trends are based on safety, health care, ecology and culture, and more and more the latest tourism trends are turning to sustainable tourism, ie tourism that is harmonized with the concept of sustainable development (Vidak, Sindik, 2016.). Given all the above, we can conclude that traditional crafts fit perfectly into the model of modern tourism - because they offer an intimate experience of the culture of a region, because they comply with the guidelines of the concept of sustainable development, because they are "healthy" for the environment, because they offer additional emotional value . However, it is essential that traditional crafts, as a specific and delicate part of the cultural heritage, fit into the tourist offer in a way that will not damage them, that will not be superficial and that will not just use them. It is necessary to find a model according to which traditional crafts will both come to life and live throughout the year, not only during the season. In other words, tourism can be an excellent platform for the renewal of traditional crafts, but the question is whether there is a sufficiently developed awareness of the importance of preserving this part of our culture, and thus sufficiently developed awareness to "use" such cultural goods in the right way.

7. CONCLUSION

What exactly are traditional crafts and why do they need to be rehabilitated? According to the official definition, traditional crafts are crafts that require special knowledge of craftsmanship and skills in performing activities and which are performed with a predominant share of manual labor, and which rely on production patterns, purpose and form on patterns of tradition, and in that sense they can symbolize local, regional or national identity. Traditional crafts need to be rehabilitated not only because of their value to that local, regional or national identity, but also because they represent a special segment of supply that industrial production cannot offer, at least not entirely in that form. It is a special "feeling" and "experience" that the customer achieves with the product through traditional crafts. What is the current situation in Croatia in terms of traditional crafts? Although Croatia has a rich cultural and historical heritage and a rich heritage in terms of traditional crafts, only 18 traditional crafts are currently registered in the Register of Cultural Heritage of the Republic of Croatia - from all over Croatia. This disparity between the actual situation and registered trades leads us to the conclusion that the restoration, preservation and promotion of traditional crafts in Croatia is not approached in an adequate way (with some exceptions). On the other hand, the potential is huge and it is to be hoped that in terms of caring for traditional crafts, conditions will improve and the attention they deserve will be given to them. How do traditional crafts fit into the tourist offer? Traditional crafts in a special and direct way represent the identity of a particular destination and as such are irreplaceable as part of the tourist offer. There are many successful examples of building a brand of tourist destination on the basis of traditional crafts - Murano and glassmaking, Venetian masks, oriental rugs and more. n terms of potential and realized examples from practice in Croatia, there is the CRAFTATTRACT project, which laid a great

foundation for the rehabilitation of traditional crafts in Croatia and showed that the renewal of traditional crafts greatly contributes to tourism and that in this segment lies huge potential, then also great potential of Adriatic drywalls, ie drywall architecture, which was recently included on the UNESCO list of intangible heritage, then there is the chest of drawers of the Ivanec region... These are just some of the projects that are already realizing or can realize the huge potential they have. Finally, it is important to note that traditional crafts as part of the tourist offer fit perfectly into modern tourist trends (modern tourists pay more attention to their health, seeks organic products, appreciate the application of sustainable development, want to "feel" the destination in its essence, not only superficially, they are increasingly leaning towards destinations far from mass tourist gathering places, looking for a certain intimacy and personalized approach, a special "experience") all the more important to renew these trades, ie exclusively for tourist purposes because such projects must not be approached superficially and once - it is important that renewed traditional crafts live all year round, not just during the season, because only then can they realize their potential to the full, not only tourism but and the overall economy and culture of their country.

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THE INFLUENCE OF INVESTMENT POLICY ON THE SECTORS OF FUEL AND ENERGY SECTORS

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ABSTRACT

The fuel and energy system is a key sector of the economy, which largely determines the country's development opportunities in the economic, social, technological and political spheres. Therefore, the study of the relationship of energy with the economy is a traditional research topic. These studies are based on a systematic research methodology, which implies a comprehensive consideration of all aspects and areas of interaction between the economy and the fuel and energy industries with the development of methods, economic and mathematical models, and an information database for their regular use as part of a quantitative analysis of the status and prospects of fuel and energy system development. To study the impact of investment policy in the industries and individual large companies of fuel and energy systems on the development of the economy, a methodology and appropriate model-information tools have been developed aimed at assessing the national economic effect, including the intersectoral multiplicative effect of investments in fuel and energy sectors. The economic effect of investments in thermal power plants includes:

- *The interindustry multiplicative effect of the growth of investments in the sectors of thermal power plants is the increase in production in the sectors of the investment complex and along the chain of intersectoral relations in all other sectors of the economy, due to an increase in orders for investment goods and services.*
- *Intensification of the growth of investment and production in the economy due to a reduction in the price burden on industrial consumers of electricity.*

Keywords: *investment, state, fuel and energy system*

1. INTRODUCTION

The fuel and energy system is a key sector of the economy, largely determining the country's development opportunities in the economic, social, technological and political spheres. Therefore, the study of the relationship between energy and the economy is a traditional research topic. Considering the high importance of the products of the fuel and energy complex in foreign trade turnover, as well as the significant role of the complex in the formation of the budget, it can be concluded that the development of the domestic economy and the improvement of indicators of the electric power industry, oil and gas and coal sectors are in direct relationship. The close connection of the economy with the development of the fuel and energy complex requires a competent investment policy in this area, since an effective investment process will make it possible not only to increase the profitability of companies in the fuel and energy complex, but also to strengthen the financial stability of the state, which is especially important in the context of overcoming the consequences of the global financial and economic crisis.

2. METHODOLOGIES FOR RESEARCHING SYSTEMIC RELATIONSHIPS BETWEEN ENERGY AND THE ECONOMY

Research on the relationship between energy and the economy is based on the methodology of systems research, which implies a comprehensive accounting of all aspects and directions of interaction between the economy and the branches of the fuel and energy system with the

development of methods, economic and mathematical models, an information database for their regular use within the framework of quantitative analysis of the state and development prospects fuel and energy system. Currently, it is a synthesis of the following methodological and instrumental directions:

- model and information complex for predictive macroeconomic research;
- method, algorithm and software for multilinear programming, which allows using the prices of products, tax rates, levels of industry wages, etc. as the desired variables in optimization problems;
- software package for automated interactive development, modification and use of static and dynamic economic and mathematical models;
- methodology for forecasting calculations aimed at finding optimal compromise solutions;
- methodology, information database and calculation models for forecasting socio-economic development;
- a model for predictive studies of the macroeconomic consequences of various measures to limit greenhouse gas emissions in the country with a more detailed consideration of individual carbon-intensive industries.

Studies of the interrelationships of the branches of the fuel and energy system with the economy are aimed at:

- Coordination of the parameters of the state investment, price, tax and export policy in the energy sector with the dynamics of the development of the fuel and energy system, the possibilities of the state budget, energy-consuming industries and the population.
- Macroeconomic substantiation and assessment of the national economic consequences of strategic decisions in the development and reforming of domestic energy markets, taking into account the balance of interests of energy producers and consumers, based on the goals of economic development and the situation in external energy markets.
- Coordination of rational options for production and investment programs of energy industries and large companies with the forecast dynamics of macroeconomic indicators and forecasts of the development of related non-energy sectors of the economy.
- Research into the impact of investment policies in industries and individual large companies on economic development. Assessment of the national economic effect from investments by industries and large companies in the fuel and energy system. Determination of directions, rational volumes and systematic assessment of the effectiveness of import substitution in the economy.
- Analysis of possible incentive mechanisms and assessment of the consequences for the country's economy of various measures to contain greenhouse gas emissions in the country;
- As part of the formation of prospective assessments of demand for fuel and energy resources in the regions, the development of mutually agreed scenarios of socio-economic and industrial development, taking into account possible changes in the current trends in the sectoral structure of the economy.

3. ANALYSIS OF THE IMPACT OF INVESTMENT POLICY IN INDUSTRIES AND INDIVIDUAL LARGE COMPANIES OF THE FUEL AND ENERGY SYSTEM ON THE DEVELOPMENT OF THE ECONOMY

Despite the weak dependence of the financial stability and investment attractiveness of gas companies on the pace of reforming the domestic gas market revealed in the study, it was recommended not to postpone the creation of a competitive gas market sector due to the great uncertainty of future world fuel prices. To study the influence of investment policy in industries and individual large companies of the fuel and energy system on the development of the

economy, a methodology and corresponding model and information tools were developed aimed at assessing the national economic effect, including the inter sectoral multiplier effect from investments in the fuel and energy sectors. systems. The national economic effect of investments in the fuel and energy system includes:

- An increase in the net value of both the electric power industry as a whole and the nuclear power industry separately due to a decrease in the specific operating costs of the industry and an increase in production capacities - a direct effect.
- Growth in the export of hydrocarbons released due to changes in the structure of fuel supply to power plants with the accelerated development of the electric power industry
- Cross-sectoral multiplier effect from the growth of investments in the sectors of the fuel and energy system - the growth of production in the sectors of the investment complex and along the chain of inter-sectoral links in all other sectors of the economy, due to an increase in orders for investment goods and services.
- Changes in the dynamics of electricity prices during the modernization of the electric power industry
- Intensification of investment and production growth in the economy due to a decrease in the price burden on industrial consumers of electricity.

The inter sectoral investment multiplier of the sectors of the fuel and energy system can take on values greater than one only in the following cases:

- First, when, in order to meet the investment needs in the fuel and energy system, it is necessary to increase production in the economy to such an extent that this, in turn, will require an increase in production capacity in related industries and along the chain of inter-industry ties and other sectors of the economy.
- Second, when the overall growth of production in the country, due to the intensification of investment activities in the fuel and energy system, leads to an increase in the incomes of the population and the state, which, in turn, causes an increase in the final consumption of households and state institutions.

The development of the energy system is closely related to the development of the entire economic complex and social sphere of the region. As an element of socio-economic systems, the energy complex participates in a variety of forward and backward connections; affects the change in prices for products of all types, on the amount of profit and resources for investment in the industries of the production and non-production areas; determines the change in income and savings of the population, changes in the budgets of various levels; affects many other elements of these systems. The quality and availability of energy resources largely determine the structure and rates of economic, social and environmental development of the region. The development of the regional fuel and energy system is also determined by a number of internal and external factors, the most important of which are the development of energy-intensive industries, the processes of restructuring the economic complex, the availability of natural fuel and energy resources in the territory, the degree of participation in national programs for the development of energy industries. Regional energy development planning can be carried out only within the framework of regional socio-economic systems, which are complex and open. The complexity of the socio-economic system of the region is determined by the existence and mutual influence of social, economic, ecological subsystems, as well as governing influences of various levels. Analyzing the existing practice of territorial and sectoral forecasting and planning, we can note the insufficient development of theoretical and methodological approaches to the organization and methodological support of forecasting and planning. Frequent inconsistencies between plans and results, as well as their regular revision are quite common phenomena.

This state of affairs negatively affects the state of the energy market and the sustainability of the region's development. The consequences of lack of planning in the energy sector can be catastrophic, but more often they lead to economic losses and imbalances in development. There are losses for investors who finance the development of the energy sector in territories where energy consumption is not growing. Investors developing energy-consuming industries, which are not provided with the necessary volumes of energy resources, are losing. Consumers who do not receive high-quality energy supply services are losing. It is obvious that the solution to the issue of placing the elements of energy systems as objects of energy infrastructure cannot be solved in isolation from the general tasks of territorial planning for sustainable development of territories. This means that planning the development of energy systems in the territorial planning system includes, as a basic element, the solution of economic issues of the development of the territory in general and its energy complex in particular. As practice shows, in the processes of territorial planning, the entire available arsenal of methods of economic forecasting can be widely used. Economic forecasting and planning is a complex multi-stage iterative process that solves a wide range of problems using a variety of methods in combination. The development of computer science and computer technology creates an opportunity to expand the range and improve the forecasting methods used. Methods, mostly based on extrapolation of existing trends, cannot take into account many emerging factors and trends associated with the complexity and openness of socio-economic systems. A practical confirmation of the existence of these problems is the cardinal revision of various kinds of long-term forecasts at the national and regional levels, caused by the global financial crisis. In general, the post-industrial level of civilization development is characterized by the rapid development of technologies, knowledge, information, technological and organizational innovations become the main resources. Development properties such as instability, disorder, nonlinearity of interactions, etc., are of the greatest importance. The modern understanding of the development of complex systems (with the preservation of previous models, but for limited areas of application) involves the alternation of periods of relatively stable development with critical states, as a result of which qualitative changes and transition to new structures occur. Random fluctuations can be of decisive importance in choosing the further path of evolution of the system at such points. Predicting which of the possible alternatives of the system's development trajectory and in what form will be implemented is one of the main tasks of long-term forecasting. Modern approaches to predicting the future, taking into account these features, are described by a number of theories, which in a general sense are called the theory of self-organization. In our opinion, these concepts should be included in the theoretical basis for the development and implementation of forecasts for the development of the region. Synergetics, which studies the processes and principles of self-organization of complex systems, the emergence, maintenance, stability and decay of structures of a wide variety of nature, makes it possible to expand the scientific basis of forecasting and take into account the peculiarities of regional forecasting of the development of the energy complex. The use of a synergistic approach assumes that along with organizational processes in the system, the processes of self-organization and self-development, which are characterized by spontaneity, unexpectedness of formations and emerging structures, are extremely important. The development of such systems can generate sustainable and efficient new structures. The presence of crises is considered as an integral feature of the development of complex systems, and disequilibrium is a necessary condition for the emergence of a new organization, a new order, new systems, that is, development. Open systems in a state can self-organize if the prerequisites for this are already laid down in the system itself. In the process of self-organization, the system again comes to a stable state at a higher level of complexity.

4. CONCLUSIONS

In order to achieve sustainable development of the fuel and energy complex, activation and improvement of the efficiency of the investment process is acquiring a key role. The investment policy in the fuel and energy complex is intended to become a purposeful, scientifically grounded activity of government bodies to regulate investment processes through the attraction and effective use of investment resources in solving problems associated with the development of the fuel and energy complex. The most important area of state support in the field of energy conservation is the reimbursement of part of the cost of interest payments on loans and borrowings received from credit institutions for investment activities, implementation of investment projects in the field of energy conservation and energy efficiency. The most important factors in attracting investment in the sectors of the fuel and energy complex are institutional reforms aimed at developing a competitive environment, creating high-tech specialized companies, and reducing the tax burden on the processing industries. In the current conditions, in our opinion, one of the most important tasks of the state is to increase the investment attractiveness of the production of light oil products, since the production of dark oil products does not require a high degree of processing of hydrocarbons. Thus, the issue of institutional support of this direction as the most promising for the domestic fuel and energy complex and the most profitable for oil companies is becoming more and more urgent. Thus, in order to increase the investment attractiveness of the domestic fuel and energy complex, it is necessary to implement a number of institutional transformations aimed at increasing the level of energy conservation of the complex, developing competition, and the participation of foreign investors in the development of new deposits within the framework that does not contradict national interests. However, the most important measure to improve the efficiency of the complex as a whole is, in our opinion, tax reforms aimed at stimulating the refining of petroleum products in the country and reducing the share of crude oil exports. Refining petroleum products on their own territory will allow companies to increase profits, in the long term, will increase revenues to the country's budget, and will also give an impetus to the development of related complexes.

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THEORETICAL AND PRACTICAL PARTIES OF SUSTAINABLE LABOR MARKET REGULATION

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ABSTRACT
The article is devoted studying the features of state regulation of the labor market. The essence of the labor market has been identified and legal regulation of the labor market and trends of its development are taken into consideration. At the current stage of economic development, it is necessary to improve labor market regulation not only in the republic and regions, but also in economic sectors. To achieve a positive outcome, there is a need for an integrated approach to its improvement, based on a qualitatively new level of the regulatory system. Development of new technologies, cities' labor market is open to competition due to limited workplaces and low demands. The rural population has a lot of chances to find workplaces in the city's industry and service sectors. But how should this be adapted to the need for urban labor? Does the city provide a guarantee for adequate workplaces? These questions should be answered systematically. Regulation of the labor market should be based on application of modern technologies and timely adjustments to monitor the market situation. The main concepts and categories that reflect the processes in the employment area of the population are reflected in article in one or another way. In particular, factors and mechanisms affecting level of employment have been studied in this article.
Keywords: economy, labor, market, development, mechanism

1. INTRODUCTION

In modern conditions, the most effective methods of employment and labor market regulation are used. The state regulates investments in various sectors of the economy, controls the retraining of employees, monitoring of employment, implements various programs to reduce unemployment, pays unemployment benefits, and organizes public affairs. All measures taken to reduce unemployment or to help the unemployed people require a significant amount of additional costs, therefore, all countries can solve this problem in a timely and comprehensive manner. The methodological basis of the article is the works of economist scientists in domestic and foreign countries, the laws, programs, regulations and other normative legal acts in this field. In the research process, economic-statistical, monographic, targeted-program systematic approach, analysis and synthesis, summarization, induction, deduction and other methods were used.

2. REGULATION OF THE LABOR MARKET

The state regulation mechanism of the labor market can be considered as a sub-system of the economic system regulation as a whole. It's like a "balance mechanism". In regulating labor relations, all activities of the state should be transparent and open. The labor market is regulated by the state [1, p.118]:

- Programs aimed at creating works in the public sector;
- Programs enabling the preparation and retraining of the labor force;
- Programs promoting employment;
- Government programs for public unemployment insurance.

The state mechanism for regulating the labor market can be classified as follows. Administrative methods - are essential elements of economic activity. Economic methods affect labor market participants and stimulate them economically. Therefore, it is possible to provide effective employment by correcting the behaviors of the participants. The state directly affects the direction of the labor market. This is done through the following instruments: employment measures financed by the state, tax incentives for businesses that create jobs and etc. There are also organizational measures used by the state to create socio-economic conditions for all participants in the labor market. The tools used are: labor market forecasting, development of regional development plans, organization of employment services, etc. The legislation plays an important role in the state regulation of the labor market. State policy is traditionally based on legislation. Because legislation, norms, and rules are required for the efficient functioning of the market. The main place of labor law resources is the Constitution of the Republic of Azerbaijan dated November 12, 1995. This document, which has the highest legal power, is the basis of the legislation, so that, all laws and other acts of state bodies are adopted on its basis and in accordance with it. The Constitution defines the basic principles of the legal regulation of labor. In accordance with these principles, Article 35 (right to work), Article 36 (Right to Holiday), Article 37 (Right to Rest), Article 38 (Right to Social Security), Article 41 (Right to Health) and other articles of the Basic Law form the basic meaning and content of national labor legislation. After the Constitution, the Labor Code of the Republic of Azerbaijan takes a major place in the system of labor legislation. The Labor Code of the Republic of Azerbaijan consists of 13 sections, 48 chapters and 317 articles approved by the Law of the Republic of Azerbaijan dated February 1, 1999, and entered into force on July 1, 1999. The Labor Law of the Republic of Azerbaijan is a legislative law that combines the legal norms regulating labor relations on the territory of the Republic and makes it systematic. The first important works to regulate the labor market in Azerbaijan has been done by the National Leader Heydar Aliyev. Then President IlhamAliyev continued his policy in this direction. The main purpose of the policy of the socio-economic development pursued by the Azerbaijani President IlhamAliyev is the development of human capital, the expansion of employment opportunities and the expansion of entrepreneurship activities, the creation of an inclusive labor market and the provision of good jobs in Azerbaijan. Presidential Decree dated October 26, 2005, "Employment Strategy of Azerbaijan (2006-2015)" was successfully implemented. During the implementation of this strategy, the unemployment rate fell from 7.3% to 5% and rate fell poverty from 29.3% to 4.9%, the population's income increased 5.2 times, the minimum wage increased by 3.5 times, the average monthly nominal wage increased by 3.8 times. Complex measures have been taken to identify trends in the labor market, to increase employment and to create favorable conditions for general economic activity, to increase the competitiveness of the workforce and other key areas. Under the relevant decree of President, the Commission on the regulation and coordination of labor relations was established and this Commission approved the Action Plan to prevent non-formal employment in Azerbaijan. Insurance coverage was initiated with the introduction of the unemployment insurance system. It is expected that the new employment strategy will have an important role in the development of public policy and in the transition to intensive development. This document analyzes the current situation and trends in the labor market in detail and reflects the priorities for 2019-2030. Economic development is the promotion of micro, small and medium enterprises, regulatory framework and institutional development, labor market regulation, labor force development and improvement of labor standards [8]. Economic development envisages activities on support micro, small and medium enterprises, regulatory framework and institutional development of labor market regulation, development of labor force skills and improvement oflabor standards [8]. It is also important to know certain definitions when improving labor market regulation issues.

The conjuncture is a temporary situation that explains some of the signs of the current state of the labor market. An important element of the market mechanism is competition. Competition in the labor market allows with a large number of independent employers and workers to compete freely for prestigious work and skilled workers and allows to enter and to leave the market freely. It is important to maintain and support the citizens working on qualified education and restructuring, including the unemployed, state employment assistance agencies dealing with their social problems, personal services of enterprises and organizations, commercial and non-profit workers' exchange in the labor market infrastructure management. There are also some scientific classifications in this field [2, p.8].

3. HUMAN CAPITAL IN LABOR MARKET REGULATION

The development of the labor market is closely related to regional development. The labor market is an important element in the regional system and ensures the implementation of the targeted regional rehabilitation process.Within the regional system, it cooperates primarily with finance, credit, and material resources, investments, consumer goods, information and knowledge markets. This involves the development of regional employment programs covering the social protection of the population. Regional programs should be based on the concept of labor market regulation, job creation, and maintenance (as a whole, socio-economic and demographic development of the region, production and occupational potential, etc.). One of the most important issues in the regulation of the labor market is the serious consideration of human capital. The human factor is a complex, multifaceted, and very important concept. None of the areas such as general development of the society, understanding the laws, revealing the nature of secrets, creating complex robotic systems, conquering space, and so on cannot be achieved without human efforts. In modern conditions, intensification of production, an increase of its efficiency, strengthening of saving mode, and acceleration of socio-economic development are considered as the most important problem. Because of the efficient development of the economy, improving the living standards of the people, and the fulfillment of the tasks facing the society, first of all, depends on these factors. These factors include the capacity of natural resources, organization of production, level of production facilities, development of scientific and technical progress and etc. The extent to which these factors are used determines the dynamics of the development of each society. But the human factor triggers all these factors and is universal for all of them. Without human effort, it is impossible to mobilize any of these factors, to regulate them, and to lead the overall development of society [5, p.14]. The increased interest of the economy to human capital is due to the willingness to evaluate the effectiveness of the productive forces of the organization's employees. Human capital reflects the knowledge, skills, and abilities of people who are able to create personal, social and national well-being. This is a key concept for the successful development of any country in the post-industrial era. Human capital is the most valuable resource. Human capital, factories, equipment, and production resources are the basic principle of competition, economic growth, and efficiency. Human capital in organizations is a major source of substantial and sustainable competitiveness. The main acceleration of the evolution of mutual relations in the market economy is competition. The successful outcome is the presence of an enterprise that can continue to compete internally and internationally. The most important factor in the market economy is the ability to compete, and people determine the types of economic activity [3, p.7]. Therefore, proper execution of human capital assessment models directly affects the activities of enterprises. The role and place of a person in the process of social rehabilitation has been of great interest. Researchers have repeatedly sought to identify the characteristics of human capital, evaluated and characterized them qualitatively and quantitatively [4, p.8]. Proper implementation of human capital in the labor market necessitates labor contracts. Proper regulation of labor relations and continuous improvement of the legal and normative base in

this area plays a special role in the development of socio-economic relations. Thus, the proper management of labor relations on a legal basis reduces the social burden of the state and leads to increased productivity in enterprises and organizations. Considering all this, it can be assumed that general development, as well as personal characteristics on the fields, should be considered during labor relations regulation. The regulation of labor relations is directly related to the labor contract. The Labor Contract (The Employment) Agreement) is a written agreement between the employer and the employee. Based on this contract, the employer provides the employees with relevant work related to their employment functions, creates labor conditions in the Labor Code, other normative legal acts, collective agreement, pays their wage, and the employee undertakes to fulfill the contract of employment. Thus, a labor contract is an important document that reflects all aspects of the current business relationship between the employer and the employee. This document reflects the fundamental rights and fundamental responsibilities of the employee, as well as the fundamental rights and obligations of the employer and the responsibilities of the employer. Each employer must sign a written employment contract with at least two copies. Improvement of the employment contract system has special importance in improving labor market regulation mechanisms. In modern conditions of the labor market, the optimal ratio issues of development and demand is of particular importance. Traditionally, factors related to wage level were determined in the study and implementation of labor supply formation processes. Further development of labor market theory provides for the research and disclosure of the content of the proposal [6, p.1]. As a rule, the labor market supply implies the number of labor services that can be offered at a certain time on a certain salary market. [7, pp.114]. Trends and volatility trends can be adjusted depending on the qualitative and quantitative indicators of the proposal's topics. For example, the educational characteristics of the labor force may be the basis for adaptation of supply and demand in the labor market. Therefore, the most important methodological problem in labor market theory is to determine the factors affecting the supply potential in local, regional and national labor markets. Traditionally, classical economic theory determines that labor largely depends on the level of payment. [6, p.114]. The analysis of the situation in our national space related to the labor market improvement mechanism is also important. Azerbaijan's labor market is constantly developing and at the same time facing structural changes. Small and medium-sized enterprises have started to play a very important role in the economy, the workplaces created in this segment are constantly increasing. The growth of small and medium-sized enterprises is also a serious problem in terms of compliance with labor protection and security measures. In this respect, ILO partners provide technical assistance to develop and implement effective strategies that meet new challenges in this area.

4. CONCLUSION

Creating an effective system of state regulation of the labor market is one of the major social goals of reform. In the context of modern socio-economic development, the state policy in the labor market should, in order of priority, fulfill the following tasks:

1) the necessity for the ability to work for increasing labor productivity, improving the quality of products and services;
2) renewal of staff potential as a result of the employment of young people receiving modern vocational training;
3) Strengthening the role of professional labor correlation in increasing employee income and relevant changes in labor motivation (highly productive work - high wages);
4) considering the ability to work economically, prophylactic and proactive vocational educating, training and retraining of economically active citizens in order to provide competitiveness;
5) the inclusion of unemployed citizens in public and other temporary workplaces;

6) providing effective interactions to coordinate the ways in which employees, employers, and government agencies can solve employment problems$

7) the development of an effective mechanism for the expansion of social partnerships in the creation and protection of workplaces, targeted support for creation and protection of workplaces for non-competitive citizens;

8) Implies that, strengthen the integration of the employment policy program at the regional level, which includes the general plan of socio-economic development, focusing on labor market issues at the regional level. The purpose of this policy is to have an exceptional significance for adapting the HR policy of enterprises and organizations (if labor efficiency is one of the key priorities of the public employment policy). The policy aimed at the shaping of a well-functioning labor market is related to the need to eliminate deformations in the labor market and to the inevitable struggle against unemployment which requires a great investment in the maintenance and development of human capital.

9) As a result of the development of new technologies, cities' labor market is open to competition due to limited workplaces and low demands. The rural population has a lot of chances to find workplaces in the city's industry and service sectors.But how should this be adapted to the need for urban labor? Does the city provide a guarantee for adequate workplaces? These questions should be answered systematically.

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ANALYSIS OF THE IMPACT OF THE EXCHANGE RATE ON THE DYNAMICS OF ECONOMIC ACTIVITY

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ABSTRACT

The exchange rate is an important factor in the development of the national economy of any state. In addition to the financial market, this factor also affects other sectors of the economy, since money itself is the only measure of the value of goods and services. For many years, economic theory assumed a predominantly negative impact of an appreciation of the national currency on economic activity in the country, linking the strengthening of the currency with the switch of domestic consumption from domestic goods to cheaper imported ones (expenditure-switching effect), with a reduction in the production of tradable goods. with a decrease in the level of competitiveness in the domestic and foreign markets, with a fall in exports and, as a result, with a decrease in the current account balance of the balance of payments. However, over time, theoretical models have emerged that illustrate the positive effects of an appreciation of the exchange rate, expressed in the growth of aggregate output. Research results on the impact of changes in the exchange rate on economic activity are quite contradictory. The ambiguous nature of the relationship between the exchange rate and economic activity is explained by the presence of several channels of influence of exchange rate changes on economic activity. The main purpose of our research is to analyze the influence of the dynamics of the real exchange rate on economic activity. As shown in the literature review, the effect of the real exchange rate on economic activity can occur through several channels. First of all, it is necessary to single out two effects of the influence of the dynamics of the real exchange rate on economic growth along the demand channel. The first is the expenditure-switching effect of replacing demand for domestic goods with demand for imported goods while strengthening the national currency in real terms, which leads to a decrease in production and deterioration of competitiveness in the tradable sector. The second important effect is the income effect, which consists in a decrease in prices for imported goods with a subsequent increase in real incomes of the population, which can lead to an increase in demand, including for domestic goods, causing an expansion of their production. The study examines the impact of exchange rate dynamics on economic activity in Azerbaijan. To obtain estimates, the SVAR-X methodology and the most recent data on the Azerbaijani economy are used. In the work, VAR models are constructed using detrended series. The vector autoregressive model (abbreviated as VAR - Vector Autoregressive Model), firstly, is presented as a generalization of AR-models in the case of using multivariate time series. And secondly, the VAR model is a special case of a system consisting of simultaneous equations. The models of this specification are widely used in both structural analysis and forecasting due to their relative simplicity and consistency. But for the correct display of the dynamics of the actual time series data, VAR models often require large amounts of lags, which can lead to large errors in the obtained forecasts. The use of high-dimensional VAR models can potentially make the forecast quality more correct.

Thus, the VAR model describes a certain joint development of variables for a selected period of time, relying on a number of information contained in the studied time series themselves. Using structural vector autoregression with exogenous variables (VAR-X), we analyze the impact of exchange rate dynamics on economic activity. We have shown using the Time Variable Ratio Model (TVP-VAR) that the pass-through effect exhibits only small fluctuations over time. The main result of this work is the conclusion that the weakening of the real effective exchange rate affects economic activity either positively or neutrally. It should be noted that the described hypotheses characterize the effect of the real exchange rate on economic growth in the short term, while in the long term the scheme of influence can change dramatically. We are examining the effect of the dynamics of the real exchange rate on economic activity without taking into account many other factors; therefore, the results obtained should be interpreted with caution.

Keywords: *currency, exchange rate, Azerbaijan economy, vector autoregressive model, economic activity*

1. INTRODUCTION

In modern conditions of dependence on the globalization of the world economy, the rapid development of international financial and foreign exchange markets, the expansion of external economic relations, each country in the world pays great attention to the role and significance of the exchange rate of the national currency. The role of the exchange rate of the currency is of great importance due to the fact that it has an impact on the export sector of the economy, domestic production, services, investments, as well as the formation of prices for goods within the country. Moreover, in conditions of high competition in modern world markets, the exchange rate of the national currency has become one of the factors ensuring competitiveness between national economies. Analysis of the impact of the exchange rate on economic activity makes it possible to find out the sector of the economy that most of all affects the aggregation results, and relatively early to identify the possible effects of the exchange rate, to determine the right directions in economic policy. Such studies also make it possible to understand the consequences of possible changes in the structure of the economy in terms of the impact of the exchange rate. By analyzing the impact of the exchange rate on economic activity, we will have the opportunity to understand how the depreciation or appreciation of the national currency plays a decisive role for the sector of the economy. The mechanism of the relationship between the exchange rate and economic activity in the short term is rather complicated. On the one hand, it is generally accepted that a real weakening of the currency leads to an increase in the cost of imported goods relative to goods produced within the country, which in turn causes import substitution and an increase in economic activity. On the other hand, a number of empirical and theoretical works have shown that the exchange rate can have a negative and positive impact on the dynamics of economic activity. Thus, the exchange rate, depending on various factors, can have a different direction of influence on the dynamics of economic activity. The economic literature has identified many channels through which the choice of exchange rate regime can influence macroeconomic performance. It is believed that a floating exchange rate contributes to a faster adaptation of economies to macroeconomic shocks. At the same time, uncertainty about the future values of the exchange rate may have negative consequences for investment activity and, as a consequence, economic growth in general. The ambiguity of the influence of different exchange rate regimes on economic growth explains the existence of a whole array of works devoted to this issue. The purpose of this study is to identify the features of the impact of the exchange rate on the economy, including the relationship between the level of the exchange rate and the dynamics of economic activity.

2. LITERATURE SUMMARY

For a long period of time, the economic literature has been dominated by the view that there is a negative relationship between the exchange rate and economic activity. provided that the economy has free production resources. Otherwise, the result of the depreciation is the rise in prices. However, over time, theoretical models have emerged that illustrate the positive effects of an appreciation of the real exchange rate, expressed in the growth of aggregate output [Obstfeld M. 2001]. In terms of aggregate supply, appreciation tends to accelerate economic growth. Thus, the strengthening of the national currency means a decrease in the costs of producers who import a significant share of raw materials and components (input cost effect) [Idrisov G.I., 2010]. Increasing the availability of imported high-tech equipment helps to improve the structure of the economy, stimulating the development of innovative industries [Bahmani-Oskooee M., Kutan A. M., 2008. Delli Gatti D., 2007]. The change in the exchange rate is not always positive, it can lead to negative consequences in various spheres of the economy [Evdokimova, T.V. 2013]. The weakening and strengthening of the exchange rate have both positive and negative consequences for economic growth [Glazunov, S.N. 2015]. There is a significant statistical correlation between the real effective exchange rate and GDP (real income) [Chinn M.D., 2013]. The presence of a significant negative impact of exchange rate volatility on the increase in production [Abramova OV, Abramov A.V. 2013]. Devaluation of the national currency is a factor of advantages in international competition [Christopoulos D., Gente K., Leon-Ledesma M., 2010]. An overvalued exchange rate negatively affects the rate of economic growth. The degree of overvaluation (revaluation) of the real exchange rate can be estimated by the size of the deviation of its actual values from the values corresponding to the level of economic development of the country [Illarionov A., 2002]. A significant factor determining the strength of the impact of changes in the exchange rate on economic activity is the volume of external debt of the private sector. Given the high volume of foreign currency debt, its devaluation makes it difficult for the private sector to service debt due to a sharp increase in its value [Aghion P., Banerjee A. and Bacchetta P.A, 2000]. The success of import substitution, which is a source of a positive effect from the weakening of the national currency, depends on the structure of preferences of domestic consumers in relation to goods produced domestically and abroad [Kadochnikov P., Sinelnikov-Murylev S., Chetverikov S., 2003]. Monetary policy has a limited impact on long-term economic growth, determined primarily by the growth of total factor productivity. By itself, monetary policy is not capable of ensuring sustainable economic growth, it can only not hinder growth. [Dynnikova O., 2006]. The strengthening of the national currency leads to an increase in the market share of domestic producers with a low elasticity of demand for imported goods [Blank A., Gurvich E., Ulyukaev A. 2006]. A change in the exchange rate can affect the dynamics of the trade balance [Lerner, A., 1975]. The impact of volatility in the long run is difficult to detect. Since, statistically, the volumes of trade are constantly growing, while the exchange rate fluctuates in both directions, and in the short term, this risk is weakened by the presence in developed countries of a developed market of financial instruments that make it possible to level the exchange rate risk in foreign trade operations. (Klaassen, F. 2004]. The nature of the relationship between the real exchange rate and competitiveness parameters significantly depends on the level of economic development (Habib et al., 2017), the institutional environment (Rodrik, 2008), the exchange rate regime (Aghion et al., 2009), the degree of dependence of the economy on the export of raw materials. resources (Bahar, Santos, 2018]. The results of published studies on the impact of changes in the exchange rate on economic growth are quite contradictory. The ambiguous nature of the relationship between the exchange rate and economic growth is explained by the presence of several channels of influence of exchange rate changes on economic activity.

3. METHODOLOGY

A large number of empirical studies have been devoted to assessing the direction of the relationship between exchange rate changes and economic growth. A depreciation is a rise in prices. This point of view is based on the Mundell-Fleming model, which describes the open economy in terms of the IS-LM model. Under this model, the depreciation of the national currency increases the competitiveness of domestically produced goods, which leads to an increase in net exports. As a result, the equilibrium volume of the aggregate output in the short-term period increases. Regression analysis is used to assess the relationship between the exchange rate and economic growth. Some researchers estimate the regression dependence of the logarithm of real output on the logarithm of the real exchange rate, as well as on the logarithm of real output and the lagging rate. Most researchers, regardless of the time period under consideration or the methods used, conclude that the weakening of the national currency leads to an increase in total output. As shown in the literature review, the effect of the real exchange rate on economic activity can occur through several channels. First of all, it is necessary to single out two effects of the influence of the dynamics of the real exchange rate on economic growth along the demand channel. The first is the expenditure-switching effect of replacing demand for domestic goods with demand for imported goods while strengthening the national currency in real terms, which leads to a decrease in production and deterioration of competitiveness in the tradable sector. The second important effect is the income effect, which consists in a decrease in prices for imported goods with a subsequent increase in real incomes of the population, which can lead to an increase in demand, including for domestic goods, causing an expansion of their production. In addition to the effects of changes in the exchange rate on economic growth from the demand side, it is also possible to highlight the effects that affect through the supply channel. The central issue of our research is to identify the general direction of the influence of the exchange rate dynamics on economic activity in Azerbaijan. Isolation of any specific effect or identification of the strength of one of the effects within a group with unidirectional influence is not within the scope of this study. For this reason, the effects affecting the course in one direction are considered indistinguishable in this work and are considered together. It should be noted that the described hypotheses characterize the effect of the real exchange rate on economic growth in the short term, while in the long term the scheme of influence can change dramatically. It should be noted that the model used in this study does not describe the economy as a whole and is not a model of economic growth, since it is incomplete and does not take into account many observable and unobservable factors that can influence the dynamics of various macroeconomic indicators. The empirical part of the study includes an analysis of the statistical properties of the series, on the basis of which a suitable model is selected, then a similar procedure is performed to study the effect of the exchange rate on economic activity. Based on the data from 2010-2019, we tested the hypotheses about the impact of the exchange rate on economic activity. Smoothing of a number of exchange rates and GDP was carried out using the moving average method. The results of the analysis show that an increasing trend is observed in the dynamics of both series. To select an appropriate model specification, it is necessary to check the series for stationarity, taking into account the possible presence of a trend. To assess the impact of the exchange rate on economic activity (output), a second-order structural vector autoregressive model with exogenous variables (SVAR-X), identified using short-term constraints, was used as the main one. The real effective exchange rate (REER), money supply (M2), dynamics of the production index of basic industries (Q) and inflation (P) were used as endogenous variables. To check the robustness of the results, the model was evaluated against different specifications.

To check the stationarity of the series, two tests for the presence of a unit root (Augmented Dickey-Fuller, DFGLS) and one test for stationarity (KPSS - Kwiatkowski – Phillips -Schmidt – Shin test) are used. At the same time, using the Johansen procedure, the presence of cointegration between the series under consideration is checked.

4. ECONOMETRIC ASSESSMENT OF THE RELATIONSHIP BETWEEN THE EXCHANGE RATE AND GDP

The exchange rate is an important factor in the development of the national economy of any state. Economic theory does not give an unambiguous answer to the question of the impact of changes in the national currency exchange rate on certain macroeconomic indicators: both weakening and strengthening of the exchange rate have both positive and negative consequences for economic growth. Let us consider this issue from a practical point of view, for this we will compare the statistical data on the dynamics of the ruble exchange rate and the dynamics of the main indicator of economic growth - GDP. Based on the statistical data, let us construct a graph of the dynamics of the US dollar / manat exchange rate over the past ten years (figure 1).

Figure 1: Dynamics of the US dollar / manat exchange rate for 2010-2019
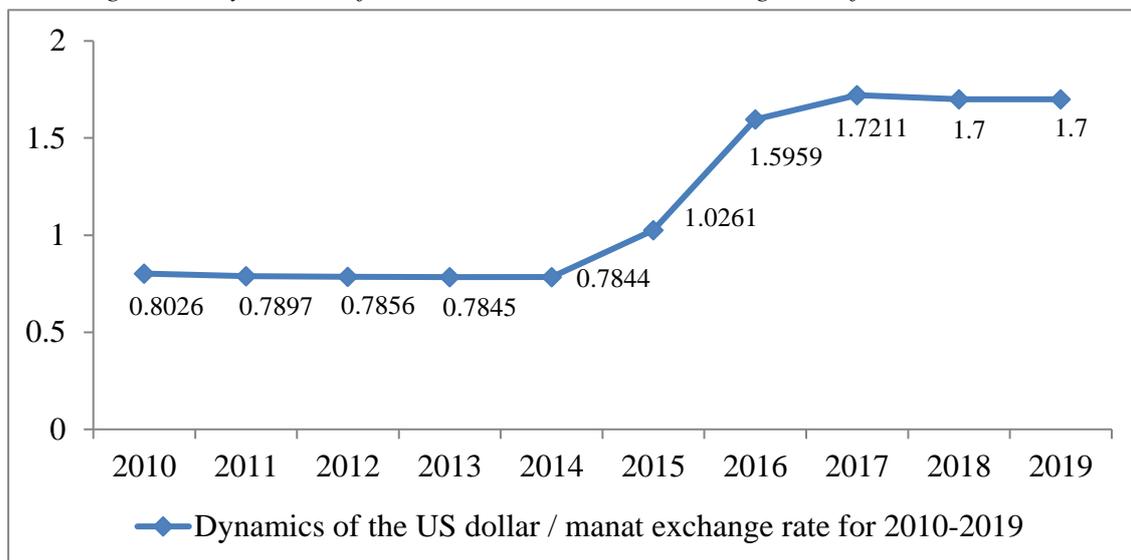
Source: https: //www.stat.gov.az/, The State Statistical Committee of the Republic of Azerbaijan

From figure 1 it can be concluded that the US dollar against the manat has a general upward trend from 2010 to 2019, that is, the manat against the US dollar has been constantly weakening over this period. There was a slight change in the general trend only in 2014. After this period, the manat began to grow against the US dollar. Next, we will build and consider a graphical representation of the dynamics of the euro exchange rate over the past ten years (figure. 2).

Figure following on the next page

Figure 2: Dynamics of the euro / manat exchange rate for 2010−2019

From figure 2 it can be concluded that the tendency of the change in the rate of the euro against the manat is similar to the tendency of the dynamics of the dollar against the manat.To analyze the growth of the Azerbaijani economy, let us consider the indicator of the gross domestic product in dynamics (figure. 3).

Figure 3: Dynamics of the GDP of the Republic of Azerbaijan for 2010-2019 at current prices, million manat
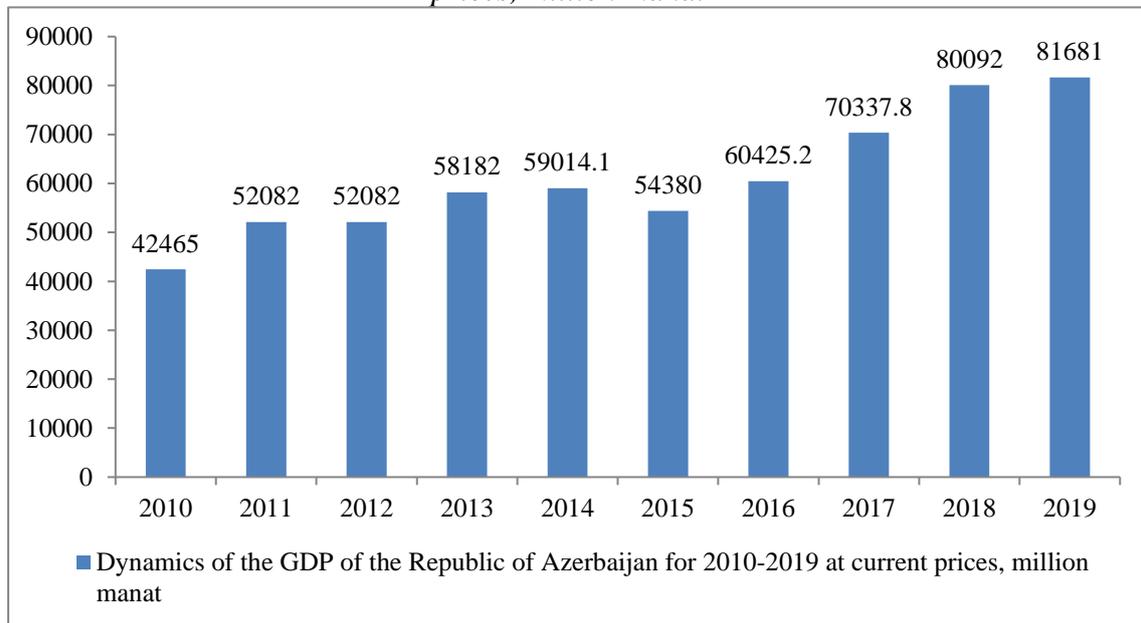
According to this indicator, it will be possible to determine the general state of the economy of Azerbaijan for the period under study. According to the graphical analysis of the dynamics of the indicators of the exchange rate of the main currencies against the manat and the GDP of Azerbaijan, it can be concluded that they are closely interrelated, since the growth trends are

similar to each other for all three indicators. It should be noted that with a gradual increase in the rate of the manat, the level of GDP increases. But this does not mean an absolute positive effect from the depreciation of the manat. There are both positive and negative changes. First of all, when constructing a model, it is required to carry out tests for stationarity and the presence of a unit root for the series of the real effective exchange rate, money supply, inflation and production index of the basic industries. Table 1 shows the results of two unit root tests (Augmented Dickey-Fuller, DFGLS) and one stationarity test (KPSS). These series are disaggregated in comparison with their quarterly counterparts, but there is no unambiguous answer about the correspondence of the order of integration in the same series, calculated at different intervals. Here, for example, seasonal unit roots can play a role, which can be smoothed by aggregation. This theoretical question is beyond the scope of this work, as a result of which the authors rely only on the test results when checking the series for the presence of a unit root and stationarity. Series analysis results are contradictory. The Dickey-Fuller test rejects the hypothesis that the series has a unit root in favor of the hypothesis that the trend is stationary only for the inflation series.

Table 1: Tests for the presence of a unit root and stationarity

Variables	DF	KPSS	DFGLS
GDR	0,0609*	< 1%	< 10%
REER	0,2106	< 5%	< 15%
M_2	0,8954	< 2,5%	< 10%
P	0,0017***	< 2,5%	< 5%
Q	0,0023***	< 2,5%	< 5%

Note: *** corresponds to significance at the 1% level, ** - at the 5% level, * - at the 10% level

The KPSS test for stationarity relative to the trend does not reject the main hypothesis only for a series of money supply in real terms. At the same time, the DFGLS test rejects the hypothesis of the presence of a unit root in all cases, which makes it possible to interpret these series as stationary relative to the trend. The number of lags in the specifications of the DFGLS and Dickey-Fuller test equations was selected based on the Akaike information criterion. On this set of series, the Dickey-Fuller test rejects the hypothesis of the presence of a unit root in about half of the cases. For the reason, the pronounced seasonality of the GDP series, the model included dummy variables that characterize this factor: D_i is a variable corresponding to the seasonal deviation of the i-th quarter. The extended Dickey-Fuller test was used to analyze the order of integration of variables in this and all subsequent models. All variables included in the final model in the studied interval turned out to be integrated in the first model was estimated in stationary differences. The final regression equation is shown below.

$$\Delta Y = -2,67 - 10,805 \cdot D_1 + 12,34 \cdot D_2 + 18,45 \cdot D_3 - 0,78 \cdot \Delta REER$$

$t-$stat $\quad$ -1,06 $\qquad$ *-3,21* $\qquad$ 2,11 $\qquad$ 6,64 $\qquad$ $-2,03$

$$R^2 = 0,896, \quad DW = 2,11$$

The coefficient of the variable $\Delta REER$ is significant and negative. Accordingly, we can conclude that an increase in the real exchange rate of the manat has a holding effect on GDP. Let us now estimate the relationship between the manat exchange rate and the dynamics of the production index of basic industries. Both series (real exchange rate and production index of the underlying industries) are first-order integrated.

Therefore, the equation was estimated in stationary differences. As a result, the model presented below was obtained.

$$\Delta Q = 3{,}04 - 0{,}84 \cdot \Delta REER - 23{,}06 \cdot D_1 + 9{,}21 \cdot D_2 - 3{,}17 \cdot D_3$$
$$t-\text{stat} \quad 3{,}02 \qquad -2{,}27 \qquad\qquad -11{,}88 \qquad 5{,}04 \qquad -4{,}55$$

$$R^2 = 0{,}943, \quad DW = 2{,}09$$

The coefficient of the variable ΔREER is significant and negative. Accordingly, we can conclude that an increase in the real exchange rate of the manat has a restraining effect on the GDR. The results of the previous section indicate the stationarity of the series under study around a linear trend. In this regard, the model should be evaluated in levels on detrended data. According to the Frisch-Vaux-Lovell theorem, the use of detrended series is equivalent - in the context of the estimates obtained - to control for the trend in the estimated equation, therefore the specification of the basic equation in the levels will look like this:

$$GDR_t = \beta_1 + \beta_2 \cdot trend_t + \beta_3 \cdot REER_t + \beta_4 \cdot M2_t + \beta_5 \cdot Q_t + \beta_6 \cdot P_t + \varepsilon_t$$

It should be noted that the trend is a specific predefined variable. In this regard, it is not entirely correct to interpret the results of evaluating the coefficients for other regressors as the intensity of the influence of each of them on the dependent variable, all other things being equal, since the trend cannot take the same values at different points in time. Therefore, relying on the Frisch - Vaux - Lovell theorem, one should interpret the estimates of the coefficients for other regressors (at the real exchange rate, money supply, and the production index of basic industries) as the intensity of the influence of their deviation from the trend on the deviation from the trend of the dependent variable. The result of evaluating this model is presented in table 2. Note that the results obtained using model evaluations on detrended data should be interpreted taking into account that the coefficients in this case describe the response to a deviation from the trend of a particular variable, and not to its absolute value. rise or fall. Thus, for example, a positive sign of the coefficient at the real rate may indicate that low values of the real rate (below the trend) will negatively affect the level of the dependent variable relative to its trend. It should be noted that such regression in levels does not take into account the possible endogeneity of the variables. The construction of the VAR model with the subsequent analysis of the impulse response functions and the decomposition of the error variance makes it possible not only to take into account the possible endogeneity, but also to check the already obtained result about the absence of a significant effect of the real effective exchange rate on GDP. Assuming the non-stationary nature of the series, it is necessary to check the possible presence of a cointegration relationship between them. The use of a large number of series to search for a cointegration ratio increases the dimension of the space of cointegration vectors and complicates the economic interpretation of the values obtained, therefore, we restrict ourselves to the search for a cointegration ratio between two and three series.

Table following on the next page

Table 2: Possible cointegration ratios

Variables	GDR	
	Possible cointegration relations	Cointegration relationships with trend
REER	0,908*** (0,0321)	0,739*** (0,0540)
M2	0,376*** (0,0631)	0,5696*** (0,0092)
P	0,604*** (0,0099)	0,468*** (0,0135)
Q	0,897*** (0,0123)	0,897*** (0,0123)
Trend	1,087*** (0,0966)	4,308*** (0,0203)
Constant	54,90*** (8,543)	96,09*** (6,234)
R-square	0,928	0,886

Note: Standard errors are given in parentheses.*** p<0,01, ** p<0,05, * p<0,1.

Based on data for 2010-2019. we assessed the impact of changes in the exchange rate on the dynamics of economic activity in Azerbaijan. In addition, the models of the relationship between the exchange rate and the production index of the basic sectors of the Azerbaijani economy were assessed. The methodology for constructing regression equations in all these cases was the same and corresponded to the above case of constructing an equation for the production index of basic industries. The results obtained show that the sensitivity of the index of production index of the basic sectors of the economy to the real exchange rate in absolute value is noticeably higher. The depreciation of the national currency has a stimulating effect on the real GDP of Azerbaijan. Based on the obtained numerical estimates of the parameters of the equations of the model, it can be argued that a change in the manat exchange rate has a short-term positive effect on GDP, while the strengthening of the national currency, on the contrary, restrains its growth. This result is useful from a practical point of view, since it allows the exchange rate to be used as one of the levers of macroeconomic policy.

5. DISCUSSION AND CONCLUSION
It should be noted that this study is interested in the short-term aspect of the interaction between the real exchange rate and economic activity. The short-term relationship between GDP and the real exchange rate obtained by us, strictly speaking, cannot be extended to a long-term period and does not mean that a weak manat in the long run contributes to the acceleration of economic growth. As a result of this analysis, several important results were obtained. First, the estimates indicate that the weakening of the exchange rate has a statistically significant positive effect on export-oriented industries, but the impact on the index of basic industries and on industries with a high share of imports remains insignificant. These findings are consistent with those of theoretical models. The depreciation of the exchange rate improves the competitiveness of domestic industries in foreign markets, therefore it is natural that in export-oriented industries there is a positive effect of currency depreciation. Second, the TVP-SVAR analysis revealed no significant changes in impulse response functions over time. This means that a simpler model, SVAR-X, may be sufficient for analysis. The impulse response functions obtained using the two approaches are also statistically indistinguishable. We have shown using the Time Variable Ratio Model (TVP-VAR) that the pass-through effect exhibits only small fluctuations over time.

The analysis shows that the weakening of the real effective exchange rate affects the main sectors of the Azerbaijani economy either positively or neutrally. It should be noted that the analysis presented by us does not take into account the reasons for the depreciation of the exchange rate, some of which can threaten financial stability, "switching" the economy to a completely different mode of functioning that has not been encountered in the historical period under study. For this reason, we should be very careful in interpreting our results, since they take into account only macroeconomic factors, and it does not follow from them that in the current economic situation, a fall in the exchange rate will create serious positive conditions for the development of the Azerbaijani economy.

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STATISTICAL ANALYSIS OF THE IMPACT OF AGING POPULATION ON ECONOMIC DEVELOPMENT

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ABSTRACT

Demographic problems are at the center of attention of the international organization today. The demographic problem has an economic dimension, and having mentioned that the downward trend in the working-age population can become a serious brake on economic growth. Indeed, demography is inextricably linked with the economy, and this connection is two-way. It is rather difficult to separate the processes of mutual influence due to the intertwining of many social, economic, political, demographic and other factors and processes. At the same time, less attention was paid to the study of the impact of demographic factors on the economy than the opposite. The demographic transition has been a significant cause of socio-economic change. Population aging is one of four global demographic megatrends, along with population growth, international migration and urbanization, that have a lasting impact on the development of the world. The importance of changing the age structure of the population and its consequences for socio-economic development was recognized in the Program of Action adopted by the International Conference on Population and Development in 1994. Subsequently, the Madrid International Plan of Action on Population Aging was adopted. The solution to the socio-economic problems associated with the aging of the population is provided for by the Sustainable Development Goals until 2030 and the tasks set to achieve them in terms of the commitment to "leave no one behind". The analysis shows that the world's population is aging, because every year the life expectancy in the world is increasing, and the birth rate is decreasing. As a result, the share of older people in the population is increasing, while the share of working-age people is decreasing. Population aging is a very important process, as it affects all aspects of society. A detailed analysis of the demographic situation in the country and in the world is needed to make decisions concerning the interests of the whole society: in the field of education, health care, the pension system, insurance and others. Therefore, the study of demographic aging is very relevant all over the world. According to the forecasts of the United Nations (UN), in the next 40 years, the proportion of people over 60 will almost double: Globally, the proportion of the population aged 65 and over has increased from 6.2% in 1990 to 9.3% in 2020. By 2030, it may increase to 11.7%, and by 2050 - up to 15.9%. In other words, if now every eleventh person on Earth has already crossed the age limit of 65, then in 2030 every eighth person will belong to this age group, and in 2050 - every sixth person. A few decades ago, it seemed that population aging, that is, an increase in the proportion of the elderly in the total population, was characteristic only of developed countries. However, it has now become clear that this demographic process has spread to almost the entire world, although its scale and speed are different. The purpose of the study is to study the impact of population aging on economic development, then more attention should be paid to such a factor of production as labor. Labor, from a demographic point of view, represents the working share of the economically active population. The paper analyzes the effect of population aging theoretically, using also Romer's endogenous growth model, but adding to this model the human capital variable, which is one of the catalysts for economic development. For further investigation, a descriptive analysis of all variables used is performed to remove insignificant observations or variables. To understand the impact of population aging on economic development, examine variables such as the proportion of people

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aged 65 and over and the old-age dependency ratio. The aging of the population is a process that affects both the economic side of society and the social one. The analysis shows that the relationship between population aging and economic development is negative. In other words, as the population ages, the rate of economic growth slows down. Regression analysis showed that population aging affects economic development non-linearly, despite the fact that many economists and demographers argue that the relationship between population aging and economic development is linear (positive or negative). The result of our study is an inverted "U-shaped" curve showing the relationship between the rate of GDP per capita growth (economic growth) and the proportion of people aged 65 and over (population aging). Thus, with an increase in the proportion of older people, economic growth first increases, but then gradually begins to decline. Thus, both economists claiming a positive relationship and authors holding a pessimistic view were right to some extent, but only within certain limits. In addition, based on the empirical analysis carried out, it can be concluded that the rate of economic growth begins to decline when the share of people aged 65 and over exceeds about 10% of the total population. And if we recall the current demographic situation in the world, when in 2013 the share of elderly people was 11.7%, and by 2050 it will reach 21.1% of the world population, then we can assume that the rate of economic growth will gradually decline.

Keywords: demographic problems, population aging, economic development, statistical analysis, variables, proportion of persons aged 65 years older, dependency ratio of the elderly

1. INTRODUCTION

Population aging is one of the dominant trends of the XXI century. It has important and far-reaching consequences for all parties in the life of society. Every second, somewhere in the world, two people mark their sixties, and by the end of the year, their sixties mark almost 58 million people. If now every ninth person in the world is 60 years or more, then by 2050, according to forecasts, there will already be every fifth person, so the aging of the population - this phenomenon, which is more than possible to ignore. Thus, the problem of population aging has long passed from the demographic gap to the socio-economic gap. The reports of the experts of the United Nations testify that the problem has a global scale and has an indirect impact on the sustainable development of the entire planet. "Older" states are forced to make adjustments to the already developed socio-economic policy, taking into account the potential consequences of demographic aging. Under the conditions of the reduced reproduction of the population, the process of demographic aging is irreversible, which allows to predict and evaluate its consequences in a short and medium term with a high degree of loyalty. At the same time, in the development of reform and adjustment of the conducted socio-economic policies, it is important to take into account the fact that the guarantee of support for the growth of economic growth and the well-being of "aging" state resources is effective. Changes in the age structure of the population can have an impact on the economy, although many aspects of human behavior in their nature depend on age. Employment opportunities, savings and needs of people differ at different stages of life: young people need investments in education and health care, people of hard work need medical assistance. In this population can be characterized by a large number of symptoms (age-sex, social, level of education, etc.). The aging of the population is closely linked with state policy, the development of the economy, the growth of the labor force, the development of the capital market and national savings, as well as other social aspects. There are negative and positive sides in the aging of the population, so statistical analysis of the aging of the entire population is important. The main purpose of this work is the statistical assessment of the relationship between economic development and the age structure of the population in Azerbaijan. The test hypothesis is that the share of the elderly affects the economic growth.

2. LITERATURE SUMMARY

Population aging is a problem that encompasses the economy with a share of 78% of world GDP (64% - GDP on parity of purchasing power), according to analysts Morgan Stanley. The world growth of the able-bodied population is slowing down: in 2016. - 1% vs. 1.6% on average annually for the previous 20 years. This leads not only to the growth of the demographic load (including retirees and children in relation to the working population), but also to the aging of the strongest workers. It is possible to distinguish two main factors lying on the basis of population aging: reduction of mortality (increase in life expectancy) and decrease in fertility [Vishnevsky A.G, 2005]. Demographers distinguish two types of population aging: "decline" (the result of a decrease in fertility), "the top" (the result of the average growth of life and the reduction of mortality). The terms "aging of the bottom" and "aging of the top" are associated with age-old pyramids, which help to reflect the age structure of the population. Earlier, the life of a man was divided into 3 parts: youth, maturity, old age. But American demographers Bernis Neigarten and Ethel Shanas offered to divide the third stage of the life cycle into two subgroups "young old people" and "the oldest" [Denisenko M. B., 2005]. The life cycle was finally divided into 4 groups, the last two of which represent "young old people" (60-80 years old) and "the oldest" (older 80 years) [Laslett P., 1996]. The transformation of the age structure of the population of a country is more important than the change in the number of populations. [An, Jeon, 2006]. There is a positive effect of population aging on economic growth. Older people, as a rule, save more and therefore have more resources for investment, which positively affect the economic growth [Prettner K. 2013, Lee R., Mason A. eds. 2011]. In addition, in a country with a high share of the elderly population, the general demand for education will decrease, and the demand for medical care will increase. Subsequently, public expenditures on social security and medical care will be higher than expenditures on education or other forms of development [Eiras, Niepelt, 2012]. Due to the reduction of the share of the working population and the increase of the share of the elderly, the volume of tax revenues is reduced. This demographic situation can also affect direct foreign investment. Foreign firms will not invest in a country with an aging population, as the reduction of the working population is negatively reflected in the production potential of the country. [Davies, Robert, 2006]. Gradual reduction of labor force and reduction of state expenditures on capital investments affect the productivity of labor, which, unconditionally, affects the economic growth [Lisenkova, Merette, Wright, 2012]. Population aging has a negative impact on economic growth through the co-acquisition of interrelated mechanisms [Bloom, Canning, Finlay, 2010, Börsch - Supan, 2002]. Population aging has a significant impact on the development of labor-saving technologies and the increase of investment in human capital [Scarth W. 2002]. With the aging of the population, labor becomes a relatively rare factor in production, which leads to an increase in investment in human capital, which leads to the growth of productivity. Carrying out a comparative study on the basis of panel data, came to the conclusion that the declining pace of growth of labor forces will affect the productivity of labor. [Cutler, Poterba, Scheiner, Summers, 1990]. A number of authors (Prettner, 2013), Prskawetz (Prskawetz, 2010), Weber (2010) studied the relationship between demographic changes and economic growth. Analyzing the influence of the age structure of the population on the economic growth of Sweden came to the conclusion that the age groups 0-19, 20-24, 25-39, as well as older than 75 years have a negative effect on the growth rate of GDP per capita groups 30-39, 40-49, 50-64 and 65-74 stimulate economic growth [Malmberg, 1994]. With the help of regression analysis, it became clear that the age structure has a strong impact on economic growth, inflation and savings [Bengtsson M., 2018]. The influence of age structure on economic growth has been studied by using the analysis of time series [Andersson, 2001]. The results of the analysis showed that the face in the age of 0-14 and older than 65 years have a negative impact on the economic growth, then at the same time as people in the age of 30-64 years have a positive effect.

In the article "Regional Age Structure and Economic Growth: An Econometric Study for German Regions" (Brunow, Hirte, 2009) the authors received and evaluated in the spatial econometric approach the expanded model Solow The addition of the age structure of the working force, which was used as a proxy for the growth of the structure of human capital, allowed to significantly improve the regression model. The results of the study showed that the age structure is a significant factor in economic growth, and the most stimulating group was 45-54 years. This result is explained by the authors through the theory of human capital. As we can see, the problems of the impact of age structure on economic development have been studied and a lot of research has shown that the aging of the population gives rise to a number of social and economic problems that are therefore due to this phenomenon.

3. METHODOLOGY

As we have already noted in our study, there is a study of the impact of population aging on economic development, which should pay more attention to such a factor of production as labor. Labor, from the point of view of demographics, represents its share of the economically active population. Many scholars have studied the effects of different characteristics of the working population - the structure, number and quality of workers - on the development of the economy of the country. Each age group of the population is characterized by different traits of economic behavior and, therefore, this leads to different economic consequences: young people need investment in education, the working-age population creates a labor supply and makes some savings, and retirees should receive quality health care and pensions.When the relative share of any age group changes, the economic impact of this group changes. There is no common view on the relationship between population aging and economic growth. In order to identify the consequences of the aging of the population for economic growth, it is necessary to analyze the main mechanisms lying on the basis of the impact of aging on economic growth: consumption and savings, state capital expenditures. Of course, the expected increase in life expectancy speaks to us about the improvement of quality of life, but the increase in the share of older people, in the opinion of many sociologists and demographers, may negatively affect the economic growth of the country. With the growth of people older than 65 years, the demographic load on the working population increases, and with the low level of fertility in many countries the load is even greater. The relationship between population aging and economic development is investigated. It is assumed that when modeling economic growth, the age distribution of the population, among other things, reflects to a certain extent the stock of human capital. The work carried out an econometric analysis of the impact of the aging process on economic development in Azerbaijan using panel data from 2009 to 2019. The data were tested for unit root (CIPS test) and for spatial correlations (indices and Moran's test, RW test). Panel data regression with spatial lag and spatially autocorrelated error (SARAR model) is used as the main model, since the basic diagnostic tests revealed the significance of spatial effects. Despite the fact that the coefficients for some age groups in the model are significant, their marginal responses turn out to be insignificant due to spatial dependences. The results of the constructed models showed that there is a relationship between population aging and economic development. The marginal effects of the influence of significant groups are estimated.

4. ANALYSIS OF THE AGE STRUCTURE OF THE POPULATION OF AZERBAIJAN

One of the conditions for the sustainable development of the state is the most complete consideration of specific structural factors, among which the age structure of the population occupies a significant position. The peculiarities of its state and the patterns of development largely determine the functioning of the socio-economic and military-political institutions of society. Since the general trend in the development of age structures in the countries of the world is demographic aging, the interests of modern researchers are concentrated around this

process [Privalova N.P., Stanishevskaya L.S., 2014]. At the same time, being an intermediate link in intersystem relationships, the age structure of the population is, first of all, the most important component of the demographic system, which is both the result and the determinant of its evolution. The age structure of the population is influenced by both evolutionary changes (a decrease in mortality and birth rates during the demographic transition) and perturbation effects associated with socio-economic shocks. Age and sex structure is one of the most important characteristics of the population. The analysis of the age composition allows a deeper insight into the essence of individual processes of the natural movement of the population and, consequently, in particular of its reproduction. This is due to the fact that the age-sex structure is the result of the evolution of the mode of reproduction of the population, which operated in the near and distant past. In addition, the structure has some impact on future population growth. The aging process of the population, which has a significant and growing impact on almost all aspects of society, is a reflection of the transformation of the age structure during the demographic transition. This explains the special attention to the dynamics of the age group of the elderly (people over working age, 65+). The age structure of the population is one of the basic features of the demographic situation. An important feature of the dynamics of the age structure of the population of Azerbaijan is the aging trend. Official statistical information indicates that in 1999 there were 435.6 thousand people over the working age (65+) in Azerbaijan, 535.4 thousand people in 2009, 678.3 thousand people in 2019. Accordingly, the number of people of working age in 1999 was 4515.4 thousand people, 6060.9 thousand people in 2009 and 6842.5 thousand people in 2019. A more objective assessment of the degree of imbalance in the age structure of the population allows the calculation of the coordination coefficients of the specific weights of nearby age groups, the growth (decrease) rates of the coordination coefficients of the specific weights of nearby age groups and the average growth (decrease) of the coordination coefficients of the specific weights of nearby age groups [Karpenko L.I. , Sharilova E.E., 2008]. The above indicators were calculated by us for the five-year age groups of the population of Azerbaijan for 1999, 2009, 2019 and are shown in Table 1.

Table following on the next page

Table 1: Analysis of changes in the age structure of the population of the Republic of Azerbaijan for 1999-2019

Age groups, years	Coefficients of coordination of specific weights of nearby age groups,%			Growth (decrease) rates of coordination coefficients of specific weights of nearby age groups,%		
	1999 year	2009 year	2019year	2009 to 1999	2019 to 1999	2019 to 2009
0–4	-	-	-	-	-	-
5–9	111,2	125,8	74,5	1,13	0,67	0,59
10–14	89,0	135,7	96,5	1,52	1,08	0,71
15–19	94,2	96,8	98,4	1,03	1,04	1,02
20–24	77,6	85,3	106,4	1,10	1,37	1,25
25–29	132,0	101,2	91,2	0,77	0,69	0,90
30–34	102,3	99,8	75,3	0,98	0,74	0,75
35–39	89,5	112,8	90,2	1,26	1,01	0,80
40–44	78,6	99,8	85,4	1,27	1,09	0,86
45–49	43,3	83,7	116,3	1,93	2,69	1,39
50–54	126,7	69,7	86,0	0,55	0,68	1,23
55–59	89,3	99,1	105,2	1,11	1,18	1,06
60–64	102,2	114,4	127,6	1,12	1,25	1,12
65–69	67,4	96,4	102,7	1,43	1,52	1,07
70 and more	114,5	120,3	136,1	1,05	1,19	1,13
Average growth (decrease) rate of coordination coefficients of specific weights of nearby age groups,%	100,8	123,4	135,1	1,22	1,34	1,39

Source: https: //www.stat.gov.az/, The State Statistical Committee of the Republic of Azerbaijan

Thus, the presence of structural shifts in the distribution of the population of the Orenburg region by age is confirmed, indicating an increase in the proportion of older age groups compared with the proportion of younger age groups, which is a clear sign of demographic aging. As noted above, the dynamics of the demographic structure is significantly influenced by socio-economic processes. Factor analysis was performed in the study. Statistical information was processed using the STATISTICA software package. The essence of multivariate factor analysis is reduced to the identified decomposition of the variation of each of the observed signs x_i into the variation that occurs under the influence of general, specific and individual factors, respectively. The a priori set includes the following indicators: x_1- share of the population under working age,%; x_2- share of the population of working age,%; x_3- total fertility rate, ‰, x_4 - general mortality rate, ‰, x_5 - coefficient of natural growth, ‰; x_6- coefficient of migration growth, %; x_7 - morbidity per 1000 population (registered patients with a diagnosis established for the first time in life); x_8 - number of doctors per 10,000 people, people; x_9- average monthly nominal wages of employees, manat, x_{10} - volume of paid services per capita, million manat. The method of principal components identified the first three principal components, describing 86.5% of the variation in indicators that measure the situation of population aging at the country level. The selection of the main components (generalized factors) is justified using the Kaiser criterion. To obtain the simplest structure of the factor loadings matrix, the space of common factors was rotated in the STATISTICA program. The best results were obtained by the rotation of the original space by the Varimax method (table. 2).

Table 2 shows that factor 1 includes indicators related to the category of living standards (x_8, x_9, x_{10}). Factor 2 was formed by indicators related to population reproduction (x_1, x_3, x_4, x_5). Factor 3 forms one indicator with a high load characterizing the incidence of the population (x_7). Judging by the value of the share of total variance, the greatest influence on the aging processes of the population at the municipal level is exerted by the change in the standard of living of the population, that is, the first generalized factor.

Table 2: Factor loads, eigenvalues and weights of factors after rotation by the Varimax method

Indicator	Factor 1	Factor 2	Factor 3
x_1	-0,318	**0,786**	-0,126
x_2	0,655	0,236	0,562
x_3	0,423	***0,953***	-0,034
x_4	-0,602	**-0,832**	0,352
x_5	0,221	**0,930**	-0,245
x_6	0,421	0,202	0,506
x_7	-0,034	-0,151	**-0,859**
x_8	**0,872**	0,347	-0,211
x_9	**0,791**	-0,322	0,308
x_{10}	**0,923**	-0,278	-0,036
Total variance	2,009	4,002	1,114
Share of total variance,%	38,6	46,9	24,2

Note: Variables with the highest factor loading are highlighted in bold.

Based on the selected principal components, a regression equation was constructed:

$$\hat{Y} = 35{,}03 - 3{,}43 \cdot F_1 + 6{,}54 \cdot F_2 + 0{,}63 \cdot F_3$$
$$t-stat \quad (86{,}21) \quad (-5{,}56) \quad (10{,}01) \quad (1{,}35)$$
$$R^2 = 0{,}876$$

Where, F_1, F_2, F_3- are general factors, F_1 -is the standard of living of the population, F_2 -is the reproduction of the population, F_3 — is the incidence of the population, t-test is the Student's test with a probability of 95%, R^2— is the coefficient of determination. The effective indicator in the model is the proportion of the population over the working age.

5. ECONOMETRIC MODELING OF THE RELATIONSHIP OF ECONOMIC DEVELOPMENT AND AGE STRUCTURE OF THE POPULATION OF AZERBAIJAN

To measure the economic development of a country, we have selected indicators such as gross domestic product per capita (in logarithms), as well as the growth rate of this indicator. As variables characterizing the age structure of the population, we took the shares of the average annual population for the following age groups: 0-15, 16-24, 25-39, 40-54, 55-64, 65+ years. The regressors used in the study are shown in Table 3. Note that all indicators are calculated.

Table following on the next page

Table 3: Description of used variables

Indicator designation	Description of the indicator
*ln*_GDR	Logarithm of GRP, adjusted by the value of the subsistence minimum per unit of the average annual population
0-15	Share of the average annual population aged 0-15 years
16-24	Share of the average annual population aged 16-24 years
25-39	Share of the average annual population aged 25-39 years
40-54	Share of the average annual population aged 40-54 years
55-64	Share of the average annual population aged 55-64 years
65+	Share of the average annual population aged 65-100 years

Let's pre-test the variables for a unit root. We will use IPS-test and CIPS-test (taking into account cross-correlations). The test results are shown in Table 4.

Table 4: Results of IPS and CIPS tests per unit root for age groups. Variant of tests with a constant, tbar statistics for IPS, lag = 1 for CIPS

Variable	IPS	CIPS	p-value
0-15	-3.546	-0.657	0.030
16-24	1.650	-1.565	0.010
25-39	0.078	-1.003	0.020
40-54	0.837	1.346	0.040
55-64	0.678	-0.765	0.020
65+	-0.885	-0.455	0.020

Taking into account the results of preliminary testing, we will consider regressions for the first differences of the variables.
To take into account the spatial relationships between variables, we will consider the following regressions:
- with random effects (RE)
- with Individual Effects Fixed (FE)
- end-to-end regression with spatial lags, with spatially correlated error and random effects (SARAR-RE);
- regression with spatial lags, with spatially correlated error and fixed individual effects (SARAR-FE)

Standard approaches are used to estimate RE- and FE-regression. Taking into account the results of preliminary testing, Driscoll-Edge robust standard errors (SCC) were used for the significance of the coefficients. It can be seen from the estimation results that the estimates of the coefficients change significantly when spatial lags are explicitly included in the regression. In addition, the significance of the coefficients will change. According to the results of assessing, the change in the share of the average annual population in the 55-64 age group turned out to be insignificant. When spatial lags are included in the model, the coefficients can no longer be interpreted as limiting values. Table 5 for the SARAR-FE model shows the responses (marginal values) for each of the regressors: direct, indirect, and total (their sum), as well as z-statistics for the SARAR-RE regression responses.

Table following on the next page

Table 5: Responses for SARAR-RE regression and Z-statistics for SARAR-RE regression responses (direct, indirect, general)

Variable	SARAR-RE Regression Responses			z-statistics for SARAR-RE regression responses		
	Direct	Indirect	General	Direct	Indirect	General
16-24	6,321	8,005	14,326	7,322***	3,545**	4,465***
25-39	8,978	14,324	23,302	5,756**	4,567***	5,235**
40-54	2,302	5,333	7,635	1,867*	1,078*	1,905*
55-64	2,675	6,456	9,131	2,476	1,309	2,435
65+	5,234	7,098	12,332	3,234**	3,312**	3,224*

*Note: * $p < 0,1$, **$p < 0,05$, ***$p < 0,01$*

The following conclusions can be drawn:
- the responses of the following regressors are significant: change in the share of the average annual population in the age groups 16-24, 25-39, 65-100. The responses of the rest of the regressors (40-54, 55-64) are insignificant.
- the largest significant response is obtained when the growth rate of the share of the average annual population aged 25-39 increases by 1%, the GDP growth rate per unit of the average annual population is 23.30% (with other things unchanged and taking into account spatial dependencies).
- note that although the coefficient for the 40-54 age group is significant in the model, the overall response for this variable is insignificant.

6. DISCUSSION AND CONCLUSION

According to the results of factor modeling, it is possible to make a conclusion about the change of the population of the older working age in Azerbaijan, first of all, are determined by the indicators of reproduction of the population, the importance of the importance of the population. Thus, at this moment, the age structure of the population of Azerbaijan is satisfactory, but if we do not take into account the complex of state measures in the perspective of the demographic structure of the population, there may be an imbalance. Among the primary measures, in our opinion, are the following:
- management of the level of life of the population, including the increase of monetary income of the population, regulation of the market of paid services, etc .;
- stimulation of fertility, state support of families with children;
- reduction of mortality rate from various diseases at the expense of creation of complex system of risk factors, early diagnostics with application of advanced technologies, introduction of educational programs, directions on prevention of development of chronic diseases; improvement of material and technical support of health care institutions.

The results of the constructed econometric models allow to make a conclusion about the fact that the age structure of the population significantly affects the economic development of Azerbaijan. Comparison of the obtained results with the results of the previous work on similar problems is complicated by a number of factors, among which: the authors of different age groups, the use of different models, as well as specific features. However, I would like to draw your attention to the fact that in Germany the most positive influence is shown by the age group 45-54 years (Brunow, Hirte, 2009), and in Sri Lanka (Bengtsson, 2018) a significant variable group 9-4 , then in Azerbaijan the main effect on the economic growth is given to the younger groups 16-24 and 25-39, their contribution was the largest, positive and significant.

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PROBLEMS OF BUSINESS INFORMATION INFRASTRUCTURE DEVELOPMENT

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ABSTRACT

The article reveals the essence and significance of the information infrastructure of business, analyzes the influence of information resources, the information market and information business on the sustainable development of the economy and improving the social welfare of the population. The leading direction of the information business development is globalization. Many countries and companies are integrating into the information business. Integration of the main producers of information technologies leads to convergence in the structure of the information sphere. One of the results of convergence is the dynamism of development trends among companies engaged in the information business, that is, companies develop at a faster pace, combining directly or on the basis of lower forms of cooperative ownership. The field of information and communication technologies was studied as a priority area. So, in the near future, it is expected that the communications and information technology sector will become the most developed sector of the Azerbaijani economy after the oil industry. The widespread use of information and communication technologies, in addition to serving the overall development of the country, is of particular importance from the point of view of ensuring national information security. In conclusion, substantiated proposals were made to determine the directions of innovative development of the business information infrastructure.
Keywords: Business information infrastructure, information resources, information market, information business, information society

1. INTRODUCTION

Human society has entered a new stage in the development of civilization, in which information and knowledge play a crucial role in all spheres of human activity. Information, being one of the most important elements of the public relations system, attracts much attention of researchers. The problems of the information society, that is, the issues of the influence of information on social processes, the state, culture and human psychology, were considered mainly in the works of philosophers. In recent years, works on economic and technological problems of informatics have been published. These works address the issues of measuring and evaluating information, the economic efficiency of information activities, and the formation of the market for information products and services. Consumption of information, production of information products and services have caused the need for the formation and development of one of the new forms of entrepreneurship - the information business. An important resource for enterprises and organizations in the modern market economy is information that allows them to gain and strengthen market positions and provide a competitive advantage. Making management decisions requires a deep and comprehensive analysis of large amounts of necessary information over a certain period of time. In this regard, the level of organization of the company's information system has a positive impact on its effective functioning and

prospects for further development. All of the above confirms the relevance of the problems of the development of business information infrastructure and the need for their scientific research.

2. THEORETICAL VIEWS ON BUSINESS INFORMATION INFRASTRUCTURE

An analytical information system is a set of technical and software tools, as well as information resources used for the purpose of collecting, processing, storing and analyzing information necessary for making managerial decisions. The effective functioning and dynamic development of economic entities largely depends on their information support. Russian economist A.B. Boxrisov defines the concept of "information support" in the Big Economic Dictionary as follows [1, p.425]:

- it is the necessary information stored in the database of information systems for the management of economic processes;
- creation of information conditions for the operation of the system, provision of the necessary information, inclusion, receipt, storage, collection, transmission, processing of information search tools in the system, organization of data banks.

Infrastructure is an important component of any economic system. Infrastructure is an integral part of the overall structure of economic life, which, on the one hand, is subordinate and auxiliary in nature and leads to sustainable socio-economic development, and on the other hand, determines the tactical and strategic directions and goals for the development of various types of economic activity. In the classical views of national and foreign economic scientists on the composition of infrastructure, two approaches are distinguished: broad and limited. In the first approach, almost all areas of the non-productive sphere of the national economy are referred to infrastructure. The second approach limits the range of areas that can accelerate the movement of infrastructure elements, products and information included in the infrastructure complex, and includes communications, transport, trade and other areas. In the narrow sense of the word, these are elements of the system of circulation of goods (warehouse, supply, trade and transport organizations). Another group of authors assesses the concept of infrastructure in a broader sense, meaning practically all market institutions, including elements of state regulation of the economy.The Russian economist A. Y. Sharipov defines infrastructure as a set of all spheres and branches of the economy that serve material production, produce services and moral benefits for the population, provide economic turnover in the national economy, create conditions for environmental protection and reproduction. I. F. Chernyavsky emphasizes that infrastructure is understood as a set of elements of productive forces in the form of industries and activities that give a holistic character to the national economy and its individual spheres and complexes, the functional purpose of which is, first, to create general conditions that ensure the effective functioning of the main production, and, secondly, to ensure the reproduction of labor. [2, p.131]. From the point of view of Russian economists, the concept of "infrastructure" is understood as a set of organizations, government and communication companies that ensure the successful functioning of all types of markets and the development of market relations. According to G.T.Timofeev, when defining the term "infrastructure", one should take into account that we are not talking about conditions in general, but about creating conditions for reproduction that provide the necessary resources for production, factors of production and services for business entities [3, p. 143]. For sustainable development and competitiveness of the national economy, it is necessary to create a modern infrastructure. The demand for innovative infrastructure is growing rapidly due to the transition of many enterprises and organizations to electronic document management and the need for constant exchange of information. It is especially important to create an innovation infrastructure to enhance innovation in the country. This, in turn, leads to changes in indicators and factors that characterize the development of infrastructure.

When assessing the development of infrastructure, economic and social indicators are used, which makes it possible to divide the infrastructure into two main blocks, respectively: economic and social. The level of development of infrastructure facilities, in turn, affects the country's competitive potential, economic growth, social well-being of the population, and business innovation [4]. As in other economic systems, the business system has a special infrastructure. Business cannot develop without modern infrastructure. Business infrastructure is a collection of joint ventures and organizations that provide businesses with paid services and provide it with the necessary means of production, transport, consulting, etc. Thanks to the creation of innovative infrastructures, modern business is becoming more civilized, each of its elements specializes in performing certain functions, and high economic efficiency is ensured in the business sphere.

3. INFORMATION AS AN IMPORTANT RESOURCE FOR ECONOMIC DEVELOPMENT

Information has a significant impact on the development of all areas of production and infrastructure. Information is one of the most important features of the system of social relations in developed countries. In the functioning of the market mechanism of the information society, as well as in the market of the industrial age, there are new signs that distinguish it. New signs of the post-industrial stage are observed in countries with developed market economies. However, in the textbooks of economic theory, these progressive trends have not yet been properly reflected. So, in these textbooks, land, labor, capital, and entrepreneurial abilities are traditionally indicated as types of resources, while post-industrial civilization values information along with them. In our time, the information business as a progressive form of entrepreneurship has become an important factor in economic growth, and in the textbooks on economics published in recent years, information is referred to as a valuable commodity. The information business, together with its infrastructure, is a relatively new area of business activity in the form of a multi-industry complex. On the one hand, the information business is included in the infrastructure of the entire system of entrepreneurial activity, along with banks, stock exchanges, audit companies, and on the other hand, it is an independent type of business. The information business emerged in Western countries in the 60s of the XX century, as an independent direction was formed in the 1970s, and in the 1980s, together with the existing infrastructure, it developed into a large diversified complex. Due to the complexity and cost of information technologies, they were previously used only in research centers and large industrial companies. Later, as information technologies improved and became cheaper, they began to be used in other spheres, and the role of information business in the country's socio-economic development increased significantly. As a result of the rapid development of information technologies, the basis for the dynamic development of the information business has emerged. The demand for the development of business information infrastructure began to grow. At the same time, there were constant changes and improvements in the development of this type of business infrastructure. Experts from different countries look at the modern information infrastructure of business in different ways. For example, Kanygin Y.M identifies the following main elements: computing center of various types; subscriber points giving subscribers access to information resources; a set of organizational elements that ensure the management of electronic computing and information potential; structural elements of the industry that meet the needs of a computing center in software and information support, as well as various supporting elements. Currently, information is considered as one of the important resources for economic development. Information has real value because of its structure.With the help of information products, it is possible to meet the needs of the consumer for new information and knowledge, as well as various aesthetic needs. As an economic resource, information has value, is exchanged and there is an effective demand for it.

The value or usefulness of the information gives the consumer additional freedom of action. The end result of information activity is called information products and services that are promoted as a valuable commodity in the consumer market, that is, they are sold and bought. Distinctive features of information products from other products are:

- information does not disappear during consumption, on the contrary, it can be used several times, regardless of its reuse, information retains its inherent value;
- information products periodically undergo a kind of "moral erosion". Although information does not wear out when consumed, but loses its value and relevance;
- It is convenient to use different methods of providing information to different consumers of information products, since the consumption of information products requires some effort;
- in contrast to the production of material goods, the production of an information product requires high costs compared to the cost of its replication. Thus, it is much cheaper to make a copy of an information product than to produce it. This feature of the information product - the complexity of the production technology and the relative ease of replication - creates many problems associated with the determination of property rights in the framework of information activities.

The promising directions for the development of entrepreneurship in Western countries have been identified. For example, in Japan, special attention is paid to the development of the information business. Using the global information market, Japanese entrepreneurs are adopting technological innovation faster and more efficiently than others. Entrepreneurs in Germany, the United Kingdom and France pay particular attention to the application of industrial technology and believe that a strong position in industrial production also leads to great success in the scientific and technological field. Improving the intellectual level, education and skills of employees in the United States is always in the center of attention, since the technological potential of the business largely depends on it [6, p.207]. Increased competition in the information business leads to the fact that the products of the mass media become more specialized.That is why different types of mainstream media (press, television, communications) carry different informational load. "Information resource" is one of the basic concepts in the information society. There are different views on the concept of "information resource". For example, N. N. Makarov considers information resources in information systems as separate documents and arrays of documents (in libraries, archives, funds, bank data, and other information systems) [7, p. 23]. According to other groups of economists, information resources are a collection of organizational data for obtaining reliable information, that is, information that is processed and then presented in a formalized form. An information product, which is the result of information activity, is sold on the market as a commodity. At the same time, there are many types of information products and services that are not the direct results of information activities.These include the material components required for the production, processing, storage and distribution of information.

4. INTENSIVE DEVELOPMENT OF THE INFORMATION MARKET IN AZERBAIJAN

The information market is a set of relations aimed at: the formation and use of information resources based on the creation, collection, processing, accumulation, storage, search, distribution and provision of documented information to the consumer; the creation and use of information technologies and means of their provision; the protection of information, the rights of subjects involved in information processes and informatization. The positive dynamics of agreements in the information sphere gives grounds to speak about the intensive development of the information market. The information market is conventionally divided into two segments: "civil" and "business".

Information in the first segment is publicly available scientific, technical, political, economic, reference, cultural and other information. They have a different presentation form, a low price limit; are not intended for intended use in business and are not objects of business transactions. The second segment is represented by information products (including resources, technologies and systems) used for business purposes. A set of conditions, tools and methods that make it possible to effectively use information resources constitute the information potential of society. It is not only a production and technological complex of modern tools, methods of processing and transferring information, but also a unified network of research, educational, administrative, commercial and other organizations providing information services based on modern information technologies. The process of forming the market of information products and services in the Republic of Azerbaijan is proceeding rapidly. Traditional scientific and technical information services are difficult to adapt to modern economic realities, previously their activities were based on corporate clients. In the current situation on the market of information products and services, not only government agencies, but also large corporate structures that do not comply with the norms of international "transparency" in organizing business, keep information closed. Although some examples of the civilized formation of some large business structures are found, the vast majority of companies prefer to remain in the shadows. The reliability and objectivity of business information is determined, in particular, the accuracy of the information provided by economic entities. During the transition period to a market economy, that is, during the initial accumulation of capital, privatization and corporatization, it was not possible to collect reliable information about the activities of Azerbaijani entrepreneurs.Very few business leaders have tried to provide accurate information about their activities in order to find a suitable partner. The main reasons that hinder the development of the market of information products and services in Azerbaijan are the presence of rather expensive information technologies in the country, technological and economic barriers that restrict access to information resources for mass users. New information technologies are being actively introduced in all spheres of the economy. Local and global networks used for data transmission provide computer users with new opportunities for rapid information exchange. Data transmission over channels using the Internet has become an assistant for any computer user. Automation of information analysis processes, as well as the creation and development of complex structured equipment used for this purpose, not only increased the society's dependence on this sphere, but also made the problem of the security of the information technologies used relevant [5, p.12]. State programs and specific practical measures implemented in connection with the development of the non-oil sector in the country have opened up wide opportunities for diversifying the economy and developing new industries. In this regard, the Strategic Roadmap for the Development of the National Economy is an illustrative example.The strategic roadmap has been developed taking into account the new challenges and opportunities facing the telecommunications sector, with the aim of increasing the potential for the development of information and communication technologies in the country, improving the ICT infrastructure for the digitalization of the economy, and effectively meeting the demand for ICT services at the expense of domestic resources. When developing the Strategic Roadmap, priority areas were taken into account - supporting the development of telecommunications, which is one of the main areas of the non-oil sector, building an innovation-oriented knowledge-based economy, bringing high-quality and competitive information technology products to international and local markets, attracting new high-tech investment projects and establishing effective coordination between organizations working in this area.

5. CONCLUSION

1) In the modern period, accompanied by the trend of transition from an industrial society to an information society, information is considered as an important factor of production that creates social wealth. The basis of the information society is the information business.The information business, which emerged as a new type of business activity as a result of the development of market relations, plays an exceptional role in the sustainable development of the country's economy.

2) In order to develop the business information infrastructure and improve the information support of economic entities, it is important to expand the use of modern information technologies. The use of modern information technologies can contribute to the justification of projects and measures for the sustainable development of the country's economy.

3) When solving many issues related to improving the market of information products and services, companies are forced to use the flows of various information infrastructure, access to which is not always easy.Some local information systems and numerous websites contain incorrect information.This situation significantly complicates the formation of a unified information system of the enterprise, which can really help in the management of modern business.

4) For the rapid development of the information infrastructure of business within the framework of the Strategic Roadmap for the Development of the National Economy, it is necessary to more effectively use the information potential of the country through the use of modern information technologies.

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IMPROVING THE FINANCIAL MECHANISM FOR FINANCIAL SUSTAINABILITY AND SOCIO-ECONOMIC DEVELOPMENT OF THE REGIONS

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ABSTRACT
Researching the current status of the regional distribution of production in the country and identifying ways to increase the development potential of the regions will enable to identify the amount of financial resources necessary for the future development of various regions, to determine the factors that prevent the activation of the existing financial potential and to neutralize the impact of these factors. One of the important functions of the state is to overcome the deficiencies in the market mechanism. It should be noted that, as a result of the impact of market forces in Azerbaijan in the current situation, the opportunities for efficient placement of production in the region are limited. Efficient placement of production in the region requires the presence of competitive and relatively large firms in the country. Therefore, a scheme for the placement of discrete productions on the region of the country should be developed by the Azerbaijani government. The government should coordinate the provision of soft loans with public investment in infrastructure development, education system improvement and other areas. Thus, the development of these infrastructure areas increases the volume and quality of services provided in these areas. Moreover, there is a need to increase public funding of the private sector to increase the number of institutions using these services
Keywords: *financial mechanism, regional financial policy, regional socio-economic development, state programs, state regulation*

1. INTRODUCTION
Ensuring sustainable economic development in each country is possible on the basis of full and effective use of the economic potential of the regions. So, development is always related to place, and the balanced development of the country's regions is a condition for improving the social welfare of the population. In this respect, increasing the socio-economic development level of the regions and minimizing the interregional differences in this area constitutes the basis of the state's economic policy. The world experience and the history of development of foreign countries prove that the market mechanism does not ensure the balanced development of the regions. In this case, the reduction of inter-regional differences in the level of socio-economic development in the country depends mainly on public policy. There is a high imbalance in the development of regions in Azerbaijan. Thus, the production potential and income of the country are mostly concentrated in Baku. Therefore, one of the main aspects of the economic reforms in our country is to ensure sustainable socio-economic development in the regions and to reduce the existing differences in location of production by regions. The effective location of productive forces in Azerbaijan and the full use of the financial potential of each region are important for the country's economic development. Ensuring the socio-economic development of the country is possible on the basis of a comprehensive evaluation of the natural-economic, demographic, environmental and other conditions and characteristics of the regions. In this respect, the deliberate location of productive forces in the country implies the development of the economy in the regions through the efficient use of natural resources, labor resources and other opportunities.

The most optimal location of production in the country ensures efficient use of natural resources, improving the level of employment, increasing labor productivity and production efficiency based on the economic use of economic resources, socio-economic development of economic regions.

2. WAYS TO INCREASE THE DEVELOPMENT POTENTIAL OF THE REGIONS

One of the important functions of the state is to overcome the deficiencies in the market mechanism. It should be noted, however, that in the current situation, as a result of the impact of market forces in Azerbaijan, opportunities for efficient location of production by region are limited. Efficient location of production by region requires the presence of competitive and relatively large companies in the country. Therefore, the Azerbaijani government should develop a scheme for the location of each production in the country. This scheme should determine the development direction of each region based on the evaluation of its economic potentials. The choice of location for individual productions makes it easier for the government to determine the measures to be taken to improve entrepreneurship and the direction of infrastructure development. For instance, the preference for improving apple production, mainly in Guba, implies, first of all, construction of apple stores in this region and establishment of an enterprise producing apple crates. In this case, the government can provide efficient allocation of limited economic resources in terms of place and time by identifying the enterprises to be established in different regions and substantiating the sequence of their establishment. The formation of regional economic development trends and sectoral structure is based on the efficient use of local natural and labor resources, geographical location and other favorable opportunities. The economic efficiency of the production in the regions, the level of development of the regional economy and the optimal structure of the sector depend on the level of specialization of each. Appropriate specialization of economic regions is the basis for organizing production at a regional level in an economically efficient way. The scale of development of specialized industries affects the formation of the production structure in each region. The higher the level of specialization of the regions, the more economically appropriate the relations between the separate branches of industry, as well as, between industry and agriculture and other sectors of the economy. In this regard, it is important to create clusters according to the specific area structure and development directions of different regions. A cluster or industrial group is a group of interconnected companies and related organizations operating in a certain geographically close area, characterizing by the generality of activities and complementing each other. [1, p. 207]. It should be noted that the creation of special economic zones has an important role in creating clusters in economic regions and increasing their specialization. The purpose of creating such zones is to develop priority areas in the country, increase investment activity, and support the organization of competitive, efficient production and service sectors. In this regard, the Presidential Decree of the Azerbaijan Republic dated March 6, 2007, "About creation of special economic zones in the Azerbaijan Republic", is of great importance. The Law of the Republic of Azerbaijan "About special economic zones" dated April 14, 2009, came into force and regarding the implementation of this law, the Decree of the President of the Republic of Azerbaijan of 3 June, 2009 was signed. The necessary regulatory framework for the establishment of special economic zones in Azerbaijan has already been established. In our view, the creation of special economic zones should not only provide benefits, but also define the industries to be developed in the region, the necessary infrastructure (roads, electricity, gas, water supply, etc.), staff training and other issues. [2.p.354] The creation of innovative-regioanl complexes is of great importance to ensure a cluster approach to the development of individual regions in the country. The creation of such complexes will lead to the diffusion of innovations, large-scale savings as a result of increased production (due to the location of relatively small productions in one area), the creation of

supply and sales enterprises. This will improve the quality of the products produced in innovative-regional complexes and lower prices. The production scale has a significant impact on the level of development of existing industries in the region. Thus, as the production scale increases, the cost per unit output decreases. The creation of small and medium-sized enterprises in these innovative-regional complexes will increase the overall demand for individual services and products, and consequently reduce the cost of the services provided. In recent years, the growing demand for agricultural products on the world market and the consequent rise in prices have increased the efficiency of investment in this area. It should be noted that considering the characteristics of viticulture, potato production, fruit production and other crops, optimizing their location in the country will provide the markets with fresh products for a relatively long time. Thus, the growing time of the same product is different in different regions of the country. Currently, the country's market for processed agricultural raw materials includes very cheap goods from foreign countries. As a result, opportunities to regulate local production are limited. In this context, there is a need to associate the production organization in the processing industry with the regulation of their imports more closely.

3. ASPECTS OF IMPROVING THE FINANCIAL MECHANISM TO REDUCE INTERREGIONAL DISPARITIES

The full realization of Azerbaijan's economic potential largely depends on the development of the regions. Thus, development is related to a certain area. In this case, the market mechanism leads to the distribution of the country's limited economic resources ((investment, skilled workers, etc.) in favor of developed regions. As a result, inter-regional differences at the level of development in the country are increasing. This difference is observed at the level of infrastructure development and product prices. Thus, one of the main factors of development is density. In high-density markets, sales costs are also lower and as a result, prices fall. All this leads to a violation of the principle of equity in the country. Thus, the amount of benefit received by citizens with the same personal income levels, but living in different regions, varies. Moreover, due to the large tax base of the developed regions, the volume of per capita public services in these regions is higher than in the underdeveloped regions. As a result, the principle of horizontal (regional) equity with equal access to public goods is violated, depending on the geographical location of existing firms and households in the country. All this makes it necessary to determine the criteria for financing the socio-economic development of the regions. It can be said based on experiences, the efficiency of the use of economic resources is high in developed regions in terms of the rate of economic growth in the country. In this context, the distribution of economic resources from developed regions to backward regions may have a negative impact on the country's economic growth rate. As economic growth is the main condition for increasing incomes in the country, the slowdown in economic growth limits the increase in both consumption and investment expenditures in the country. At present, the fact that revenues in Azerbaijan are mainly generated in Baku and the formation of these revenues in oil and gas production eliminates such a negative impact. According to the level of socio-economic development, measures need to be taken to increase the financial capacity of both vertical and horizontal management hierarchies. Increasing financial capacity in the vertical management hierarchy implies the distribution of public revenues between central and local authorities. In terms of vertical hierarchy, local authorities have limited opportunities to realize their powers in their regions and to provide the necessary public services in the region. In this case, a budget policy should be implemented in all regions to provide households and firms with a standard package of social benefits. This implies the distribution of public expenditures at both the centralized and local levels. Moreover, given that the powers and functions of local bodies are equal in different regions, it is necessary to take measures to equalize budget revenues.

At that rate, one of the key factors is to equalize the income potential of the regions to ensure equal access to public goods. Today, it is important to increase the financial capacities of the municipalities in the vertical arrangement hierarchy for the socio-economic development of the regions. Thus, sources of budget revenues of municipalities established by law form an objective basis for differentiating their revenues. In some municipalities, their incomes may be high due to high land quality ratios, availability of local building materials, the need to use billboards and other factors, while others may be low. [3.] For instance, according to the Tax Code, the land tax for individuals is municipal tax. In general, municipal budget revenues are highly dependent on the location of the municipality. Municipalities as local self-government bodies should have the same income opportunities to finance their spending, as they are the main institutions that provide public goods on site and the powers of all municipalities are defined same by law. In this case, in the present situation where public revenues are mainly centrally collected, there is a need to establish an improved mechanism for municipalities to be financed from the state budget. In this respect, it is necessary to take into account inter-regional differences in the formation of sources of income, including the cost of services provided by them in the provision of subsidies and the volume of services, to finance their expenditures. In our opinion, it is appropriate for municipalities to develop rules for the use of these forms of financing in the provision of public services. It should be noted that currently, under the Budget System Law, municipalities can attract funds from the state budget. To this end, municipalities should submit the following documents and information to the Ministry of Finance:

- reference on expected results of the current year and actual results of the last year's budget;
- substantiation of the planned revenues and expenditures of local budgets for the next budget year, the amount of subsidies to be allocated from the state budget and other financial assistance;
- auditor's opinion on the state of execution of the local budget in the previous year;
- Other materials at the request of the Ministry of Finance.

Based on these materials, funds for financing municipal budget expenditures can be considered in the State Budget. In our view, the mechanism of financing municipal budgets in this way increases uncertainty and subjectivity in the allocation of funds. In this regard, it is necessary to determine municipal funding criteria and the amount of funds required to finance public services to be provided through municipalities in the budget year. In this case, the limits of funds intended for the financing of municipalities are determined. The increase in state budget revenues in recent years has led to an increase in funding for regional development. However, it is important to establish reasonable criteria for the horizontal balancing of regional funding. Thus, the balance between local revenues and local expenditures should not be at the expense of cost reductions. It should be noted that increasing the efficiency of regional funding and ensuring the principle of equity in this area requires requires a correct identification of the needs of the regions for public goods and the calculation of the amount of funding accordingly. In this context, determination for defining the volume of demand for public spending in the regions is necessary. In this case, it is necessary to define a certain set of public services (for instance, education, health, culture, etc.) that must be provided per capita in different regions. All these nuances relate to the ways of financing expenditures in the regions. Moreover, one of the ways to eliminate both horizontal and vertical imbalances is to increase the financial potential of the regions. In this case, measures are taken to increase the tax base in the regions to provide public services. This is achieved in a number of ways. Thus, in fiscally decentralized systems, the government achieves reduction of inter-regional disparities in terms of financial capacity due increasing economic activity in the region by influencing the movement of labor and capital. In recent years, the state has taken measures to increase the production of agricultural products, which form the basis of the regional economy.

Producer support measures are aimed at increasing local food production, increasing farm incomes, and improving food security. At present, agricultural products in Azerbaijan are exempt from other taxes, excluding land tax. However, agro-processing enterprises pay full value-added tax. Therefore, although local agricultural products are exempt from value-added tax, this factor does not provide an additional advantage to imported products during processing to local agricultural products. One of the important factors in increasing the competitiveness of the regions is the development of the infrastructure. The development of roads, gas, water, electricity and other infrastructure in the regions increases the efficiency of economic resources by increasing the speed and reducing the cost of material, financial and information flows [4.]. This factor increases the economic activity in the region and consequently increases the financial potential of the region. Today, the development of the infrastructure in the regions is carried out within the framework of the Public Investment Program. However, in determining the direction of public investment and the priority of concessional financing by development institutions, the elimination of gaps in the value chain of the region's specialized products should be considered as a priority. The public investment program is an integral part of the country's socio-economic development program and is an effective tool for implementation of investment policy by government. The public investment program includes investment projects ordered by government agencies and implemented by state-owned enterprises. In order to achieve the main goal of the public investment program and ensure the sustainable development of the country's economy, the following tasks have been determined:

- accelerating socio-economic development;
- increasing public and private investment volume;
- creating new workplaces;
- attracting foreign investments and expanding investment opportunities;
- developing the financial base of the investment process and improving the knowledge base;
- effectively coordinating investment programs implemented by international financial institutions in the country.

In our view, it is important to assess the impact of public investment on the socio-economic development of individual sectors of the national economy and regions. At present, the impact of the public investment program on economic development is not assessed. In order to determine the optimal set of public investments, it is important, first of all, to develop a methodology for assessing the effectiveness of the program. Currently, it is possible to make such an assessment using the net present value method, which is still used in the evaluation of investment projects. The government should coordinate the provision of soft loans with public investment in infrastructure development, education system improvement and so on. Thus, the development of these infrastructure areas increases the volume and quality of the services provided in these areas. Moreover, public funding of the private sector is needed to increase the number of institutions using these services. So, the mechanism for financing the reduction of inter-regional disparities in terms of socio-economic development should include attracting funds to finance expenditures in the region and increasing the region's domestic financial potential. Such an approach accelerates the creation of equal access to public opportunities for people living in all regions.

4. CONCLUSION
1) The government can ensure the efficient allocation of limited economic resources in terms of place and time by determining the enterprises to be established in different regions and substantiating the sequence of their establishment.
2) The creation of innovative regional complexes is essential to provide a cluster approach to the development of individual regions in the country.

The creation of such complexes will lead to the diffusion of innovations, large-scale savings as a result of increased production (due to the location of relatively small productions in one area), the creation of supply and sales enterprises. This will improve the quality of the products produced in innovative-regional complexes and lower prices.

3) Increasing the share of transfers in local budget expenditures can decrease incentives for municipalities to expand their sources of income. In this context, measures should be taken to ensure that such incentives are not reduced during the development of the transfer mechanism.

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DEVELOPMENT OF FAMILY BUSINESSES IN KARABAKH REGION OF AZERBAIJAN: NEW OPPORTUNITIES AND PROSPECTS

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ABSTRACT

Family entrepreneurship refers to a significant number of companies around the world in which one or more members of a family are active in business operations and have the primary responsibility for ownership or power. Families may operate small businesses or multinational corporations. Family-owned companies often save money by using the financial and other resources of family members, allowing them to meet long-term business objectives at lower costs. The family business is an efficient segment in the non-oil sector as well, thanks to its duty and confidence, as well as its clear management. As a result, it assists in the resolution of social concerns in a market economy, as well as economic development and citizen jobs. The main aim of this paper is to investigate the opportunities and prospects for the formation of family businesses in Azerbaijan's Karabakh region. To achieve this aim, the concept of family business is theoretically applied to explain the current state of family businesses in Azerbaijan's Upper Karabakh and Kalbajar-Lachin economic regions and to recognize opportunities for family business growth. In addition, proposals for the growth of family businesses in the area have been developed. The following is a breakdown of the paper's structure. The first section includes details about Azerbaijan's economy and economic landscape as well as economic potential of Karabakh region of Azerbaijan. The second part examines the latest research on family businesses. The third sections discusses opportunities for family businesses in Azerbaijan and aims to uncover potential in Azerbaijan's Karabakh region. At last, conclusions will be drawn and shared to summarize the papers.
Keywords: Karabakh, family business, development, opportunities

1. INTRODUCTION

After regaining its independence in 1991, the Republic of Azerbaijan started to exercise its sovereign rights and follow an independent policy in the economic sphere. The main directions of economic policy were the economic system based on state, private and municipal forms of ownership, the transaction to a market economy and integration into the global economy. The signing of the "Contract of the Century" with the world's leading oil companies in 1994 laid the foundation for a successful oil strategy. The Baku-Novorossiysk (1996) and Baku-Supsa (1999) export oil pipelines, the Baku-Tbilisi-Ceyhan (2006) main export oil pipeline, and the Baku-Tbilisi-Erzurum (2007) gas pipeline were all designed to supply Azerbaijani oil to world markets, resulting in a diversification of export routes. The Southern Gas Corridor (Baku-Tbilisi-Erzurum+TANAP+TAP) was fully operational on December 31, 2020, delivering Azerbaijani gas directly to the global market. In general, the oil and gas industry has played a locomative role in the development of other areas in the country. Although the price of Azeri Light oil on the world market is slightly higher than other oils (Muradov; Hasanli; Hajiyev, 2019: p. 41), the dramatic drop in oil prices since 2014 has resulted in a significant decrease in Azerbaijan's revenues. This trend has necessitated the country's economic diversification and non-oil export growth (Babayev, 2019: p. 1). Azerbaijan's ties with international financial, credit and economic institutions, as well as its membership in the International Monetary Fund, the World Bank, the European Bank for Reconstruction and Development, the Asian Development Bank, and the reforms implemented have all contributed to the country's favorable business and investment climate.

Over 277 billion 577 million dollars was invested in the Azerbaijani economy from 1995 to 2019, with more than 140 billion 843 million dollars coming from foreign investors (The State Statistical Committee of the Republic of Azerbaijan, 2021). Azerbaijan is ranked 34th out of 190 countries in the World Bank's Doing Business 2020 index (World Bank, 2020). In particular, the development of entrepreneurship in the regions is one of the priorities of economic policy. The Entrepreneurship Development Fund has made preferential loans of up to 127 million AZN to finance 908 investment projects worth 397 million AZN in 2020, with 79 percent going to regions and 21 percent going to Baku settlements (Entrepreneurship Development Fund of the Ministry of Economy, 2021). In order to minimize negative impact of the Coronavirus (COVID-19) pandemic on the economy, including entrepreneurship, an economic support program worth 3.5 billion AZN was implemented in 2020 (Ministry of Economy of the Republic of Azerbaijan, 2021). The program covers a variety of entrepreneurship subjects, including family businesses. In Azerbaijan, employment support programs for family entrepreneurs are provided by the Public Legal Entity "Easy Support for Family Business" (ABAD), the Small and Medium Business Development Agency (SME) as small and medium businesses, the Ministry of Labour and Social Protection framework, and other means. Thus, only in January-October 2020, the number of active members of ABAD was 257 people. Their total financial turnover was 1.1 million AZN, and their monthly average income was 346 AZN (ABAD, 2021). The liberation of Karabakh by counter-offensive operations launched on September 27, 2020, in response to Armenia's military aggression against Azerbaijan, and the trilateral declaration signed on November 10, 2020, have generated new realities in the region. In this context, new prospects for the formation of entrepreneurship, including family businesses have arisen in Azerbaijan's Upper Karabakh and Kalbajar-Lachin economic regions, which have rich resource potential.
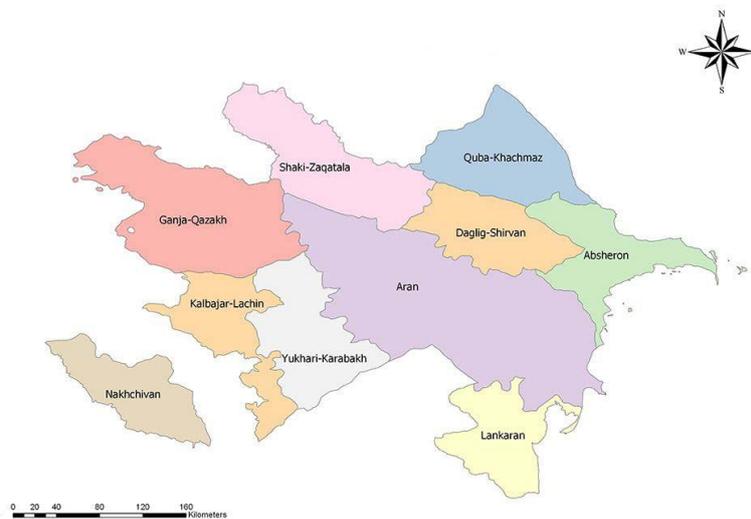
Figure 1: Social-Economic Regions of the Republic of Azerbaijan
(Source: https://www.pinterest.com/pin/512425263849743751/)

The Upper Karabakh economic region is one of the ten economic regions of Azerbaijan and rich in natural resourses, encompassing Aghdam, Tartar, Khojavend, Khojaly, Shusha, Jabrayil, Fuzuli administrative districts and the territory of Khankendi city. The total area of the economic region is 7.25 thousand square kilometers, accounting for 8.4 percent of the country's total land area. Agriculture is the mainstay of the region's economy. The region is represented in the country's division of labor of agricultural products by fruit-growing, grain-growing,

meat-milk and meat-wool sheep-breeding. Minerals abound in the economic region, which includes sulfur pyrites, limestone, cement, raw materials and massive polymetallic deposits. The mountains and foothills contain dirt, sand and other building materials (Ministry of Economy of the Republic of Azerbaijan, 2012).
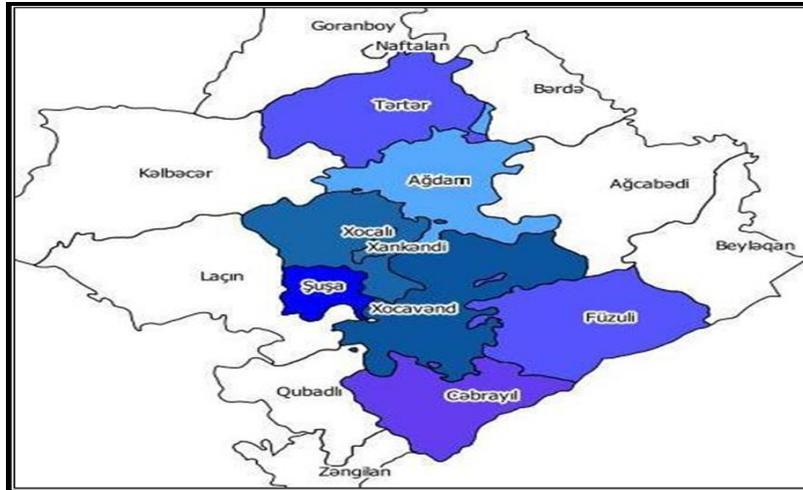
Figure 2: Upper Karabakh Economic Region
(Source: The Republic of Azerbaijan Ministry of Economy)

The population is 687,7 thousand people (The State Statistical Committee of the Republic of Azerbaijan, 2020). The Kalbajar-Lachin economic region includes the administrative districts of Kalbajar, Lachin, Zangilan, Gubadli and covers 6.400 square kilometers, accounting for 7.5 percent of the total area of the country. Economic region's territory is rich in mineral resources such as gold, mercury, chromite, granite, facing building stones, coral, and perlite. Thermal mineral springs such as Istisu, Minkend, and Tutgunchay, along with climatic and balneological conditions and mountain forests that can be used for resort and recreational purposes are all accessible (Economic Reforms Research Institute, 2011*).*
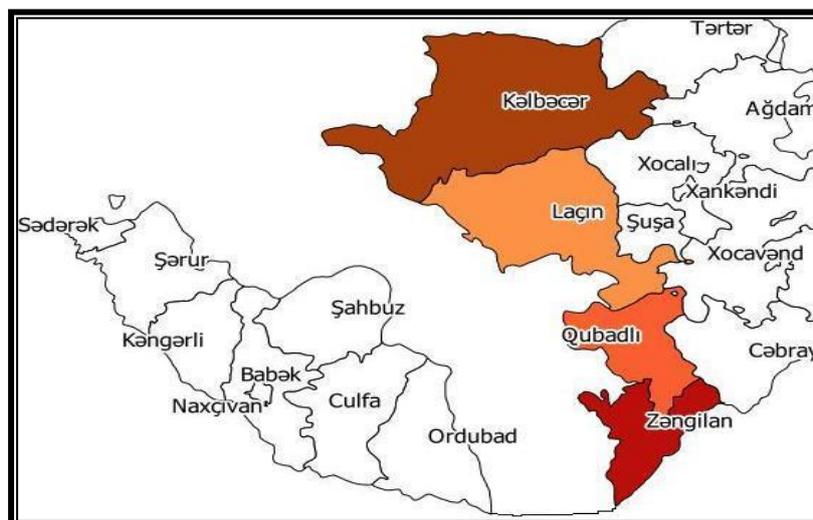
Figure 3: Kalbajar-Lachin Economic Region of the Republic of Azerbaijan
(Source: The Republic of Azerbaijan Ministry of Economy)

The population is 259.5 thousand people (The State Statistical Committee of the Republic of Azerbaijan, 2020).

It should be noted that Karabakh's abundant water supplies are critical to the country's industry and agriculture. The Sarsang reservior, which has a capacity of 560 million cubic metres, will provide irrigation water to approximately 100,000 hectares of land in six administrative districts across the country (Tartar, Agdam, Barda, Goranboy, Yevlakh and Agjabadi). In addition, there are other reserviors in liberated areas with a total capacity of 80 million cubic metres. Their involvement in the country's economy has the potential to establish conditions for the irrigation of an additional 15,000 hectares of land. The release of the Khudafarin reservoir, which is situated in the Jabrayil and Zangilan districts, entails irrigating 75,000 hectares of new land as well as enhancing irrigation of existing irrigated areas. Some estimates place the amount of this reserve at 1.6 billion cubic metres. Furthermore, the region's major rivers, Tartar, Bazarchay (Bargushadchay), Hakari, and other small rivers, have considerable hydropower potential. It is also presumed that there are 11 groundwater sources throughout the area. In other words, this equates to a daily groundwater supply of 1 million 968 thousand cubic metres. These areas are estimated to contain 39.6 percent of Azerbaijan's total geological mineral water reserves. In the region, there are approximately 120 mineral water deposits of various compositions that are of great medical significance. This equates to a mineral water supply of 7805 m3/day in other measurements. The hydropower plants in the region, such as "Khudafarin", "Giz Galasi" and "Sarsang" will be actively used to enhance the energy supply of the surrounding areas, reconstruct the country's liberated areas and integrating renewable energy sources into the country's energy system will result in geographic diversification of sources. It means that loading will be reduced through Absheron, Shirvan, and Mingachevir and that the share of renewable energy production in total energy production will increase (Center for Analysis of Economic Reforms and Communication, 2020). "The liberated areas should be a green energy zone as a whole. Our water supplies are plentiful. At the same time, solar and wind energy generation are viable options. İt is necessary to involve foreign partners and investors in this job, to create conditions for local businesses. Lands that have been liberated should be developed in a high-tech way" said Mr. President Ilham Aliyev (Aliyev, 2021). Karabakh's rich raw materials and natural resources, fertile land, water resources, beautiful scenery, well-planned transportation and energy networks, and business incentives provide new opportunities for family businesses. However, completely realizing the potential necessitates the reconstruction of damaged infrastructure and communications, as well as substantial investment. In which, the overall cost of the occupation to the country is estimated to be more than 800 billion dollars. A framework for the socio-economic growth of the liberated territories will be adopted in the "Concept and forecast indicators of economic and social development of the Republic of Azerbaijan for 2021 and the next 3 years". Within the framework of the concept, along with public investments, the priority will be the reconstruction of economic and social infrastructure in the liberated territories with the involvement of local and foreign investments, the implementation of work to ensure employment (Jabbarov, 2020). In the state budget for 2021, 2.2 billion AZN have been set aside for reconstruction of liberated territories, construction of modern infrastructure (roads, electricity, water, gas, communications, and other required infrastructure), education, health, cultural services, housing, and preservation of cultural and historical monuments (On the State Budget of the Republic of Azerbaijan for 2021, 2020). Building of a new road to Shusha (Aliyev, 2020), the design of the Barda-Agdam railway (Aliyev, I., 2021), the construction of Fuzuli International Airport, as well as the planning of an international airport in the Kalbajar or Lachin area (Aliyev, 2021), the reconstruction of land and railway to the Nakhchivan Autonomous Republic via Karabakh, and the efforts made to open all communications between Armenia and Azerbaijan are all new opportunities for the region. This opens up new opportunities for the development of tourism, agriculture, manufacturing and service sectors, as well as GDP growth, by making domestic and international freight transportation more convenient for the region and broadening people's

travel options. Azerbaijan will collaborate with Turkey on road, rail, and infrastructure projects (Aliyev, 2020*),* Italy (Məmmədov, 2020*)* and the United Kingdom (electricity) on energy infrastructure development in Karabakh (the Ministry of Energy of the Republic of Azerbaijan, 2021). Exim Bank in Hungary has opened a 100 million dollars credit line for companies interested in participating in the reconstruction program (Siyarto, 2021). Iran, Russia, Ukraine, Georgia, Israel and a number of European states are expected to contribute to the reconstruction effort. The presence of local and international companies in all projects, as well as the attractiveness of foreign direct investment would help to shape the business climate quickly. The re-establishment of infrastructure and the return of hundreds of thousands of refugees to Karabakh may provide great possibilities for family businesses to emerge in the area.

2. LITERATURE REVIEW

As an academic subject, family business is still considered to be in its adolescence. According to Donelley (1964), Barnes, and Hershon (1976), the roots of the research subject were mainly papers and case studies focused on the constructive position of family businesses (Poutziouri; Smyrnios; Klein, 2006). Despite its significance, the improved definition of a family business has yet to be adopted. A big, well-managed organization, on the other hand, has more clearly defined characteristics. The family company first appeared in the United States in the 1870s and 1890s, spurred on by waves of technological innovation in transportation and manufacturing known as "the second industrial revolution". Chemicals, electrical products, transportation systems, oil refining, primary metals, several sectors of the food and beverage sector, the tobacco industry, and many other capital-intensive industries have all seen increased investment. Today, family companies form the backbone of many newly developed economies, and "old industrialisers" still exist in many sectors, from labor-intensive industries to specialist suppliers. Medium-sized and large Italian family businesses, as well as well-known corporations in traditional and specialized fields such as Benetton, Luxottica, Ferrero, and Natuzzi are examples (Andrea, 2003: p. 6-9). Family companies are classified in a variety of shapes and sizes. For example, in which family members control 51 percent or more of an organization, and family members influence key organizational strategies and decisions for leadership continuity. Family company, according to the wider definition suggested by Poza and Daugherty (2014) and adopted in this report, includes all forms of entrepreneurship, including the strategic influence of a new generation CEO or entrepreneur with one or more family members on the firm. Furthermore, these individuals wield such power by a variety of ways, including equity control, board or managerial involvement, or principles and culture instilled in the company by family shareholders. Finally, family companies are made up of members of a family who pool their resources to accomplish (Alonso; Kok; O'Shea, 2018). Latin America is made up of 20 sovereign states and territories that account for about 9% of global population and 6% of global GDP. After Southeast Asia, the region is the world's second-largest emerging market and its growth is expected to accelerate significantly in the coming years. Family businesses, like the rest of the world are the most common form of economic and social organization in Latin America, though this prevalence varies significantly across countries. Approximately 60% of the region's GDP is generated by these organizations. Family control is not limited to small businesses, it also exists in about 40% of the region's largest corporations (Olavarrieta; Villena, 2014).

3. OPPORTUNITIES FOR FAMILY BUSINESS IN AZERBAIJAN

Development of the non-oil sector in the regions is one of the priorities of Azerbaijan's economic policy. The government promotes increasing the volume and quality of production in the regions (except Baku and Absheron) through state programs for socio-economic development of the regions, strategic roadmaps, tax incentives, investment and other means.

The role of family businesses in this sector has started to grow in recent years. Meanwhile, On September 23, 2016, "ABAD" - "Easy Support to Family Business" public legal entity was established under the auspices of the State Agency for Citizen Services and Social Innovations (ASAN service) under the President of the Republic of Azerbaijan. The organization's mission is to encourage people to actively participate in the country's socioeconomic development, including the growth of small and medium businesses, increased jobs, and the formation of competitive households. ABAD centers develop projects to help family-owned enterprises in the decorative and applied arts, as well as food production (ABAD, 2021). It also offers a number of services to its members, including the following. Business-Consulting. The various Business Consulting Services provided by the ABAD public legal entity to people. These services include assessing ABAD beneficiaries' capabilities and real market demand for their products, identifying new markets, and developing a variety of business plans in the presence of ABAD members. Technical Support. ABAD gives technical support services to family companies that have entered the public legal entity, such as constructing and enhancing production capacity, developing production vehicles, and procuring necessary production equipment. Marketinq Services. The ABAD provides packaging solutions to its member families that improve product marketability. Each product is given the appropriate design, and family brands are established. ABAD evaluates the scope of market demand for a specific product by conducting market research, which helps to avoid cost overruns by establishing a planned production. Financial Literacial. The main aim of ABAD is to promote family businesses in the country, and ABAD PLE places a high value on financial literacy among the population. Legal Assistance. ABAD members learn how to properly handle documentation issues as part of the rendered legal services, and they receive certification services based on the "single-window" system. Logistics and Sales Management. ABAD organizes transportation and sales for its members, conducts market research, examines real demand for a specific product, and then contacts appropriate department stores to sell its members' products. Once an agreement with the store is reached, planned production begins. ABAD is in charge of product packaging, as well as transportation to local storehouses and department store depos (ABAD, 2021).

3.1. Family business prospects in Karabakh

Entrepreneurs interested in building their businesses in the liberated areas are encouraged to submit business plans to the SMB (SMB, 2020). "ABAD and the Republic of Azerbaijan's Food Safety Agency have launched a new joint project in the liberated territories. The project's primary aim is to create favorable conditions for livestock farmers, ensure that modern slaughter methods are compatible, and provide healthier meat and meat products for consumption. The new butcheries will control and prevent the spread of zoonotic diseases, as well as protect people from transmission from animals to humans. As soon as possible, a foundation will be laid for the organization of veterinary mechanisms to regulate animal health in the liberated regions. The Azerbaijan Food Safety Institute will build new slaughterhouses at its expense. ABAD will engage in the selection of project participants, assess their potential and business management skills, and provide professional training for butchers within the framework of ABAD's support program, based on its experience working with micro and small businesses. Initially, relevant organizational work was carried out in Guzanly settlement of Aghdam district in order to create a modern abattoir, and the location of the slaughterhouse was determined (ABAD, 2020). Moreover, ABAD, the International Bank of Azerbaijan, and the Agrarian Credit and Development Agency signed a Tripartite Letter of Intent to support self-investment projects. Customers will be supplied with soft loans, agricultural product packaging and sales, new experience in production and marketing, logistics, transportation, certification, expert support, and experience exchange, according to this document (ABAD, 2020).

We can say that, state support and planned projects open up great opportunities for family businesses in the region, given Karabakh's rich natural resources and the local population's historical traditions in crafts, tourism, and agriculture. Natural honey, jam, dairy products, compotes, dried fruits, vegetables, and a variety of beverages, as well as carpet weaving, national coverings, jewelry and leather goods, decorative and applied arts, are all good family business ideas in Karabakh. The production of sheep breeding in Azerbaijan has historically resulted in the formation of an endless supply of raw materials for carpet weaving. Karabagh has always been well-known for its carpets. Local carpet-making evolved over time, based on national practices. It can be seen in paintings by European artists depicting carpets. The Karabakh "Mugan" carpet is depicted in Hans Memling's (15th century) paintings "Mary with the Child" and "Portrait of a Young Man" (Muradov, 2010: p. 10, 25). Domestic and international demand for Karabakh carpets, as well as national carpet-weaving practices and a plentiful supply of raw materials, provide all-around opportunities for family business growth in the region. Karabakh's national costumes are symbols of a long-standing culture that can be found in many museums around the world. A collection of national clothes in Karabakh includes headdresses, shoes, and jewelry (Narimanoglu, 2017). The constant demand for these items, as well as the growing interest of tourists visiting Azerbaijan in recent years, has created new opportunities for families interested in producing traditional Azerbaijani costumes. It also ensures profitability by ensuring raw material availability and manual labor differentiation. It should be noted that, in terms of the growth of decorative and applied arts, Karabakh is one of Azerbaijan's most popular places. Domestic families have traditionally worked in a variety of decorative and applied arts, including jewelry and coppersmithing. Cold weapons made by Karabakh weapons masters, horse and cavalry equipment, richly worked saddles, velvet chuls, stirrups and spurs made by blacksmiths and coppersmiths were highly valued (Salamzadeh, 2020). In terms of the current realities, the "Halal" food industry has the potential to play a significant role in the economic revival of Karabakh. The clean air, fertile land, and clean water supplies of the Karabakh region would provide excellent opportunities for environmentally friendly food production (Azerbaijan State University of Economics, 2021).

4. CONCLUSION

During the nearly 30 years occupation of Karabakh, an integral part of the Republic of Azerbaijan, all of the region's infrastructure and communications were lost, and its wealth were looted. As a result, establishing a family business in the newly liberated territories seems impractical at first. However, the government's priority in the reconstruction of Karabakh and the resettlement of refugees indicates that the region will soon enter a new phase of development. The government appears committed to providing Karabakh with modern infrastructure, a favorable business climate, and a high standard of living. Without a question, territorial liberation and progressive tendencies would have an effect on economic growth and business activity. According to preliminary estimates, the gross production of key sectors in Upper Karabakh and Kalbajar-Lachin economic regions could rise by over 2 billion manats in the coming years. In this case, the family business is one of the effective methods to provide jobs for the hundreds of thousands of people who will return to Karabakh. However, the establishment of family businesses based primarily on pre-occupation experience and historical traditions would be successful. At the next stage, it would be more appropriate to develop family enterprises based on existing outcomes. The region's existing potential should be recognized as new prospects for family businesses in the service and manufacturing sectors. Taking into account natural-geographical and resource factors, as well as other factors, we conclude that there are opportunities for family businesses to build greater value in the fields of crafts, agriculture, and tourism in Karabakh.

To summarize all facts, we propose the following proposals for the creation of family businesses in the Upper Karabakh and Kalbajar-Lachin economic regions.

1) Providing financial, technical, marketing and logistical support to families interested in starting businesses in Karabakh, primarily in the fields of crafts, agriculture and tourism.
2) Creation of an unique concept for the growth of rural tourism. Thus, families who want to build a business in this direction can be systematically assisted in the design of housing and the construction of other required infrastructure, based on the opportunities of rural tourism in the restoration of areas.
3) Ensure the involvement of family business owners in adult education and vocational training programs.

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ISLAMIC FINANCIAL SYSTEM: KEY TRENDS AND PROSPECTS

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ABSTRACT
The Islamic economic model has become widespread in the world, which has determined the interest of the economic and scientific communities in introducing its experience into the traditional financial model in order to minimize the risk of crisis situations and form a more stable financial system. The problems of the development of Islamic banking have acquired particular relevance now: the demand from the dynamically increasing number of Muslims in the United States and Europe for financial services and transactions made in accordance with the principles of Sharia is constantly increasing; financial products offered by the Muslim industry are attractive enough for both Muslim and non-Muslim investors. In addition, it is interesting to discuss the need to apply the experience of Islamic banks in the traditional financial system. Therefore, the topic of the development of the Islamic financial industry in Azerbaijan is also relevant in connection with its rapid growth throughout the world. The aim of the work is to study the theoretical foundations of Islamic banking, analyze the problem and development of Islamic banking in modern conditions of the new challenge of globalization of the economy, as well as develop recommendations and proposals for the introduction of Islamic institutions into the banking system of Azerbaijan. Analysis of the financial sector in Azerbaijan and Russia, which are implementing a pilot project to introduce Islamic banking, revealed a number of problems and prospects. Firstly, the developed market environment contributes to the adaptation of the principles of the Islamic banking model, and secondly, the availability of qualified personnel in the field of Islamic banking makes it possible to develop tactical and strategic plans for the development of a financial institution.
Keywords: *Islamic finance, Islamic banking, alternative banking system, financial product, Islamic financial institutions*

1. INTRODUCTION

Today in the world there are more than 400 Islamic financial institutions in 58 countries, and they are located not only in the Muslim states of the Middle East and Southeast Asia. The idea of an Islamic financial system does not contradict the banking laws of countries that have not historically professed Islam; in fact, 5% of all Islamic assets today are in non-Muslim countries. The Islamic financial sector has shown faster growth after the global crisis of 2008 compared to the traditional one, has developed in many countries outside the Islamic world. These countries include the UK, Luxembourg and South Africa, while Japan and the US are considering allowing this type of banking products. The Islamic finance industry is one of the fastest growing in the world, with an annual asset growth rate of 15-20% over the past ten years. «Due to its youth, this sector remains relatively small: according to estimates of global consulting companies, the volume of Islamic financial assets in 2013 amounted to about 1.7 trillion. dollars1. and in 2014 2 trillion. Doll». [Мамедов, 2018.P.7].

2. THE GENESIS OF ISLAMIC BANKING

«The history of the development of Islamic finance is represented mainly by the formation of Islamic banks. The first attempts to create Islamic banks were made in the mid-1940s. in Malaysia and in the late 1950s. in Pakistan, but the first bank to operate on the basis of Sharia law was the Mit Ghamr Savings Bank, established in Egypt in 1963, later renamed Nasser Social Bank» [Мамедов, 2013. P. 4]. The Egyptian initiative began gradually to be introduced into the economies of other Muslim countries, who saw in it an opportunity to emphasize their identity. At first, they were in the nature of scattered entities, but by the mid-70s they began to consolidate into fairly large institutions, which by now have developed into an entire industry with their own rules, products and restrictions. The culmination of the process was the creation at the same time of the Dubai Islamic Bank and the Islamic Development Bank in Jeddah by the decision of the Organization of the Islamic Conference. In 1975, at a meeting of the Organization de la conference islamique (established in 1970), it was decided to create an Islamic Development Bank (Banque islamique de development - BID) by analogy with the World Bank. Islamic Development Bank laid the foundation for the official development of Islamic banking. Islamic banks began to emerge this year, the first of which were Dubai Islamique Banque (DIB), Kuwait Finance House (KFH) and Bahrain Islamic Bank (BIB). The Islamic financial sector has shown faster growth after the global crisis of 2008 compared to the traditional one, has developed in many countries outside the Islamic world. In 2015, there were 363 Islamic lending institutions worldwide, of which approximately 69% were fully Islamic "autonomous" banks, while the remaining 31% were traditional banks offering Islamic services through "Islamic windows". Currently, Saudi Arabia is considered the main market for Islamic banking due to strong demand from corporate and private clients. This country accounts for more than a third of Islamic financial assets, that is, approximately $ 446 billion. By 2019, the value of Islamic assets in the kingdom could reach $ 683 billion. In the international economy, there are 21 Islamic banks with capital over USD 1 billion and at least 1 Islamic bank with capital over USD 10 billion. Currently, the capital of 21 Islamic banks is at least US $ 1 billion, compared with 19 such banks in 2012. Of these 21 banks, nineteen are located in Qatar, Indonesia, Saudi Arabia, Malaysia, the United Arab Emirates and Turkey. So, the Islamic finance industry is one of the fastest growing in the world: over the past ten years, with an annual asset growth rate of 15-20%. Due to its youth, this sector remains relatively small: according to estimates of global consulting companies, the volume of Islamic financial assets in 2016 amounted to about 2 trillion. dollars (For comparison: the total assets of the 20 largest banks in the world in 2013 amounted to about 44 trillion dollars). Today, the Islamic financial sector is growing rapidly, its average growth rate is estimated at 10-15% per year. The entire Islamic financial industry is projected to be valued at $ 3.4 trillion by 2020. [Филоник, 2017, p. 88].

3. ISLAMIC BANKING MODELS

«From the standpoint of the development of Islamic banking, one can single out developed, developing, undeveloped, developing, undeveloped markets» [Mamedov,2018]. Most of the Gulf countries, as well as Malaysia, can be ranked as a developed market. In these countries, the share of Islamic banks' assets exceeds 10% of the total assets of banks. Emerging markets include countries such as Oman, Pakistan, Indonesia and Turkey, in which the share of Islamic banks' assets ranges from 2 to 10%. The undeveloped market includes the post-Soviet countries of Central Asia, Russia, as well as potential countries like India and China. The practical embodiment of a full-fledged Islamic bank exists in the Gulf countries, as well as in countries such as Pakistan, Bangladesh, Malaysia, Sudan, Egypt, Kyrgyzstan, Kazakhstan and the United Kingdom. According to the laws of Pakistan, Sudan and Iran, the activities of conventional banks are prohibited, in these countries there are independent Islamic banks and "Islamic

windows" of conventional banks. In other countries, Islamic banks exist in parallel with conventional ones. The participation bank is a unique scheme for secular Turkey, the legislation of which does not accept any religious attributes in the texts and the term "Islamic bank" cannot be used in the law. Participation banks comply with IFSB and AAOIFI Islamic standards applicable to full-fledged Islamic banks, and they also have an external and internal Sharia expert council. In Turkey, the participation of the Participating Bank in the sector is five percent. The government intends to bring this figure to 15 percent by 2023. Islamic window refers to a branch of an ordinary conventional bank operating in accordance with Sharia law. At the same time, the assets of the Islamic conventional divisions of the bank are not mixed, they are managed and regulated separately. Large transnational banks Bank of America, Barclays, BNP Paribas, Citibank, JPMorgan Chase, HSBC and others have Islamic windows. Moreover, these banks open their Islamic windows both in Islamic countries and Western countries. In the UK, some banks such as Citi and Barclays have opened so-called Islamic windows.

4. ISLAMIC DEVELOPMENT BANK - AS THE MAIN FINANCIAL INSTITUTION OF THE ISLAMIC WORLD

The main victory of the followers of the idea of the need to create a new trend in world finance can be considered the opening in 1973 of the Islamic Development Bank (hereinafter - the IDB). Today we can safely say that the project turned out to be successful. Almost all large Muslim countries are IDB shareholders. The Bank is responsible for mobilizing financial resources in the IDB member countries. The mission of the IDB is to maintain economic and social progress in the countries of the Muslim world in accordance with the laws of Islam. Currently, 56 states are members of the IDB. Islamic Development Bank Group (Islamic Development Bank Groups include the following organizations: Islamic Development Bank (1975); Islamic Research and Training Institute (1981); Islamic Corporation for Investment Insurance and Export Credit (1994); Islamic Corporation for private sector development (1999); International Islamic Trade and Finance Corporation (2008)) is involved in a wide range of activities: project financing (based on the principles of public-private partnership); promoting poverty reduction in member countries; development of trade and economic cooperation between member countries; support for small and medium-sized businesses (including microfinance services); resource mobilization of member countries; participation in the capital of Islamic financial institutions; insurance and reinsurance of investments and export crediting; organization of research and educational programs for the working-age population of the member countries; assistance to member countries in emergency situations; other aspects of the activity. Based on the results of the IDB's activities in 2015, the largest share in the portfolio of socially significant projects was occupied by projects in the field of education (55%), which illustrates the desire of the IDB to transform the Islamic economy into a knowledge-based economy [Мамедов,2019. 178]. But here is the fact that the IDB has gone far beyond the framework of these states in its activities. A number of factors can be enumerated about the attractiveness of the financial model to which he adheres:

1. these are the advantages of investment decisions that are not present in the financial system familiar to the Western world;
2. it is worth noting a certain ethical nature of investments;
3. Funds of oil tycoons from the Islamic world look attractive to the banking sectors. To attract these funds, European banks have to open so-called "Islamic windows";
4. increase in the Muslim population in the world as a whole.

5. ISTANBUL AS AN IMPORTANT CENTER FOR ISLAMIC BANKING

The experience of functioning of Islamic financial institutions in Turkey is of particular interest. This country, despite the fact that over 99% of the population are Muslims, as a result of the Kemalist revolution, was officially proclaimed a secular state, and most attempts to implement Islamic instruments, including economic ones, met with resistance from the military. The activities of Islamic enterprises in Turkey began with the coming to power in 1983 of the first civilian government after the military coup, headed by Turgut Özal [Мамедов, 2005. P.144]. In an effort to create a favorable climate for attracting investments from Arab countries, in December 1983, the Council of Ministers of Turkey adopted a decree "On the establishment and operation of special financial organizations." Until 1999, they were classified as "non-bank financial institutions" and only after the Turkish financial crisis in 2001, the government amended the banking law No. 5411 in November 2005, when special financial institutions received the status of banks, but were not Islamic named, and were renamed "participation banks" (Katılım Bankaları). In addition, the Partner Banks received guarantees from the Turkish Deposit Insurance Fund (TMSF). Currently, there are about 52 banks operating in Turkey, of which 5 are Islamic banks: Albaraka Turk (operating since 1985), Kuveyt Turk (since 1988), Turkiye Finans (since 2005), Ziraat katilim (since 2015) Vakif katilim (since 2016). The controlling stake in Ziraat katilim and Vakif katilim is owned by the state. In the ownership structure of other Islamic banks, more than half of the shares are currently owned by foreigners: Albaraka Türk - Bahrain, Kuveyt Türk - Kuwait, Türkiye Finans - Saudi Arabia. In 2015, Ziraat Bank opened the first branch in Istanbul, which operates on the principles of Islamic banking. Turkish President R. T. Erdogan called on other state-owned banks - Vakifbank and Halk Bank - to follow the example of Ziraat Bank. He stressed that state-owned banks should increase the share of the Islamic banking sector in the country and turn Istanbul into an important center in the region and the world. In 2016, joint participation banks accounted for 5% of the TR banking sector and the total amount of funds used for Islamic banking amounted to 133 billion Turkish Lira. During this period, we have also increased the number of their missions and staff. If in 2002 there were 188 branches in the country, then by 2016 their number reached 959. Accordingly, the working staff of these financial institutions increased from 3250 to 17020 people. In general, experts note the dynamic growth of Islamic banking in Turkey, which has the potential to further develop financial instruments to provide an alternative to conventional banking services. Currently, the Islamic banking sector in Turkey accounts for only 2.5% of the total turnover of Islamic banking in the world. Given the stability of the TR financial system, it is expected that the share of the Turkish banking sector in the global Islamic banking sector is expected to increase significantly in the medium term. Turkey aims to ensure that Islamic banking accounts for 15% of the banking services market by 2023, which implies the growth of the industry to $ 180 billion.

6. SIGNIFICANCE OF ISLAMIC BANKING IN THE UK

The Islamic banking system is a phenomenon that is not unique to the countries of the Islamic world. For example, in the UK, following the research of the Working Group on Islamic Finance, created by the Bank of England in 2001 in order to study obstacles to the development of the industry in the country, amendments were made to the financial legislation to avoid double taxation in Islamic mortgage transactions. Later, the legislation was amended to legalize other Islamic financial instruments and create the same tax conditions for them as for similar traditional instruments. The development of Islamic finance in Britain was also facilitated by the fact that such large international financial institutions as Cite, Deutsche and HSBC had representative offices in the Middle East and Southeast Asia, studied the experience and need for Islamic financial services and did not see anything extraordinary in their provision. The UK is today the largest market in Europe and one of the world's leaders in the development of

Islamic finance. Today, the UK, which is one of the global financial centers, declares its ambitions to also become the world center of Islamic finance, seeks to take this role away from Malaysia, which is a leader in attracting Islamic financial resources from the Persian Gulf countries. Currently, there are more than 20 banks in this country (6 of which are full-fledged Islamic banks) with a volume of Islamic financial assets of $ 19 billion, and 50 permits for Islamic investment securities were held on the London Stock Exchange for a total of $ 35 billion. In 2014, the UK issued the first Islamic bonds with a par value of 200 million pounds and attracted 2.3 billion pounds sterling on them - ten times the amount placed.

7. DEVELOPMENT OF ISLAMIC FINANCE IN THE CIS COUNTRIES
The development of Islamic finance also took place in some CIS countries. Of the 11 CIS countries, five are actively developing the legal framework for regulating Islamic finance - these are Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, RF. In Kazakhstan, the development of Islamic finance is associated with the financial and economic crisis of 2007, on the basis of the National Bank of Kazakhstan (NBK), the Regional Financial Center of Alma-Ata was created. In 2009, the law "On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on the Organization and Activities of Islamic Banks and Organization of Islamic Finance" was adopted, and in 2012, the National Bank of Kazakhstan developed and approved a roadmap for the development of Islamic finance up to 2020 In March 2010, the first Islamic bank, Al-Hilal, was registered in the republic. The Kazakhstan branch of Al-Hilal Bank (Abu Dhabi), is a full-fledged Islamic bank, but only provides corporate financing. Islamic banks in Kazakhstan have opened up a new stream of income for the government of the country, which has made it possible to attract new types of investors. In 2009, the assets of the country's largest Islamic bank, the Emirati AlHilal, reached $ 300 million, experts predict that by 2020 the share of Islamic banking in Kazakhstan may reach 10%. In Kyrgyzstan, there is a legislative framework and developed instructions that regulate the activities of Islamic financial organizations. The process of practical implementation began with the dense project "Eco Islamic Bank", in this republic there are many Islamic microfinance organizations. Tajikistan is currently developing a special law on Islamic banking. The development is carried out by the efforts of the National Bank of Tajikistan and a special commission, which includes representatives of a number of ministries and other state bodies. With the assistance of the Islamic Development Bank and the National Bank of Tajikistan, a memorandum of understanding was signed and a legal framework for the development of Islamic finance was formed (with the participation of Nicolas from Malaysia). The growth in the level of microcredit increases the interest in Islamic banking at the global level. One cannot but agree with the following statement: "The Islamic finance industry is one of the fastest growing in the world: over the past 10 years, the annual growth rate of assets is 15–20%. According to forecasts, by 2020 the volume of the Islamic financial industry will reach USD 1.8 trillion". Islamic Banking offers an option that provides stability in financing all projects internationally. It should be noted that thanks to the Islamic banking system, a higher level of stability is provided in terms of financing all projects at the international level [Мамедов,2019. p.176]. Azerbaijan is taking important steps for cooperation with the Islamic Development Bank (IDB). Currently, 56 states are participating in it. At the same time, a large role is assigned to the introduction of Islamic banking in Azerbaijan. The IDB Group is involved in a wide range of activities. Among them - "project financing; promoting poverty reduction in member countries; development of trade and economic cooperation between member countries; support for small and medium-sized businesses; mobilization of resources from member countries; participation in the capital of Islamic financial institutions; insurance and reinsurance of investments and export crediting; organization of research and educational programs for the working-age population of the member countries; assistance to member countries in emergency situations; other aspects of

activity ". The Government of the Republic of Azerbaijan and the Islamic Development Bank signed a grant agreement, which provides for the provision of technical assistance in order to prepare a legislative framework for Islamic finance. The main purpose of this Agreement is both the study of the banking sector legislation and the analysis of the opportunities provided for the introduction of the fundamental norms of Islamic banking in the Republic of Azerbaijan. In 1991–2018. The Islamic Development Bank has allocated loans to Azerbaijan in the amount of $ 1.387 billion to prepare a legal framework for Islamic financing. A consortium of companies Ekvita Consulting and European experts have been attracted to prepare proposals for the development of Islamic finance in Azerbaijan. The Islamic Development Bank has provided technical assistance to Azerbaijan in the amount of $ 200,000. The technical assistance includes the analysis of banking legislation and the study of the possibilities of introducing the principles of Islamic banking in Azerbaijan. However, as Moody's experts clarify in their report on the prospects for the development of Islamic banking in the CIS countries, "despite the large number of Muslim population, the prospects for the development of Islamic banking in Azerbaijan are weak". In our opinion, the problem of introducing Islamic banking needs to be thoroughly investigated, which is associated with the solution of two issues: the creation of a fundamental legal framework and the training of professional personnel. The latter is especially important in order to achieve the efficiency of the process itself. The solution to the problem, which determines the high level of efficiency of the banking system of Azerbaijan, lies in the growth of the competitiveness of banking institutions on the basis of their merger and increase in banking capital [Mamedov, 2020. P 65].

8. CONCLUSION

So, the main drivers for the development of the Islamic finance industry will be Saudi Arabia and Malaysia, while the role of Turkey and Indonesia will increase. Turkey aims to ensure that Islamic banking accounts for 15% of the banking market by 2023, which implies the growth of the industry to $ 180 billion. However, the current drop in oil prices and a decrease in the level of temporarily free liquidity also affects the ability of Islamic banks to compete with traditional ones in Western financial markets. The experience of different countries shows that there is no single form that just needs to be applied - there are different views on certain issues. Russia can proceed both from the experience of some countries and develop its own approach. One of the conceptual questions is the definition: should a financial institution working with Islamic methods be called Islamic? For example, in Turkey, these banks are called "participation banks", in Great Britain there is no word "Islamic" in the legislation either. The main difference between Islamic finance and the global banking model is the rejection of lending interest, i.e. it's not about the name, it's about the principles. In addition, it is important to pay attention to improving the financial literacy of the population and protecting consumer rights. Unfortunately, today, both in Russia and in many CIS countries, there is an idea among a certain part of the population that Islamic banks are financial organizations where you can get an interest-free loan or some kind of assistance. Clients should know the specifics of Islamic banking, understand what investment deposits are. Speaking about the prospects, one could consider the creation of a single Islamic bank for the development of the CIS countries. We believe that such an institution can serve as a good platform for the further development of economic and financial relations within the CIS countries.

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SWOT ANALYSIS AND ASSESSMENT OF AZERBAIJAN'S TRANSITION POTENTIAL TO THE CONCEPT OF SUSTAINABLE DEVELOPMENT

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ABSTRACT

At the article, it searches and evaluates the concept of transition to sustainable development based on world experience, all fields of human activity from the scientific and methodological point of view, taking into account economic, social, environmental sustainability, as well as the interests of present and future generations. Depending on the nature and structure of the factors that determine development, negative tendencies are also observed, which manifests itself in the form of "development without a future", uneven development. Because, in some cases as a result of economic development, depletion of natural resources, environmental pollution, and demographic imbalances are also observed. Based on the analysis of concrete factual materials of Azerbaijan, it is concluded that the economic, social, scientific, technical, financial potential, human capital, infrastructure, improvement the level of population social welfare, as well as normative-legal acts and institutional framework has made the transition to the concept of sustainable development a practical challenge. Then, based on the current state of socio-economic development of the country and the 360-degree diagnostics of the SWOT analysis of the starting position and opportunities that can be mobilized within the existing opportunities, the balance of resources, the level of their use and potentially mobilized national economy for the near future. Attempts were made to define the main priorities, goals and objectives, as well as to make concrete proposals and recommendations for the effective implementation of the existing forms, methods, principles and mechanisms of regulation of socio-economic processes in our country in the near future economic, social, demographic, environmental, humanitarian and institutional development are put forward.
Keywords: Sustainable development, economic sustainability, social sustainability, environmental sustainability, SWOT analysis, "Development without a future", "Uneven development", development concept, national priorities, economic environment, social environment, ecological environment

1. INTRODUCTION

The successes which achieved in the field of socio-economic development in Azerbaijan over the past decade, the created economic, social, scientific and technical, financial potential, human capital, infrastructure, improvement the level of population social welfare, as well as normative-legal acts and institutional base allowed our country to present the transition to sustainable development as a practical problem. At the same time, as a result of the global financial crisis and the sharp decline in world crude oil prices over the past two years, the devaluation of the manat, the role and opportunities of the oil factor in the development of the national economy, limited income, declining GDP in our trading partners, increasing the deficit, increasing global pressure on the nature of economic development as a whole, distorting the factors, criteria, driving forces, principles and mechanisms of economic development in our country, which has applied to the perspective period, has made it necessary to develop a qualitatively new economic development strategy. This, in turn, includes: a GZIT (strengths, weaknesses sides, opportunities, dangers and threats) analysis of the current state of socio-

economic development of our country analysis and 360-degree diagnostics, assessment of the balance of resources owned by the country, the degree of their use and potential that can be mobilized in the current condition; ensuring the effective implementation of economic, social, environmental and institutional development of the existing form, method, principle, requirements of regulation of socio-economic processes requires improvement of the conceptual basis of stable fiscal and effective monetary policy.

2. POTENTIAL FOR AZERBAIJAN'S TRANSITION TO THE CONCEPT OF SUSTAINABLE DEVELOPMENT

In condition of globalization, the demand for resources of mankind is constantly growing, the growing cost of their production, the growing dependence on globalization as a logical consequence of globalization, has led to the universal nature of economic, social, demographic and environmental problems. In such requirements, the formation and development of an effective national economy in Azerbaijan is decisively conditioned by the transition to its model of sustainable development. The historical experience of the developed countries shows that in order to ensure the transition of the national economy to sustainable development, the resource potential of the country must first and foremost be of interest and benefit to future generations. The required necessary economic, social, ecological, technical-technological potential should be graduallyformed for the transition from resourcebased development model to innovative development model. Generally, concept of sustainable development based on such a civilized approach is to be dominated by socio - economic systems, and regardless of the nature of development models, it is necessary to ensure that the application and development of scientific and technical progress in the national economy is accelerated and the principles of sustainable human life at all levels should be upheld and the balance of the environment should not be worsened. All this, in turn, makes it necessary to re-evaluate the growth factors of the national economy in terms of sustainable development. In such circumstances, the optimality and effectiveness of economic policy in each country, its responsiveness to the interests of present and future generations, and above all, theresilience of national economies to the global financial crisis, especially ecologicalbalance. From this point of view, modernization of production in our country in the near future, increasing the competitiveness of innovative development, improving the structure and diversification of the economy, ensuring inclusive economic growth are based on the principles, mechanisms and goals of sustainabledevelopment. In this context, the potential for the transition of the national economy to sustainable development in modern times requires an assessment based on SWOT analysis. Emphasizing the urgency of the problem, Mr. President Ilham Aliyev noted on the 90th anniversary of Baku State University: "Azerbaijan has completed a period of transition. We must draw conclusions by analyzing the existing realities, think about new paradigms and define the conceptual basis of the economic development model for the transition of the Azerbaijani economy to sustainable development. All these issues should form the main line of the strategic economic policy of the state developed in our country for the near future (1). Ensuring the transition of the national economy to a model of sustainable development requires, first of all, the development and practical implementation of the conceptual framework of the development strategy, taking into account the relevant progressive world experience and national realities. World experience shows that although the natural resources of each country provide the initial necessary basis for its sustainable economic development, in many cases it does not act as a decisive condition. The development of the transition concept to sustainable development of national economies first of all, it is necessary to identify the balance of material, labor and natural resources of the country, the degree of their use, the factors of production that can be mobilized within the capabilities of existing scientific and technological progress and financial potential. This, in turn, requires an objective assessment of the level of economic development and potential of

the country in terms of economic, scientific, technical, financial, social, environmental and human capital. In general, if we try to characterize the perspective development model aimed at ensuring sustainable development in our country in modern times, we will focus on the following priorities, showing the optimal ratio of key factors in economic growth, ensuring the security of the national economy, the competitiveness of the national economy. Special attention should be paid to the assessment of growth efficiency from the point of view of reproduction, to the emphasis on social efficiency and, finally, to the fact that efficient use of one factor does not negatively affect the level of use of another. The analysis shows that at different stages of world development, the priorities and goals of the transition to sustainable development are also improving. Then, on December 6, 2016, twelve Strategic Roadmaps on eleven sectors were approved by Presidential decree. For the first time, these roadmaps set as a strategic task the harmonious solution of economic and social development, the interests of present and future generations, as well as raising the inclusion of the economy. In general, they are: investment-innovation; improving the business environment; investment promotion; implementation of structural and institutional reforms; raising the competitiveness of the national economy; stimulating the development of the non-oil sector and exports; state support for the development of profitable labor-intensive industries and productions; improving the system of salaries, pensions and benefits; promotion of the "Made in Azerbaijan" brand; and etc. can be grouped by destination. At this time, the expectation of the security of the national economy was defined as an inevitable condition for the formation and implementation of the strategy of economic reforms to be implemented in our country. The success of economic reforms in each country depends crucially on the nature of the economic policy pursued in the country, taking into account their changes in the world and national interests (2). The realization of the strategic goals and objectives of our country's transition to a model of sustainable development in the near future requires improving the structure of the national economy in accordance with changing conditions and demand, ensuring optimal balance between the real and financial sectors. The analysis shows that the nature of our country's economic development in the near future will include: the relocation of global economic power centers to emerging markets in Asia; significant effects of technological innovations, the changing geopolitical configuration and the gradual reduction of the effects of the oil and gas factor will significantly increase the potential of the non-oil sector. The analysis shows that a large part of the investment in the country's economy over the past decade has been directed to the export of oil and gas resources to the world market, the creation of economic and social and market infrastructure necessary for the development of entrepreneurship, their main source of funding, along with the state budget, was financed by transfers from the Oil Fund. In my opinion, the above should be considered one of the most characteristic features of Azerbaijan's transition to a sustainable development strategy. All this will dramatically increase the solidity to possible negative cataclysms and the negative impact of geoeconomic and nstability on the sustainable and dynamic development of the national economy in the near future. In general, during 1993-2018, the volume of investments in fixed assets in our country at the expense of all financial sources amounted to more than $ 250 billion. [Statistical Indicators of Azerbaijan, Baku 2018] Assessing the potential and opportunities created in our country in recent years in all areas, the International Monetary Fund forecasts 2-3 percent annual growth of the Azerbaijani economy until 2025. Today, the Azerbaijani economy is in the process of transition from quantitative to qualitative changes. It is well known that no matter how similar economic growth is to any country in terms of natural resources, their ability to provide ever-raising reproduction is limited, but human capital is a constant, inexhaustible source of economic development. From this point of view, in the near future, the national economy in Azerbaijan will ensure its self-development and competitiveness, and oil capital will depend to a large extent on the development of human capital.

The analysis shows that if we try to characterize the perspective development model aimed at ensuring sustainable development in our country in modern times, taking into account the world experience and national realities, we will focus on the following priority areas; to expect optimal ratios of key and progress factors in economic growth, to ensure the security of the national economy, to make the national economy competitive, to choose the right priorities, to approach the assessment of the efficiency of economic growth from the point of view of reproduction, highlighting social efficiency and finally, special attention should be paid to the fact that the efficient use of one factor does not negatively affect the level of use of another. P. Solow rightly notes that three main issues should be in the center of attention while determining economic policy. First, society should be direct more or less of its national income to the savings. Second, it must be determined how economic policies can affect savings, and third, how changes in economic policies can affect technical progress. Because, as M. Todaro noted, "Development is a highly planned process, which accelerates the transformation ofpeople's behavior, social institutions, social structure, fundamental, economic growth, reduces unemployment and softens inequality in society." [3] It is also a fact that the transition to the concept of real sustainable development is virtually impossible without ensuring its international competitiveness. Porter rightly writesthat the competitiveness of the country's economy depends not only on the known classical factors of economic development, but also on national conditions, in other words, the structure of the national economy, national culture, mentality of public servants, and even the country's history also has a significant effect [4]. Of course, in this case, as noted by P. Solow, the expectation of the degree of sustainability between existing produced capital and natural resources is a prerequisite for the development of sustainable development programs. Serious problems in the field of ensuring the harmony of nature-society,human relations in modern times have become an objective necessity to re-evaluate them in terms of sustainable development. In general, since the 1970s, new approaches to the concept of economic growth have emerged in relation to sustainable development. The introduction of the concept of sustainable development as a practical problem in the international arena dates back to the 1971 report "Limits of Growth" prepared by the Club of Rome. It was emphasizedin the report that the increasing scale and wasteful use of natural resources, especially energy, causes great damage to the environment, rendering it unusable, and casts doubt on the possibility of normal life on Earth in the long run. To address this problem, the need to shift from intensive economic growth to intensive development in anticipation of ecological balance was justified. Taking into concideration the relevance and practical significance of the principles of the report, an international conference on sustainable development was held in Stockholm in 1972. It was presented to humanity as a challenge to address the problem of limited land resources at this conference. Then, the fundamental principles, ways, mechanisms and priorities of the concept of sustainable development were identified at the international summits held in 1992, 2002 and 2012. In 1972, Nobel laureates Y. Nordhaus and J. Tobin, in their study "Growth isObsolete," actually proposed a model for the first time to assess the sustainability of the economy. In 1974, the conditions for sustainable economic development were formed for the first time by Robert Solow. He noted that a gradual decline in the consumption of the economy in order to ensure the intended sustainability of the natural resources in the produced capital provided the necessary conditions for the development of a sustainability program.Then, on October 20, 1987, the resolution of the 42nd session of the IMF defined the basic principles of sustainable development of mankind. It is known that in the world economic literature, the concepts of weak and strong sustainability are distinguished depending on the level of economic development of the country, the chosen modelof development and the degree of integration into the world economy. "Poor sustainability - is a development that does not reduce from generation to generation." Other economists agree that poor sustainability is seen as "a sustainable supply of consumption without worsening the

condition of fixed capital." We note that it is the most difficult and contradictory process for economists to accurately define the indicators of "weak and strong" sustainable development (5). "Sustainability - is a development based on the long-term unity of social, financial and ecological balance, with long-term economic, environmental and cultural viability." The literature shows that the 5 main elements of sustainable economic development are indices and indicators for assessing the economy, ecology, fairness, education and sustainable development (6). In general, researchers agree that sustainable development involves maintaining a weak balance between improvement of people's lifestyles, needs, material well-being, and the ecosystems. of natural resources (6). The analysisshows that the practical and effective implementation of the sustainable development strategy in highly developed national economies is determined by known general principles, but its provision at the mega, macro, meso, micro and regional levels must be taken into account. Thus, depending on the level of development of national economies of individual countries (6), the role of individual factors in improving its competitiveness must be taken into account. In recent years, the strengthening of the social and humanitarian aspects of sustainable development in the international arena and the practical realization of these goals have become more relevant. In this regard, in accordance with the goals of sustainable development adopted at the UN Summit in September 2015, the "2030 Agenda" was adopted, taking into account the need for a comprehensiveinstitutional and political approach to ensure the implementation of sustainable development goals in Azerbaijan until 2030 and the National Coordinating Council for Sustainable Development was established and the transition to the concept of inclusive economic growth was set as an important task. In recent times, the principles put forward by the UN have used the terms "development without a future", as well as "unequal development". Analysis and evaluation of existing concepts of inclusive development led to the conclusion that inclusive development directly uses the potential of labor, provides effective employment, minimizes poverty and its negative consequences, eliminates sharp differences in income between different social groups, different regions, to reduce inequality in living standards and infrastructure, especially in social infrastructure, and to minimize the direct Gini, Lawrence curve requirements, the correspondence between the country's income and consumption, and the difference between these consumption groups. At the same time, the concept of inclusive growth implies comprehensive human development, as well as the development of health and education services, not only the development of these services, but the availability of these services among all groups of the population. Ultimately, the nature of inclusive development in the country is strongly influenced by the model of development it chooses, the historically formed structure of the economy, the level of development and the national mentality. The nature of ensuring long-term inclusive economic growth has a strong negative impact on theexisting disproportions in the level of socio-economic development of the country. In order to eliminate these negative processes in regional economic development, three regional development programs covering 2004-2008, 2009-2013, 2014-2018were adopted by the order of the President of the Republic of Azerbaijan, and today significant results have been achieved due to their implementation. In general, $ 50 billion has been spent on regional development inour country over the past fifteen years.

3. CHARACTERISTICS AND PRIORITIES OF AZERBAIJAN'S TRANSITION STRATEGY TO THE CONCEPT OF SUSTAINABLE DEVELOPMENT

World experience shows that the practical implementation of sustainable development in a concrete example of any country is a logical sequence: a systematic SWOT analysis of the level of development of the national economy, goal setting, the degree to which the existing system of economic relations meets national interests and finally, the form, method, scale of its regulation. In general, in a globalizing world, every country must solve four problems to ensure

sustainable development. First, it is necessary to implement a system of appropriate measures to address the environmental problems arising from the development of the world economy in modern times; second, to implement the necessary socio-economic programs to ensure sustainable human development; third, to formulate and implement appropriate policies to address thedemographic problems observed in modern times; fourth, existing economic problems must be systematically addressed, taking into account current and future goals in terms of sustainable development. It should be noted that ultimately the ability to solve environmental, social and demographic problems depends cruciallyon the level and nature of economic development. At the same time, it should not be overlooked that the practical implementation of the concept of sustainable development is primarily conditioned by the country's potential for sustainability (7). At the same time, the analysis shows that although the potential for sustainability is determined by the absolute advantages of the country as a whole, this potential can be significantly increased by implementing the right, optimal, flexible economic policy and waiting for the optimal stage of solving global, regional, national interests and current and future goals. It should be noted that the transition to the concept of sustainable economic growth ultimately depends on the development and efficiency of the real sector. " The analysis of the Azerbaijanieconomy in terms of supply also shows the positive results of a successful strategy. Over the past 10 years, macroeconomic stability has been maintained in the Azerbaijani economy, important reforms have been carried out and necessary measures have been taken to diversify the economy and develop entrepreneurship. At the same time, the balanced development of the regions was ensured during thisperiod, the competitiveness of the country's economy increased and the country's rapid integration into the world economy continued " (8). Ensuring the transition to sustainable development is a problem directly related to the security of the national economy. Expectation of economic security is an internal and external factor covering the independence of the national economy, the stability of the reproduction process in the country at all levels, the coordination of current and future goals and objectives, dynamic and sustainable development, as well as its ability to constantly renew, self-development and improvement, in this case canbe expressed as a set of conditions, especially the availability of appropriate financial security should be noted. As noted in the economic literature, "The financial self-sufficiency of a country is one of the most important criteria of its economic independence. A state that cannot support itself, is unable to provide its socio-economic development with the financial resources it has earned, cannot be considered a sedentary state in general " (9). The concept of economic security should include not only the protection of national interests, but also the mechanism of protection and realization of national interests, the development of national entrepreneurship and production, the ability to ensure socio-economic stability in society. In turn, to achieve relevant results in the field of economic security, in a number of areas; to identify and forecast internal and external threats to the society in all its interests, to create the necessary information base by conducting comprehensive objective monitoring of economic processes, to prevent possible negative consequences of threats to economic interests, to implement a set of flexible and longterm measures to eliminate them and their consequences. It requires timely assessment, adaptation to dynamic changes in the world economic system, global competition, as well as problems arising from limited resources, and adequate response to internal and external threats. A characteristic analysis of the economic policy pursued in Azerbaijan during the years of independence shows that during these years the Azerbaijani state has formed and implemented such an optimal economic development strategy that it almost did not lead to the so-called "delay effect" in the economic literature. The Azerbaijani government has always sought to maintain a link between regulatory capacity, especially financial capacity, and the level of regulation. Implementing financial market liberalization without creating an appropriate regulatory framework is undoubtedly a common recipe for economic instability (10).

At the same time, Yantirberg's opinion is of particular importance that the scale of regulation should be coordinated with the country's regulatory capacity. In order to ensure sustainable economic growth, it is important to make the necessary structural and institutional changes in response to changing condition, demand and potential. This proves once again that in order to ensure sustainable economic development, the ratio between the country's financial potential and the development of the real sector must be constantly improved in accordance with changing conditions and demand, and the necessary changes in the structure of reproduction. Thus, the assessment of socio-economic processes on the basis of 360-degree diagnostics shows that the production processcan be carried out efficiently in any national economy. However, if the distribution and exchange process in the country is not optimal, especially if the existing products and services are not used efficiently, then the benefits of overall economic growth will fall sharply and the country will experience "impoverished economic growth." It is also a fact that in order to effectively implement the strategy of sustainable development, every piece of legislation adopted in connection with socio-economic development must have a strong enough intellectual load and take into account current and future goals. Therefore, ensuring the effective functioning of a competitiveand dynamically developing national economy depends on the nature of the regulatory system, the effectiveness of its application and the level of managementof these processes as a whole in the country. In general, when assessing the impact of legislation on socio-economic processes, along with costs and results, the issuesof environmental assessment, ensuring national economic security and competitiveness, and anticipating the interests of present and future generations should not be overlooked. As a result of the economic development strategy implemented in our country in recent years, significant progress has been made in improving the competitiveness of the national economy, inclusion, development ofinfrastructure and the business environment as a whole, as well as the dynamics ofeconomic freedom index. Under the direct influence of the coronavirus pandemic, the stagnation in the world economy, its foreign trade relations, sharp fluctuations in oil prices in world energy markets, as well as the decline in economic activity due to restrictive measures to prevent the pandemic were clearly observed in Azerbaijan. In this framework, a special Economic Council was established to adequately respond to the strategic challenges of national economic development, to ensure a successful transition to a new model of economic growth and sustainable development, and to formulate an appropriate strategy reflecting the country's national development priorities in the post-pandemic period.

4. CONCLUSION
In the post-pandemic and post-conflict period, the independent and sovereign Azerbaijani state is entering a qualitatively new strategic stage covering 2021-2030. Taking these into account, the Presidential Decree of February 2, 2021 identified 5 national priorities "Azerbaijan 2030: on socio-economic development." These priorities cover the formation of a steadily growing competitive economy for the next 10 years, ensuring inclusive development, the digital economy in all spheres of economic and social life, and finally the "Great Return to Karabakh" program. Despite the reasons for the impact of the pandemic on the country's economy, as well as the growth of non-oil and gas industry and agriculture, which are the main sectors of the economy, against the background of declining components of aggregate demand, GDP in real terms decreased by 4.3% in 2021 compared to 2019. 72.4 billion manat, and GDP per capita decreased by 5.0% and amounted to 7262.8 manat. In 2020, the average annual inflation was 2.6%. Opportunities to implement the priorities set for the next 10 years are based on the development concept "Azerbaijan 2020: vision for the future", 4 regional development programs, as well as the results of the measures envisaged in the Strategic Roadmaps for 2016-2020. The concept of socio-economic development covering 2021-2025 has been developed.

The main driving force of the implementation of national priorities in Azerbaijan for the next 10 years is the restoration and revival of 20% of our lands liberated from occupation as a result of the Great Patriotic War. The existence of the financial potential of our country, as well as the sharp increase in employment as a result of the involvement of many foreign countries in the reconstruction of Karabakh, the development of human capital and a favorable business environment in the post-conflict and post-pandemic period will play an important role. As a result of the successful strategy implemented in the country, according to the World Bank's "DOING Business 2020" report, the crisis in the world economy in 2020 improved Azerbaijan's position by 6 points, raising from 34th to 28th place and once again included in the list of "10 most reformist countries" in the world. In general, our research leads to the conclusion that in the near future to ensure the transition of our country to the concept of sustainable development; formation and implementation of innovation-oriented investment policy; creation of appropriate production - socially oriented infrastructure; formation of the national innovation system; achieving a sharp increase in the share of intellectual capital in GDP; fifth, in a globalizing world, it has become an objective necessity to make the necessary institutional changes in response to changing market conditions and demands.

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MATHEMATICAL MODELING OF THE LIMITING OPERATING MODE OF STRAIN WAVE GEARING

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ABSTRACT

Findings of the theoretical research provided in the article, and experimental data produced by the research paper [3] show that radial deformation, the depth of gear teeth penetration, and membrane thickness are key factors with a significant impact on the limiting moment of strain wave gearing (also known as harmonic gearing). During the research, the limiting moment has been estimated given that no breakthrough occurs in regard to the operation of a wave generator. For the gearing in question, the limiting moment could exceed the nominal (torque or rotational force) value by a factor of five to six. Such difference in the value of the moment of resistance could cause plastic deformations of the elements of strain wave gearing. Therefore, while setting the limiting moment the static strength must be calculated. The singularities of operation of strain wave gearing have also been studied, along with the mathematical model that covers spatial deformation and the corresponding interaction among the elements of strain wave gearing. The Bubnov-Galerkin method has been applied to get the determinant set of equations. Consequently sensitivity coefficients have been obtained through the methods of the spatial (covariant) theory of elasticity, while the limiting moment has come out of the condition of generator breakthrough. Also studied is the impact of various parameters on the limiting moment of strain wave gearing with a flexible-bottom bucket-shaped cam wave generator. Design calculations have demonstrated that the radial deformation of flexible spline, depth of gear teeth penetration, the angle of standard basic rack tooth profile, and radial (internal) clearance have a significant impact on the limiting moment, while preload pressure in the gearing, the membrane length and types of straining of the flexible spline almost fail to affect limiting moment parameters.
Keywords: mathematical model, gear teeth intervention, strain wave gearing, circular spline

1. INTRODUCTION

Strain wave gearing, setting a small overall size and a few parts, has a high gear train value. Besides, such gearing has a high load capacity and kinematic precision (due to multi-tooth gearing). These advantages provide room for the broad use of strain wave gearing in various drives of automatic control systems as well as mechanical drives used in robots, and aerospace technology. The operating capacity of harmonic gearing is specified by the following criteria: fatigue (endurance) limit of flexible spline, a lifetime of a wave generator, wearing power of flank tooth surface of the flexible and circular splines [1]. The M_{lim}, the maximum output shaft resistance at which strain wave gearing is able to transmit motion, is an important parameter of the operating capacity of harmonic gearing running a periodically applied high load (hoisting machines, rotation gears, etc.). Wave generator breakthrough or static failure of segments could be a cause of transmission failure. Following the application of strain wave gearing in different machines, it has been detected that its segments are not subjected to static failure during the generator breakthrough if the corresponding gearing (transmission) parameters are selected correctly.

Generator breakthrough is the result of elastic compliance (resilience) of gearing components. The higher the torque M_r moment of resistance the narrower the tooth socket at involute gear will be, thus leading to interference. Further torque M_r increase intensifies interference, while the teeth of flexible and circular splines interact at the tip level. Meanwhile, the circular spline sprawls, the wave generator gets compressed and its shaft deviates from the axis of rotation. Following such deformations, all teeth of the flexible spline exit the sockets of the circular spline in one of the contact zones. Finally, the strain wave gearing transforms into one single wave and loses operability [2–4], i.e. the turn of a cam (driving member) fails to trigger off the slave unit (driven member or cam). This phenomenon is known as the generator breakthrough.

2. PROBLEM STATEMENT
Tooth interference and generator breakthrough phenomena have been the subject of a number of research papers [2–6], and other studies. Findings of the research activities by Polituchiy A. I. [2–4] stand for the best comprehensive study of the impact of design parameters on the limiting moment. Following experimental research, Polituchiy has established the dependence of the limiting moment M_{lim} on radial deformation of the flexible spline, as well as the depth of gear teeth penetration, structural dimensions, generator run-out, and other key gearing parameters. The corresponding testing has involved the strain wave gearing with the flexible spline setting an internal diameter of 120mm, and the tooth-to-tooth seizure of the flexible spline to the shaft. For other gearing parameters, theoretical dependences have been established by means of approximation methods in engineering, which, however, fail to allow for spatial features of deformations, and the interaction among the elements of strain wave gearing. The research paper [7] proposes the methodology for the calculation of the limit load operation of strain wave gearing; it is based on the localization of dimensional elastic interaction among the elements of strain wave gearing, through the methods existing in the elasticity theory. The methodology enables to study more accurately the impact of different parameters on the limiting moment under the circumstances of unequal design solutions and dimensions of strain wave gearing. The purpose of the research is to carry out a theoretical study of the impact of different parameters on the limiting moment of strain wave gearing with a flexible-bottom bucket-shaped cam wave generator. The calculations have employed the dimensional mathematical model of strain wave gearing, proposed in research papers [7, 8]. Consequently, the available and newly obtained dependence values of the limiting moment M_{lim} on strain wave gearing parameters.

3. MATHEMATICAL MODEL
The principal cause of generator breakthrough is elastic deformation of the elements of strain wave gearing; therefore the gradation of elastic interaction among the elements of strain wave gearing is required to calculate the limiting moment M_{lim}. Such gradation allows for elastic deformations of flexible and circular splines, as well as a flexible bearing cup, contact deformations on the flexible bearing, bending deformations on the camshaft, and offset (displacement) of the elements of strain wave gearing as rigid bodies. The dimensional model of strain wave gearing is used for the calculation of the strength of interaction among the respective elements [7, 9, 10]. The resolving system of equations implies the possibility of the interaction involving flexible and circular splines along with lateral and outer surface areas of the teeth, the surface areas of the flexible spline and flexible bearing cup, and rolling elements with rolling paths on the flexible bearing. The Bubnov-Galerkin method has been applied to build up such equations. Surface-distributed strength of interaction among the elements of strain wave gearing is replaced with surface forces with a piecewise linear distribution. To achieve that result, interacting surfaces are divided into square subareas.

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Every node is then compared against the dimensionless Courant number φi [11], which represents a single-cone hexagonal pyramid. Subsequently, $u_i = 3\varphi_i/S_i$ has been employed as a basis function, with S_i standing for the base area of the pyramid. Basis functions u_i are unit-volume hexagonal pyramids. Thus the intensity of the distributed strength of interaction between two surfaces is expressed by the following linear combination of basis functions:

$$p = \sum_{k=1}^{N_2} F_k u_k, \qquad (1)$$

where F_k ratio involves the dimensions of strength and is worked out through the resolving system of equations and inequalities [8].

Caused by SI-derived unit of forces, $1u_k$ (influence coefficients), nodal displacements on interacting surfaces of the flexible spline and bearing are detected by means of the linear membrane theory. The influence coefficients of the flank tooth surface of the flexible spline are built upon mass displacements as a result of deformations on the teeth and membrane of the flexible spline. The extent of mass displacements is worked out by means of the linear membrane theory, while deformations on the teeth of the flexible spline and influence coefficients of flank tooth surfaces of the circular spline are determined by means of the finite element analysis with the use of first-row solid elements (voxels). Interaction strength of rolling elements with rolling paths on the flexible bearing is deemed concentrated. Any convergence between such elements is detected by Herz equations. The influence coefficients of the outer surface areas are calculated by the linear membrane theory, while the coefficients of influence of outer surface area of the circular spline are quantified by the finite element analysis. The resolving system of equations is a set of canonical equations covering flexibility methods, as well equations of circular spline balance, flexible spline balance, flexible bearing cup, and cam, and the equations that express the unilateral nature of interaction among elements:

$$\begin{cases} \begin{pmatrix} \tilde{D} & \tilde{G} \\ \tilde{G} & C \end{pmatrix} \begin{pmatrix} F \\ a \end{pmatrix} = \begin{pmatrix} \tilde{\delta} - \tilde{\delta}_0 \\ B \end{pmatrix} \\ \tilde{\delta}_j \geq 0; F_j \geq 0; \tilde{\delta}_j F_j = 0, j = 1,...,N \end{cases} \qquad (2)$$

where $\tilde{D}$ is a reduced matrix of nodal resilience; C - is a matrix that accounts for the resilience of the supporting elements of the cam, flexible and circular splines; F - is a force vector of interacting surfaces (for the surface-distributed strength, vector elements are equal to F, k ratios in the above-mentioned linear combination (1)); $\tilde{\delta}$ and $\tilde{\delta}_0$ are the vectors of reduced internal clearance at nodal points between the deformed and undeformed surfaces; a - is a vector of displacement of the elements of strain wave gearing as rigid bodies; $\tilde{G}$ - is a matrix that bonds an increment of the vector of reduced internal clearance $\tilde{\delta}$ with a vector of displacement a; B is an external force and moment vector that contains a single nonzero element (moment of resistance against the flexible spline); $\tilde{\delta}_j$ elements of the vector $\tilde{\delta}$; F_j elements of the vector F.

Meanwhile, the calculation is done in the following sequence:
1) The restoring torque method [9] is a solution to the resolving system of equations (2) under the circumstance setting the zero value of the moment of resistance at the output shaft. The corresponding calculation determines the contact zones of interacting elements (nodes with zero clearance $\widetilde{\delta}_j$). It is assumed that no tooth interference occurs at an idle stroke, and therefore the teeth of the flexible and circular splines cannot interact with outer surfaces.
2) Then the moment of resistance at the output shaft M_r is subjected to a gradual increase. At every value of the output shaft resistance M_r, the angle of rotation of the cam φк changes, in fine pitches, from 0 to 90°. For every φк value, elastic interaction among the elements of gearing is measured. Such measurements are necessary to detect any possibility of generator breakthrough that occurs when all teeth of one half-wavelength of the flexible spline interact with the teeth of the circular spline along outer surfaces only.

The calculation (2) is getting complicated under the circumstances of tooth interference, for the surfaces (flank or outer) on which the teeth of the flexible and circular splines can interact are not known in advance. To identify the surface(s) of possible tooth contact, the measurements are done in pitches, gradually increasing the moment of resistance M_r and the angle of rotation of the cam. To identify the surface of possible contact between a pair of teeth, the results of two measurement options are taken into consideration; the first option corresponds to the previous load step, while the second is based upon the current load step, i.e. the measurement after a small angle of rotation of the cam $\Delta\varphi$, without any change of possible surfaces of contact of all tooth pairs.

Consequently, the following outcomes are expected:
1) According to the first measurement option, the entry (interference) of the jth pair of teeth h_j (opposite-sign clearance between outer surfaces of the pair of teeth) has a negative value. According to the second option, h_j has a positive value while the clearance between effective flank surfaces of the same pair of teeth δ_j is negative. In that case, the outer surfaces of the gearwheel (meshing of gear teeth interference) are considered as possible interaction surfaces of the jth pair of teeth.
2) A pair of teeth interact with flank surfaces until the rotation of the cam, while upon the cam rotation at $\Delta\varphi$ angle the entry (interference) of the same pair turns out to be negative. In that case, possible interaction surfaces of the jth pair of teeth change from the flank to outer surfaces of gearwheel (disruption of the tooth of the flexible spline from the gash up to the crest of the circular spline).
3) A pair of teeth interact with outer surfaces until the rotation of the cam, while upon the cam rotation at $\Delta\varphi$ angle the flank clearance δ_j value regarding the same pair turns out to be positive. In that case, possible interaction surfaces of the jth pair of teeth change from the outer to the flank surfaces of the gearwheel (disruption of the tooth of the flexible spline from the crest down to the gash of the circular spline).

Detailed description of the dimensional model of strain wave gearing is proposed in research papers [7, 8].

4. FINDINGS OF THE RESEARCH
The study of the impact of various parameters on the limiting moment M_{lim} has been carried out on the strain wave gearing with a flexible-bottom bucket-shaped cam wave generator. The studied gearing is characterized by the following key parameters: the number of teeth of the circular spline (b), $Z_b = 172$; the number of teeth of the flexible spline (g), $Z_g = 170$; offset coefficient of the circular spline and flexible spline, $X_b=4.35$ and $X_g=4.22$, respectively; gearing

module $m = 0.7$ mm; membrane thickness of the flexible spline $h_0 = 1.1$ mm; thickness of gear ring in the gash of the flexible spline $h_1 = 1.3$ mm; membrane length of the flexible spline $L = 120$ mm; width of gear ring of the flexible spline $b = 13$ mm; thickness of the circular spline $h_b = 21$ mm; outer diameter of the flexible bearing $D_n = 120$ mm; width of the flexible bearing $B = 20$ mm; fairly bearable radial deformation of the flexible spline $w_0/m = 1.1$; depth of gear teeth penetration $h_d = m$; radial clearance in the flexible bearing $G_r = 26$ μm; nominal rotational force $M_{nom} = 400$ N m. In addition, the cam setting error corresponds to the 7th quality grade of the elements of strain wave gearing. Other gearing parameters are available in the research paper [7]. Below are the findings of the impact of the following parameters on the limiting moment M_{lim}, precisely deformation $w0$ and types of straining of the flexible spline, depth of gear teeth penetration hd, membrane thickness of the flexible spline h_0, membrane length of the flexible spline L, the thickness of the circular spline h_b, radial clearance in the flexible bearing G_r, the angle of basic rack tooth profile α, and preload pressure in the gearing. The reference value of these parameters is given above; if the value of one of the parameters changes, the remaining values remain unchanged. A relative value of limiting moment M^*_{lim}, which represents a ratio of the limiting moment M_{lim} to nominal rotational force, has been used for the estimation of dependence values. Figure 1 represents the dependence of a relative value of the limiting moment on fairly (relative) radial deformation of the flexible spline $w_0^* = w_0/m$. As radial deformation of the flexible spline w_0 increases, the values of preload pressure in the gearing and the depth of gear teeth penetration are not subjected to any change due to corresponding (counterbalancing change) of the values of offset coefficient and the circle radius of the interaction vertexes of the circular spline. As radial deformation w_0 increases, so does the flank clearance at the involute gear. This results in the intensification of the rotational force leading to tooth interference and, consequently, to further enhancement of the limiting moment M_{lim}.
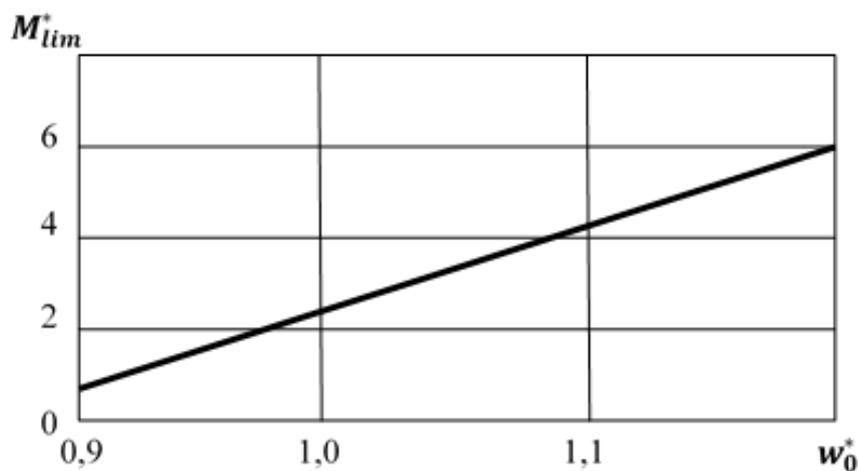
Figure 1: Dependence of relative value of the limiting moment M^*_{lim} upon fairly (relative) radial deformation of the flexible spline w^*_0

Figure 2 represents the dependence of relative depth of gear teeth penetration $h_d^* = h_d/m$ upon the relative value of the limiting moment M^*_{lim} of strain wave gearing. An increase of h_d from 0.6 up to 1.2 mm occurs following the corresponding change of the circle radius of the interaction vertexes of the circular spline. As the gear teeth penetration deepens, the limit moment increases by almost the linear law.
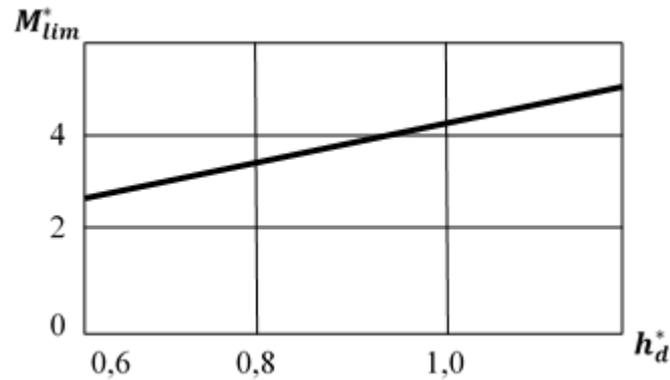
Figure 2: Dependence of the relative value of the limiting moment M^*_{lim} upon the relative depth of gear teeth penetration h^*_d
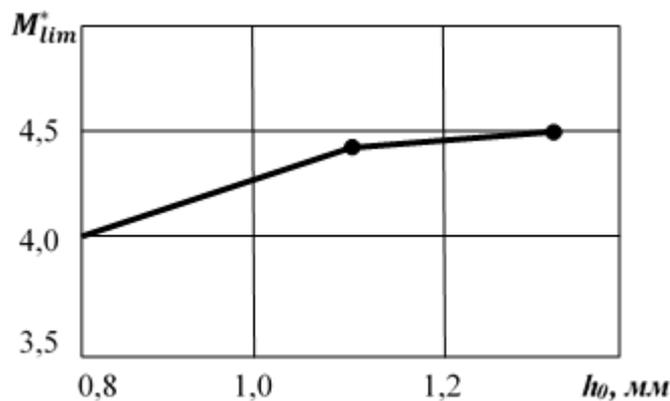
Figure 3: Dependence of the relative value of the limiting moment M^*_{lim} upon membrane thickness of the flexible spline h_0

To establish the dependence of the limiting moment upon membrane thickness of the flexible spline h_0, three measurement options are considered with different values of h_0 and thickness of gear ring in the gash of the flexible spline h_1: 1) h_0=0.8 mm, h_1=1.1 mm; 2) h_0=1.1 mm; h_1=1.3 mm; 3) h_0=1.3 mm; h_1=1.5 mm. As is seen from Figure 3, further expansion of the membrane thickness of the flexible spline slightly increases the limiting moment. An increment of h_0 by 0.4 mm causes only a 12-percent increase of the limiting moment due to further enhancement of torsional and radial stiffness of the limiting moment. Consequently, the swirl angle of the flexible spline narrows while the moment of resistance intensifies, thereupon tooth interference occurs.Figure 4 describes the dependence of the relative value of the limiting moment M^*_{lim} upon relative (layer) thickness of the circular spline $h_b^* = h_b /m$, radial clearance in the flexible bearing G_r, and the angle of basic rack tooth profile α.

Figure following on the next page
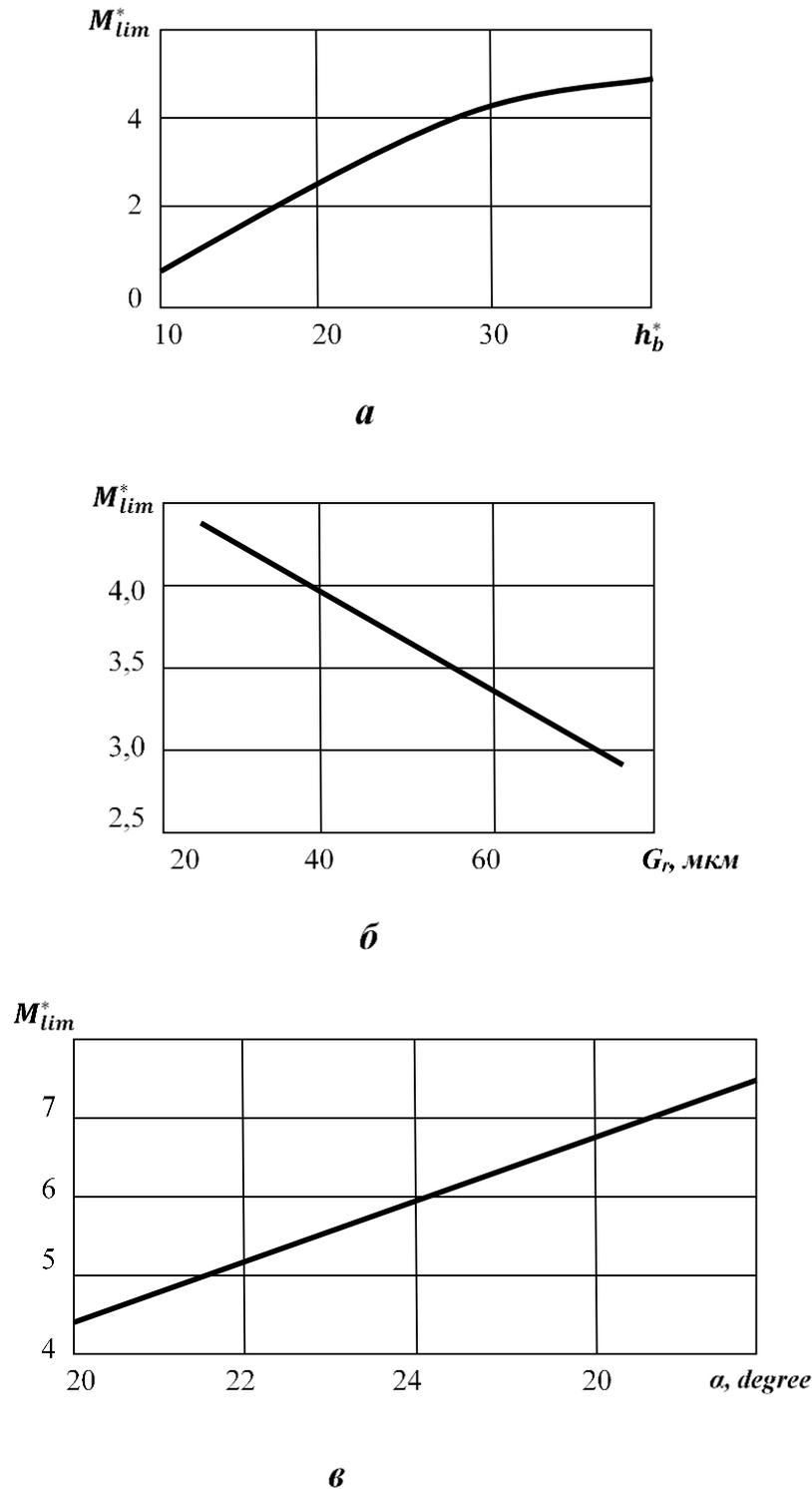
Figure 4: Dependence of the relative value of the limiting moment M*lim upon relative (layer) thickness of the circular spline hb (a), radial clearance in the flexible bearing Gr (б), and the angle of basic rack tooth profile α (в).

As the (layer) thickness of the circular spline h_b increases its radial deformation, thereby enhancing the limiting moment (Figure 4, *a*). The (layer) thickness of the circular spline has a significant impact on the limiting moment only if h_b value is under 30m. At h_b value above 30m, the circular spline is subjected to small deformation; therefore h_b has an insignificant impact on M_{lim}.

Following wear, the flexible bearing experiences an enlargement of radial (internal) clearance. The change of the clearance value G_r from 26 up to 78 μm causes the limiting moment abatement under the linear law (Figure 4, *б*), due to a reduction in the radial deformation of the flexible spline. The angle of basic rack tooth profile has a significant impact on the limiting moment M_{lim} (Figure 4, *в*). An increase of the angle α from 20 up to 28° elevates the limiting moment M_{lim} by almost 70 percent. This is the consequence of changing deformation of the flexible spline under the load caused by the increased angle of the strength of interaction among teeth. A study of the impact of membrane length of the flexible spline L on the limiting moment M_{lim} has been carried out with different values of the relative length of the membrane of the flexible spline: $L^*=L/D_p$ = 1.0, 0.75, and 0.5. According to the measurement findings, a reduction in the L^* value within specified limits decreases the M_{lim} value by around 20 percent. A study of the impact of initial clearance in the gearing δ0 on the limiting moment M_{lim} has been carried out by changing the gas width of the flexible spline. The corresponding measurements have been done with the following values: $\delta_0 = 0.1m$, 0 m, and $–0,1m$. The negative value of δ_0 corresponds to the preload pressure. Findings of the research have proved that neither initial clearance nor preload pressure in the gearing has an impact on the limiting moment M_{lim}.

5. CONCLUSIONS

1) Findings of the theoretical research provided in the article, and experimental data produced by the research paper [3] show that radial deformation, the depth of gear teeth penetration, and membrane thickness are key factors having a significant impact on the limiting moment of strain wave gearing (also known as harmonic gearing).
2) It has been established that the membrane length of the flexible spline and preload pressure in the gearing have an insignificant impact on the limiting moment of strain wave gearing – a nonconformance with the findings data provided in the research paper [3].
3) Empirical measurements also made it possible to establish the dependence of the limiting moment upon the (membrane) thickness of the circular spline, radial clearance in the flexible bearing, the angle of standard basic rack tooth profile, and types of straining of the flexible spline.
4) It has been established that the type of straining of the flexible spline and (layer) thickness of the circular spline (h_b value above $30m$) have an insignificant impact on the limiting moment.
5) In the present research, the limiting moment has been estimated on the condition that no generator breakthrough occurs. For the gearing in question, the limiting moment could exceed the nominal (torque or rotational force) value by a factor of six to eight. Such difference in the value of the moment of resistance could cause plastic deformations of the elements of strain wave gearing. Therefore, while setting the limiting moment the static strength must be calculated.

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THE IMPROVEMENT OF E-MUNICIPALITY SYSTEMS IN AZERBAIJAN LOCAL GOVERNMENTS

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ABSTRACT

The main philosophy of e-governance is its view of management as a source of services to citizens and companies as customers who wish to benefit from these services. E-government has many aims that it seeks to achieve in the context of its dealings with customers. Electronic government is the best mechanism for maximizing administration productivity and efficiencies. It is a key method to ensure services to citizens. Nowadays, e-government is becoming an increasingly essential phenomenon in public administration. Azerbaijan has not been indifferent to this phenomenon which is no longer an option and with the impact of the Requirements of the European Charter period especially since the 2000s, Azerbaijan has accelerated the e-government projects and applications. This notion has been accepted in developed countries and has led to more individualization by supporting independent actors and decision-making. Participation, characterized at this grade, alludes to a more solution-oriented get into touching, with the dimension of attainability and intelligibility, both between the rulers and between the rulers and the ruled. This study intends to determine and test crucial success elements for the execution of e-municipality systems, which are very utility in today's world. When the population of Baku is considered, e-government systems are very significant for Baku citizens and the smallest part of that e-government system is e-municipalities. That is why establishing a highly used e-municipality ambiance is an essential thing. In this context, this doctorate study aims to make strategic suggestions, by measuring the potential of e-participation at local governments. This study also performed how and in what way e-participation influenced and by researching how to contribute to the improvement of local management systems in the context of governance.
Keywords: E-government, e-municipality systems, e-service, local governments

1. INTRODUCTION

The subject of restructuring, which has been put forward to eliminate the current problems in public administration, keeps its place on the agenda as a result of globalization and changes in technology. Changes in the field of activity, social function, the economic, technological, social, and cultural structure of the state force the current public administration to change. In our world, which is experiencing rapid change, transformation and development, there are important changes in information and communication technologies. The added value-added to our daily lives by new technologies, which are increasing day by day, has pushed the states in general and the local administrations, in particular, to use different media in the provision of public services. The transfer of public services to the internet has been tried to be explained with concepts such as e-government and e-municipality. The transfer of transactions concerning the state to the electronic environment is defined as e-government, while the local application of e-government is named as e-municipality. In this process, along with the use of e-government applications in the provision of public services, the increase in service quality, efficiency, and effectiveness, and decreases in cost and time have led to the development of a wide variety of e-government applications. Communication, cooperation, and competition strategies of individuals and organizations are changing in the globalizing world. Information and communication technologies that enable international information sharing have brought along

very different and complex relationships. This situation has led to the formation of markets and databases with wide participation and interconnectedness, making the participants connected and dependent on each other in a virtual environment. Increasing dependency and commitment in relation to the complex and rapidly changing environmental conditions, especially with the pandemic process (COVID-19), made it necessary for the citizen-oriented change of the public sector. In this direction, it has used public sector information and communication tools that aim to increase efficiency, accountability, transparency, and effectiveness in service delivery and to meet demands by increasing performance in business processes. In particular, thanks to internet technologies, it has been ensured that the state offers innovative approaches in communicating with the business world and citizens. One of these approaches has emerged as e-Government with the transfer of the communication between the State, business world, and citizens to the internet environment. E-Government, e-health, e-voting, e-passport, e-discussion, etc. it emerges as an umbrella concept that includes applications. E-Government includes interactions between citizens, business and government through online platforms. It includes the use of web-based internet technologies by public institutions to access public information and services by stakeholders, workers, and other institutions. In order to understand e-Government, it may be useful to examine the traditional government approach. While the traditional government approach involves physically visiting public buildings and manually transacting on paper at limited times (such as office hours) to access public services, e-Government involves using different forms of information and communication technologies to access public services. E-Government is the use of Information and Communication Technologies and new business processes in the transformation of the state's method of interaction with citizens and the business world. The e-Government is expected to have benefits such as less corruption, increased transparency, increased revenue, and cost reduction; It has components consisting of electronic service delivery, electronic business processes, electronic voting, and electronic productivity. Electronic service delivery refers to information sharing and transactions through electronic networks, program design, and service uploads to be made from automated databases, an electronic voting system that provides public confidence in electronic voting results, and electronic productivity means better operations at lower costs. Azerbaijan has not been indifferent to this phenomenon which is no longer an option and with the impact of the Requirements of the European Charter period especially since the 2000s, Azerbaijan has accelerated the e-government projects and applications. E-Government has an important role in simplifying and integrating the administrative processes of the public administration mechanism, changing the understanding of service delivery, and transforming its relations with its stakeholders. It can be stated that these change and transformation processes actually brought about a radical paradigm change in the provision of services in the public sector. In this context, with the widespread use of e-government applications day by day, it is observed that countries are breaking away from the "traditional state" and turning towards "e-government". In Table 1 below, the comparison of traditional state and e-government in public service delivery is given.

Traditional Government	E-Government
Passive citizen, the demands of the administration	Active citizen, customer, citizen's expectations
Paper-based and face-to-face communication	Electronic and online communication
Vertical structuring and hierarchy	Horizontal organization and networking
Staff response	Automatic voicemail, e-mail, call center, etc.
Human-based inspection	Automatic control
Uniform service, time-consuming processes	Differentiated service, fast process
High transaction costs	Low transaction costs
Nationality relationship	Participation relationship
Closed State	Open State

Table 1: Comparison of Traditional Government and E-Government

The pandemic process made it mandatory to use e-government technology to meet the needs of citizens. In line with the needs of citizens, countries should embrace the importance of the UN's "Sustainable Cities and Communities" goal. Therefore, it is time for governments to encourage and support cities and local governments to achieve greater inclusiveness, security, resilience, and sustainability through the use of technology (SDG 11: Sustainable Cities and Communities).[5] Table 2 contains the digital government policy response to COVID-19 in the short, medium, and long terms.

Time horizon	Policy action	Digital government response
Short-term	React	Use digital platforms (i.e., online portals, social media) for accurate and timely information-sharing
		Lead two-way communication with people and foster e-participation (i.e. hackathons, brainstorming events)
		Ensure protection of people's human rights including data privacy and take into consideration unintended consequences of technology
Mid-term	Recover&Resolve	Form effective multi-stakeholder partnerships (i.e. private sector, academia, NGOs and international organizations) on regional, national and local levels
		Provide technology education for digital literacy, specifically targeted at public officials, children, women/girls and MSMEs
		Offer financial and technical support to local governments in the implementation of digital tools and technologies
		Leverage lessons learned and policy ideas from the ongoing crisis
Long-term	Reinvent	Invest in new technologies (i.e., AI, blockchain, robots, drones) and ICT infrastructure to increase the resilience of the health economy and public services delivery
		Develop digital infrastructure and engagement tools for the most vulnerable groups in society, particularly for migrants, refugees and ethnic minorities
		Revisit data protection and privacy legislation along with lessons learned

Table 2: Digital government policy response to COVID-19
(Source: https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/2020%20UN%20E-Government%20Survey%20(Full%20Report).pdf)

2. THE ROLE OF THE E-MUNICIPALITY IN THE E-GOVERNMENT STRUCTURE

Electronic state, electronic municipality phenomenon is an interdisciplinary phenomenon, and there are public administration, international relations, law, and business parties as well as technology-based issues. Especially with its implementation dimension, the e-municipality is an expression of the tangible presence of all these different work disciplines in practice. Local measures that are able to respond directly and sincerely to their problems have an important role in obtaining positive results and in establishing the relationship of the individual state on the ground of trust. Nowadays, through the portal established in many cities in developed countries, citizens are provided with information about municipal services, most municipal operations can be done online without going to the city hall, interactive city maps, online complaints, requests, suggestions, and the same technical facilities and ideas are presented.

The Internet also creates a great opportunity to introduce national priorities and local policies to the world, to form a global public opinion, and to find support in the international arena. Thanks to e-municipality, the process and service times can be shortened and the efficiency, effectiveness, and service quality of municipal administrations can be increased. Transparency can be provided in management. The approach that e-government services will make sense with the participation of citizens is more easily overlaid with the structure of local governments that enables horizontal coordination and the function of providing services directly to the needs and expectations of citizens. From this point of view, the main role of the e-municipality in the e-government structure can be expressed as a tool for citizens to get closer to the e-government when they use the e-municipality for purposes such as obtaining information about the actions that concern their daily lives, making transactions, and expressing opinions. With e-service, local governments primarily aim to reach the needs and suggestions of the citizens faster, to have the right databases about the service area, to provide management services efficiently, to protect people and public information, and to make global investments attractive for that region. It is also reminded that the Internet seems to have the potential to create added value in both the administrative and political functions of local governments, but this ownership does not guarantee the result. The e-municipality interaction process is a process that starts with the data from the field, passes through various decision mechanisms and reaches the users on the e-municipality portal, and turns back into data from there.

3. ADVANTAGES PROVIDED BY E-MUNICIPALITY

E-municipality is a management system that works in integration with the e-government application, increases the service capacity and speed of municipalities through the use of digital applications, contributes to the formation of a transparent, auditable, and accountable management, and provides efficiency and effectiveness in municipalities. Undoubtedly, local governments are one of the institutions most affected by the rapid transformation in technology. That is why local governments are the first step of citizens' access to public services. Therefore, citizens' expectations from local governments are changing rapidly with the effect of urban life. In order to keep up with this change, municipalities renew their technological infrastructure and benefit more from internet technology and digital applications. The e-municipality applications, which find a wide application area and develop more and more every day, have many benefits for municipalities and citizens. E-municipality applications contribute to the increase of the service quality, efficiency, and effectiveness of municipalities, the provision of justice in tax, the formation of uniformity in practices, the measurement of institutional performances, and the development of decision-making mechanisms based on inventory and data. On the other hand, e-municipality provides significant support for citizens to receive quality service, the development of a citizen-oriented service understanding, providing 24/7 service availability, developing local participation, creating a transparent and accountable management model, establishing the trust of citizens in the state, and spreading good management principles in public services. The e-municipality application is also the biggest tool in overcoming the bureaucracy in local governments, accelerating the transactions, facilitating the affairs of the citizen-citizen, citizen-state, state-state through the management information system. E-municipality applications fulfill two important functions for cities. The first of these is that they support the processes of data collection, classification, processing, and administrative decision making in the management of systems such as public transportation, transportation, real estate, human resources, water, and sewage. Second, these technologies have the potential to improve local democracy and participation by eliminating the communication problem between local governments, citizens, and city bureaucracy. Considering the development process of e-municipality around the world, it is seen that all public institutions and organizations start with simple e-government applications and move rapidly towards increasingly complex

applications. The transition process to the e-municipality system is expressed in the applications realized in these three stages, which are defined as one-way information flow, mutual communication, and online transaction capability.

By Difficulty Level	Applications
One-way information provision	Press releases, announcements, annual reports, etc.
Mutual face to face communication	Tax debt inquiry, sending e-mails, participating in surveys, interactive communication, etc.
Online transaction	Paying tax debt, participating in tenders, making subscription agreements, etc.

Table 3: E-municipality stages

It is possible to talk about some specific aims and benefits of the transition to e-government at the local level. The benefits expected from the transition to e-government in local governments can be briefly listed as follows:

- Making it possible to arrange and provide local services according to the needs of the local people and to reduce the costs of local services;
- Access to local services 24/7 that can be transferred to the Internet and monitoring local government activities and agendas from anywhere;
- Supervision of the services and actions of local governments and the decisions of their administrations;
- Ensuring equal distance and equal service provision to local people living in different districts and neighborhoods;
- Ensuring that local people can participate more actively in municipal activities and democratic processes;
- Zoning, parcel, tender, and so on. preventing bribery and corruption in activities;
- Reducing bureaucratic procedures by transferring more local services to the Internet;
- Establishing an accountable and more transparent municipal administration;
- Removal of barriers between citizens and local government and increased interaction;
- Creating an effective network structure between the central government and local governments and mutual sharing of information.

Within the scope of local e-government, local governments make use of various tools to achieve these benefits. Creating a web page, setting up urban information systems, developing wireless service delivery applications (WAP) for mobile phones, handheld computers, using handheld terminals called PDA and kiosk-style (ATM-like) terminals can be given as examples of these tools. The effective and appropriate use of these tools by local governments will facilitate the emergence of the benefits expected from e-government. However, using only these tools alone does not seem sufficient for the transition to local e-government.

4. TRANSITION TO LOCAL E-GOVERNMENT - REQUIRED STEPS

The establishment of e-government in local governments undoubtedly requires a change in mentality along with a technological adaptation process. This situation is closely related to the adoption of e-government. Eliminating the prejudices of the e-government by ensuring that both the representatives of local governments and citizens have sufficient information about e-government is the task to be done in terms of local e-government. Explaining the opportunities offered by e-government and the benefits of e-government will change the perspective of both managers and citizens towards e-government and will reflect positively on their expectations from e-government and their attitudes and intentions towards using e-government.

In this context, there are a number of activities that need to be implemented in order to ensure the transition to local e-government:

- **Developing customer-cocused approach:** The transition to local e-government makes it necessary for the governments to think again fundamentally in meeting the needs of the citizens. In this way, local governments will be able to harmonize public services with a customer-oriented structure. Local governments should first determine the expectations in order to design the best system that will meet customer expectations, and then make an attempt to establish a system that will meet these expectations. Since local governments have more one-to-one relations with the citizens than the central government, with the transition to local e-government, time and cost savings, especially the establishment of a customer-oriented approach, and increasing the satisfaction level of the citizen, can be achieved.

- **Determining realistic and consistent goals:** Short, medium, and long-term concrete, consistent and realistic targets for the future should be determined for the transition to local e-government. For example, a local government organization entering the e-transformation process should set targets such as a 30% reduction in file and paper costs and a 20% reduction in transaction costs at the end of three years.

- **Investing from today for the future:** As in all institutions, high costs are encountered in local administrations during the transition to e-government. Considering that local governments have more financial resource shortages than central government organizations, the issue of investment in ICTs and getting a quick return from these investments is more prominent in local governments. While the main goal is to save resources as soon as possible, it is also necessary to implement initiatives that will provide savings in the medium and long term.

- **Focus on digital interaction between management and citizen:** Among the ICT, especially the internet, is a highly popular tool in society. Nowadays, the internet offers a variety of interaction opportunities over a wide variety of platforms. It is now possible for administrations to easily interact with citizens through many platforms such as various blogs, web 2.0 tools, websites, social networking sites. What is expected from local governments is that they organize their interactions with both citizens and business circles in alternative ways through these dynamic structures and make their management known and accessible to all stakeholders.

- **Ensuring public and private sector interaction and cooperation:** Adaptation of ICTs to management is valid for all administrations including the private sector and public sector. On the other hand, the public sector and the private sector interact in many areas. In this context, local administrations, as in all public institutions, need to establish a complementary infrastructure that is compatible with each other while creating both back-office applications and interfaces for the private sector and citizens. Because developing systems that are compatible with each other will increase the level of interoperability and create a more efficient, cheaper, and less complex local e-government entity.

- **Encouraging rather than restricting access to information on the internet with concern of privacy and security:** One of the criticisms made by bureaucrats and citizens alike in the transition to local e-government is the possible privacy and security problems. However, it is obvious that the current bureaucratic system is not any safer than the state. Therefore, instead of suspending the transition to e-government due to privacy and confidentiality concerns falling on local governments, steps should be taken to increase security and privacy measures first, and then to try to increase trust in e-government by persuading citizens about the groundlessness of concerns.

- **Respecting citizens' confidentiality and protection of their information:** If a successful local e-transformation is to be realized, first of all, local governments must respect the

principle of confidentiality of the information they collect from citizens about public affairs, prevent system gaps, and protect this information with individual efforts and sensitivities. Otherwise, in cases such as when it is learned that the information of citizens is transmitted to third parties for commercial or any other concern, the trust in e-government will be damaged and this will constitute an obstacle to the transition to e-government.

- **The e-government is not de-alternated:** Advocates of e-Government foresee that in the future, it will be possible to perform almost all services online. However, even if a public service can be delivered online by local governments, it continues to be provided to some extent by traditional methods and alternative methods. Because e-government may not be a suitable service delivery method for all citizens. For Instance, an elderly citizen may not find himself competent enough to perform transactions alone through e-government. Forcing this citizen to carry out the transaction online despite this means making that citizen dependent on others compared to the past. This situation will lead to negative impressions of those citizens towards local governments and e-government.

- **Being complementary instead of repeating private sector services:** One of the main reasons underlying the attempts to restructure public administrations today is that the state has become a clumsy structure trying to operate in every field. E-Government is a structure that is expected to provide benefits to administrations in many areas such as getting rid of this clumsiness and reducing costs. However, the issue of where e-government applications will end is important. E-Government applications should be limited to the basic service areas that the state must fulfill to its citizens and should not extend to the field of activity of the private sector with commercial concerns.

4.1. Stages of the e-municipalization process

In the municipalities that have the most prominent place in the local government system, as in any other organization, there are five stages of the process:

1) The computerization stage as a means of owning a computer;
2) Automation phase as a system in which works such as financial affairs, water fee, tax collection are transferred to the computer environment on the basis of certain software, and the works are carried out in this environment;
3) The stage of internet users who have made an internet connection, as the rate of accessing the internet;
4) The stage of local governments' network site existence, which refers to owning a network site;
5) For municipalities, the stage of moving management to the internet by rising from the base of the Urban Information System.

E-municipality is a desirable practice for modern states in many respects. With the e-municipality, citizens can easily pay their debts such as taxes, without having to go to the municipality, wherever they are, see their debts, declaration information whenever they want, and thus follow their own records in a healthy way. Save time and effort for both service users and municipal employees. Integration between municipal units is ensured, as it reduces the densities by preventing dependency on working hours on the waiting time and due dates within normal periods. Efficiency will be increased by preventing any waste of resources by reducing the negative effects of repetition of the process. Accessing all necessary data for project planning in different fields will make planning and management services fair, efficient and rational. Since the automation of municipal services is ensured, it will be offered to citizens in efficient, reliable, healthy, and contemporary norms.

The highest level of contribution will be made to the budget by researching potential resources for meeting the municipal personnel, current and investment expenditures, determining, monitoring, and controlling the municipal property and real estate revenues.

5. E-GOVERNMENT AND E-MUNICIPALITY IN AZERBAIJAN

The activity of "e-government" in the Republic of Azerbaijan is regulated by the Decree of the President of the Republic of Azerbaijan "On some measures in the field of organization of e-services of state bodies" dated May 23, 2011, "E-Azerbaijan" State Program and other normative legal acts. Work is underway with other government agencies to form e-government and to establish appropriate infrastructure. The National Certification Services Center has been established in Azerbaijan to use the e-signature service, and an infrastructure has been established to ensure the exchange of information between government agencies. Also, an e-government portal (https://www.e-gov.az) in accordance with world standards has been developed in Azerbaijan and made available to citizens and government agencies. Azerbaijan has improved its position in the UN E-Government Survey, which is published by the United Nations every two years. All the countries in the survey were divided into four groups (very high, high, middle, and low) depending on the number of points they gained in the E-Government Development Index (EGDI). Azerbaijan has entered the "high group" of E-Government Development.

Country	EGDI Level	Rating Class	Rank	EGDI	Online Service Index	Telecommunications Infrastructure Index	Human Capital Index
Afghanistan	Middle EGDI	M2	169	0.3203	0.4118	0.1762	0.3728
Albania	High EGDI	HV	59	0.7399	0.8412	0.5785	0.8001
Algeria	High EGDI	H1	120	0.5173	0.2765	0.5787	0.6966
Andorra	High EGDI	H3	80	0.6881	0.4824	0.8372	0.7448
Angola	Middle EGDI	M2	159	0.3847	0.4882	0.1364	0.5295
Antigua and Barbuda	High EGDI	H2	98	0.6055	0.4471	0.6176	0.7518
Argentina	Very High EGDI	V2	32	0.8279	0.8471	0.7265	0.91
Armenia	High EGDI	HV	68	0.7136	0.7	0.6536	0.7872
Australia	Very High EGDI	VH	5	0.9432	0.9471	0.8825	1
Austria	Very High EGDI	V3	15	0.8914	0.9471	0.824	0.9032
Azerbaijan	High EGDI	HV	70	0.71	0.7059	0.6528	0.7713
Bahamas	High EGDI	HV	73	0.7017	0.6765	0.6739	0.7546

Figure 1: E-governmetn development index (EGDI)
(Source: https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/2020%20UN%20E-Government%20Survey%20(Full%20Report).pdf)

In recent years, municipalities in Azerbaijan have been conducting the majority of public services through e-municipality applications on their web pages. The first application examples regarding e-municipality were applied in Duisburg in Germany, Tilburg in the Netherlands, Farum in Denmark, Braintree in England, and Phoenix in the USA. The common point of these practices is citizen-centered management, new budget systems, effective communication with the public, lowering local taxes, giving priority to the principle of localization in service, and applying a local administration understanding based on volunteerism and participation.

5.1. Services provided by the e-municipality

The technologies and applications most widely used by local government units in the world and in Azerbaijan are urban information systems, call center and telephone technologies, electronic document management, e-signature, mobile applications, geographic information system,

management information system and webcasting. However, in order to reduce the bureaucratic oligarchy in local governments and to save resources and time, most of the local public services have been transferred to the electronic environment and a wide variety of e-municipal services have been implemented in local governments. Some of the examples of e-municipal services frequently implemented by municipalities are as follows:

- E-signature and mobile signature application;
- Security cameras system, camera vehicle tracking system;
- Announcing the decisions of the municipal council to the public, live broadcasting of the council meetings;
- Online service application to municipal units, payment of debts related to services;
- City information system, pharmacy, and bakeries on duty;
- License application, tender tracking system, real estate, advertisement, advertisement, environmental and cleaning tax tracking;
- Security cameras system, camera vehicle tracking system, etc.

Finally, it is seen that local government organizations and citizens face many problems in the e-municipality process. Electronic municipal service in Azerbaijan is provided through the website "www.e-belediyye.gov.az". There are currently 1,607 municipalities in Azerbaijan. Approximately 42 of these municipalities have websites. Municipalities in the largest districts of the capital do not have any websites or some of them close their websites because they do not pay the "domain". The sites of some remote municipalities are more equipped than the municipalities of the capital. According to my research, many municipalities do not have contact information on their websites. This makes it impossible for a citizen to communicate with municipalities in any case. On the other hand, we see that conditions have been created for citizens to apply to the municipalities only by letter. In this case, it is doubtful that all objections will be taken into account. It is noteworthy that many sites do not have any information other than municipal information. The problems encountered in my country while providing services through the network site in the field of e-municipality are as follows:

1) Inability to provide information security;
2) Low connection speed;
3) Insufficient number of trained network personnel;
4) High hardware-software cost;
5) The hardware/software purchasing process is long and difficult due to the tender process;
6) The e-signature application has not started yet;
7) On the establishment of very important City Information Systems for the e-municipality.

It is listed as the absence of established principles or standards. Many e-municipalities' websites are not "user friendly". The sites have been prepared with a focus on neither the public nor the employee.

6. CONCLUSION AND SUGGESTIONS

E-municipality applications are used by many municipalities today as a complementary element of the e-government system. In particular, developments in technology, innovations in internet and mobile technologies and changes in the perception of public administration necessitate the development of applications that enable citizens to benefit from public services without going to municipal service points. The developed e-Municipality Information System was created in order to reduce the problems arising from different practices between municipalities and public institutions and to ensure coordination. It is observed that the technological infrastructure of the municipalities is insufficient in the e-transformation process and they do not have sufficient budgets to invest in technology.

Finally, in a successful e-municipality implementation, there should be factors such as making public services transparent, saving time and space, ensuring an environment of trust between citizens and local governments, increasing service satisfaction and quality, providing services quickly and effectively, and reducing costs. My suggestions for solving the problems of local governments regarding e-municipality are as follows:

- Service programs in other public institutions should be harmonized with the municipal programs;
- Strong resources in the budget should be directed here in the municipalities for the processes related to the purchase, maintenance, updating and efficient use of computer hardware and software;
- Necessary renewals in the municipal legislation should always be made without wasting time in parallel with the developments in order to follow the IT sector from the closest distance;
- It is necessary to establish systems in order to quickly access the planning, engineering projects and applications information needed by the municipalities in their urban activities, and working groups of the authorities and relevant persons in this field should be established in order to establish principles or standards for their establishment.

On the other hand, information processing infrastructure should be established in all municipalities, IT staff should be kept at the required levels in accordance with the population scale of the service area, and it should be ensured that all of the municipal personnel have computer literacy. With the e-municipality, it is necessary to realize many openings that stand in front of the municipalities and that can create a new income gate for them. For instance, as the interest of the local people in the internet increases and as they learn the ways to use the internet, there will be people who want to establish a web page or who want to sell online. The first consultancy service and support can also be provided by the municipality. In fact, it may be possible to host a network site on the municipal server for a certain fee or free of charge. Any municipality that can use these new ways to increase its income will be able to demonstrate strong and contemporary municipalism by offering better services and social gains.

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INFLUENCE OF INTELLECTUAL CAPITAL ON SME'S EFFICIENCY IN THE TRANSITION ECONOMY OF AZERBAIJAN

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ABSTRACT
Small and medium enterprises play a key role in the maintenance and economic development of many emerging countries. They use different internal and external components of intellectual capital, but most companies do not have a systematic approach to intellectual capital management. The article examines the special manner of perceiving and understanding this resource and determines the degree of intellectual capital's influence on the performance of national SMEs. The study, based on the authors' empirical research, has tested hypotheses about the impact of separate elements of intellectual capital, such as human, structural and customer capital, on the overall performance of small and medium-sized businesses. Intellectual capital is assessed with respect to resource-based view theory. By conducting surveys of 206 representatives of small and medium-sized companies and using the SPSS application package, several hypotheses about the influence of intellectual capital on the company's efficiency have been proved. The study presents calculations confirming the existence of a direct relationship between the level of development of intellectual capital and the growth of SMEs' productivity. This research also provides computations allowing to conclude that in elaborating a series of measures for improving the efficiency by using intellectual capital, it is advisable increasing the knowledge and professional skills of the enterprise's management staff. The article also provides a comprehensive analysis of the factors influencing the process of using intellectual capital in SMEs, according to which it is necessary to improve government measures aimed at increasing the efficiency of using intellectual capital.
Keywords: *Factor analysis, Financial resources, Intangible assets of an enterprise, Small and medium business*

1. INTRODUCTION
The ability to create and exploit the phenomenon of intellectual capital (IC) is the key to success in the global economy. It becomes an essential resource for the strategy and competitiveness of the company, including many different aspects such as experience, culture, information, knowledge. Today, in the transition period of the Azerbaijani economy, traditional management decisions, including the bureaucratic management approach, are unable to cope with modern economic challenges. Modern business reconstruction methods are often associated with the visualization, use and assessment of the effectiveness of the intellectual capital concept (Roos and O'Connor, 2015). Small and medium-sized enterprises (SMEs) play a key role in the emergence and fostering the economies of many developing countries (Banos-Caballero et al, 2010). They use different internal and external components of intellectual capital, but most national companies do not have a systematic approach to intellectual capital

management(Arenas and Lavanderos, 2008). The article examines the special manners of perceiving and managing this resource by the company's leadership and determines the degree of intellectual capital influence on the performance of national SMEs. The main focus of previous studies was intangible resources as a basic condition for competitiveness and profit generation in modern market conditions. The presented article assesses the degree of materiality of each IC component in the effectiveness of the organization's functioning; at the same time, the statistical calculations carried out reveal the ambiguous influence of the enterprise's financial resources on the change in the level of the IC components.

2. ASSESSMENT OF INDIVIDUAL IC COMPONENTS'S VALUE BASED ON THE EXPENDITURES

To be able to manage intellectual capital, we should study its individual components and ways to manage them. Basically, researchers use a three-component structure of intellectual capital's concept, which consists on human, structural and relational capital (Barpanda and Mukhopadhyay, 2016). Currently, *human capital* is the most valuable resource both for an individual company and for society as a whole, much more important than natural resources or accumulated wealth. It is human capital, and not factories, equipment and production stocks that are today an indicator of competitiveness, economic growth and efficiency (Absah, Muchtar, and Qamariah, 2018). To assess, form and use human capital as the most important component of production, it is necessary to define it as an economic category. Thus, in a formalized form, the expression for quantifying human capital HC will look like an additive model representing the sum of three components:

$$HC = \beta_1 A + \alpha_1 \beta_2 B + \alpha_2 \beta_3 C, \tag{1}$$

where A – wage fund of an enterprise; B – enterprise expenditures on knowledge and skills capital; C – enterprise costs for "health capital"; β_1 – return on labor costs; β_2 – return on costs of knowledge and skills capital; β_3 – return on "health capital" expenditures; α_1 (2) and α_2 (3) – parameters showing the dependence of the return on costs on the level of education and age, respectively,

$$\alpha_1 = \frac{\sum_{i=1}^{n} r_i z_i}{Rz}, \tag{2}$$

where r_i and z_i – the number of employees with the i-th level of education and their average salary; n – the number of levels of education in a particular enterprise; R – the total number of employees of the enterprise; z – average wages of workers. The function mapping the dependence of the return on the expenditures for "health capital" is as follows:

$$\alpha_2 = \gamma_m \sum_{j=1}^{n} k_j d_j + \gamma_w \sum_{j=1}^{n} k_j t_j, \tag{3}$$

where $\gamma_{m,w}$ – the proportion of men and women, respectively, at the enterprise; d_j, t_j – share of employees – men and women – of the j-th age group; n – number of age groups; k_j – the rate of return on investment in "health capital" depending on age groups, which are determined based on the retirement age in Azerbaijan (Law of the Republic of Azerbaijan "On labor pensions"). For workers of pre-retirement age, we take $k_j = 1$, for workers of retirement age, but continuing to work at the enterprise, we take $k_j = 0,85$. Taking into account the specifics of the enterprises' activities, we assign the following coefficients of return: $\beta_1 = 0,7$, $\beta_2 = 0,25$, $\beta_3 = 0,05$ (Chigoryaev, Skopintseva, and Ulyashchenko, 2008).

The values of the parameters α_1, α_2, calculated in accordance with (2) and (3), reflect the dependence of the return on costs on the level of education and age are $\alpha_1 = 0,95$, $\alpha_2 = 0,98$.

Structural capital (SC) is defined by the authors as the sum of the value of innovation capital formed by the organization ($InnC$) and the company's total investment in process capital, representing the sum of the organization of production, management and labor (PrC):

$$SC = InnC + PrC \tag{4}$$

where $InnC$ – cost of innovation capital; PrC – investment in process capital. The value of innovation capital is defined as the sum of the values of scientific activity and development, as well as the inventory value of the organization's intangible assets.

For the assessment of *client capital* (CC), the method proposed by Berger and Nasr was used - the BN-approach (Berger and Nasr, 1998):

$$CC = GC \times \sum_{i=1}^{n} \frac{r_i}{(1+d_i)} - M \times \sum_{i=1}^{n} \frac{r^{i-1}}{(1+d)^{i-0,5}}, \tag{5}$$

where n – number of years of SMEs' operation; d – annual discount rate; GC – annual profit received from the buyer; M – annual investment for customer retention; r – customer retention rate (Petrov, Polunovskiy, and Sokolyanskiy, 2017).

Data sources for further analysis and calculations are taken from information from SME leaders, presented in the electronic questionnaire. The authors are forced to make a reservation that all data are approximate. The calculations are shown in the following table (Table1):

IC components			
Human capital HC			
Wage fund of enterprise (A, thousand manats)	Enterprise costs for knowledge and skills capital (B, thousand manat)	Enterprise costs for "health capital" (C, thousand manat)	Human capital cost (HC, thousand manat) (1)
15,864	0,7932	3,1728	19,83
Structure capital SC			
Innovation capital ($InnC$, thousand manats)	Process capital (PrC, thousand manats)		Structural capital cost (SC, thousand manats) (4)
Intangible asset value	Production Organization	Management organization	Labour organization	
980,428	67,832	15,631	9,953	1073,844
Client Capital CC			
Discount rate ($d, \%$)	Sales profit (GC, thousand manats)	Customer retention costs (M, thousand manats)	Customer retention rate ($r, \%$)	Client capital cost (CC, thousand manats) (5)
0,0417	5271,871	1704,857	0,9	2884,365624

Table 1: Assessment of IC components
(Source: Authors' calculations)

3. INTELLECTUAL CAPITAL AND PROPOSED HYPOTHESIS

Forming competitive advantages on the basis of intangible assets that cannot be copied, the entrepreneurial structure increases the capitalization of the business and extends the level of its competitiveness. The share of intangible assets in the company's value can become a benchmark for assessing the competitiveness of companies (Hong and Lu, 2016). Since in this work IC is considered as the sum of components according to Stewart (human capital, structural capital and client capital) (Stewart, 2003), we put forward the following hypotheses:

- H1. Human capital significantly improves the efficiency of SMEs
- H2. Structural capital significantly improves the efficiency of SMEs
- H3. Client capital significantly improves the efficiency of SMEs

On the other hand, the competitiveness of an organization directly depends on how fully and successfully it uses its intellectual capital and how actively it invests in its development. In this way, we put forward the following hypotheses:

- H4. Financial resources strengthen the link between human capital and SME performance, so the association will be stronger when businesses have adequate financial resources.
- H5. Financial resources strengthen the link between structural capital and SME performance, so the association will be stronger when businesses have adequate financial resources.
- H6. Financial resources strengthen the link between client capital and SME performance, so the association will be stronger when businesses have adequate financial resources.

4. DATA AND ANALYSIS

This study is based on information about SMEs in Azerbaijan obtained through a questionnaire survey of leaders of organizations. Using the electronic form, questionnaires were sent to managers with a request to answer a number of questions on assessing the state of IQ in their enterprise. The cover letter stated that the survey will be anonymous and strictly confidential, all results obtained will be used only in summary form, solely for research analysis. To fill out the questionnaire, it is enough to choose the number of the answer option that most closely matches the respondent's opinion. A total of 600 forms were sent. Back, 206 completed questionnaires were received, which is 34% of the total (Table 2).

Table following on the next page

Item	Number of enterprises	Percentage
Qualification of employees		
High school level	81	39.3
Bachelor level	92	44.6
Master's level	20	9.7
Doctoral thesis level	11	5.3
PhD level	2	0.9
Economics field		
Industry	12	5.8
Agriculture	8	3.8
Services	186	90.2
Enterprise size		
10-20 people	96	46.6
21-50 people	42	20.3
51-100 people	40	19.4
101-50 people	28	13.5
Age of the company		
1-10 years	144	70.0
11-20 years	56	27.1
More than 20 years	6	2.9
Total	206	

Table 2: Data from a survey of SMEs' managers
(Source: Electronic questionnaire)

5. EXPERIMENTAL RESULTS

As variables used we accept the following variables:

- intellectual capital (IC), which acts as a composite variable consisting of three components: human capital (HC), structural capital (SC), and client capital (CC);
- Financial resources (FR);
- Firm efficiency (FE);
- Company size ($Size$);
- The age of the company (Age);
- Level of education of employees ($Education$).

For data analysis, we used the SPSS statistical data analysis package. Correlation relationships cannot be considered as evidence of a causal relationship, they only indicate that changes in one feature, as a rule, are accompanied by certain changes in another, but whether the cause of the changes is in one of the features or is it outside the studied pair of features, we don't really know. The relationship between the variables is shown in Table 3. Based on the results of the correlation analysis, a conclusion can be made about the presence and nature of functional dependence or preference for describing the object under study of one type or another in the regression model. Not all IC components have the same positive effect on a firm's efficiency: there is a small, but still negative correlation between efficiency and human capital (-0.035). In this case, this value is so close to 0 that we will assume that there is no correlation between HC and FE. According to calculations, the efficiency of SMEs is positively affected by the firm's client capital (0.67). This trend can be explained by the fact that a high customer retention rate (90%) has a positive effect on the lifetime value of the customer and client capital, and thus on the firm efficiency.

	Education	Size	Age	HC	SC	CC	FR	FE
Education	1							
Size	0,595674	1						
Age	0,694371	0,9377	1					
HC	0,87739	0,1774	0,3525	1				
SC	0,86487	0,4170	0,6843	0,8870	1			
CC	-0,50299	0,3880	0,3338	0,4547	0,8030	1		
FR	0,682843	0,4346	0,8202	0,8056	0,8000	0,4087	1	
FE	-0,29508	0,2361	-0,373	-0,035	0,2612	0,6689	-0,270	1

Table 3: Values of the correlation between the variables
(Source: Authors' calculations)

On the other hand, we see a fairly high connection between the amount of financial resources invested in the intellectual potential of the company, age (0.8202), human (0.8056) and structural (0.8) IC components. Also, a remarkable relationship can be traced between education and human and structural capital (0.87739 and 0.86487, respectively), which is quite intuitively explicable. Since all values of the pair correlation coefficients in modulus are not higher than 0.6-0.7, there is no threat of multicollinearity. Now we go directly to the hypotheses and their interpretation (Table 4). For this we applied two tests: *t*-statistic and *F*-test. All *t*-statistics indicate the fulfillment of null hypotheses - there is no excess in absolute quantity of the critical value for this distribution. We conclude that control factors (staff education, size and age of enterprises) play a significant role in the model. Should be addressed how many arguments will allow the null hypothesis to be rejected in favor of the alternative. The smaller the *P*-value, the stronger the arguments against the null hypothesis. Traditionally, it is believed that if $P<0.05$, $(=0.05)$, then there are enough arguments to reject the null hypothesis, although there is a small chance against this. Then you can reject the null hypothesis and say that the results are significant at the 5% level. In contrast, if $P> 0.05$, then there are not enough arguments to reject the null hypothesis. In our particular case, the *P*-values are close to 0.5. This conclusion does not mean that the null hypothesis is true, there are simply not enough arguments to reject it.

Hypothesis	t-test	F-test	F- value	P-value
H1 ($HC \rightarrow FE$)	1.323223726	0.003639595	0.955687626	0.277571627
H2($SC \rightarrow FE$)	0.496989932	0.219745654	0.671194807	0.653335101
H3($CC \rightarrow FE$)	-0.900387764	2.42917867	0.16983275	0.434274335
H4 ($FR \rightarrow HC \ and \ FE$)	-1.550619184	5.548938764	0.099795602	0.2187788
H5($FR \rightarrow SC \ and \ FE$)	-1.230534959	5.335780238	0.104037588	0.306182263
H6($FR \rightarrow CC \ and \ FE$)	0.57812341	0.60193250	0.4943894	0.603721

Table 4: Hypothesis testing
(Source: Authors' calculations)

The *F*-test is very important in regression analysis and is essentially a special case of constraint testing. If the value of this statistic is greater than the critical value at a given level of significance, then the null hypothesis is rejected, which means the statistical significance of the regression. Table 8 indicates the rejection of 4 and 5 hypotheses about the influence of financial resources on the level of intellectual capital of the enterprise. All our other inferences, in a sense, also confirm our this conclusion. From the foregoing, we unexpectedly conclude that high financial resources do not stimulate the influence of human and structural capital on the efficiency of an enterprise.

6. DISCUSSION AND CONCLUSION

The article examines the role of intangible assets, in particular, intellectual capital, or rather its components (human, structural, client) in creating a company's value. Tangible assets such as buildings, equipment and financial assets have ceased to be the main competitive advantages, but in the context of this study are considered as tools for the growth of an IC of an enterprise. In turn, IC is assessed as the main driver of the company's efficiency. Despite the fact that the hypothesis about the influence of human capital on the efficiency of the organization was fully confirmed, the calculations carried out in the SPSS environment gave somewhat unexpected results regarding the influence of financial resources on the indicator of human capital in the structure of IC. We believe that the reason for this incident is the lack of financial skills among SME managers, who cannot efficiently allocate financial resources. The reasons for this may be different: the quality of the country's labor resources, the level of education of consumers, the investment climate in the countries, the quality of the regulatory framework, and many others. Another reason for this incident may be that in Azerbaijan, administrative and managerial work in most SMEs is carried out directly by the owners, and not by hired qualified specialists. This consequence differs from the previous conclusions, which may be of practical interest for managers and owners of SMEs.

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PROBLEMS OF THE DEVELOPMENT OF STATE-BUSINESS COOPERATION IN AZERBAIJAN

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ABSTRACT

Recently, in most countries, in terms of increasing investment activity and saving budget funds, they prefer to reduce the scale of state entrepreneurship and use equal state-business cooperation in this area. In international practice, the practice of public-private partnership is widely used to ensure the participation of the private sector in financing infrastructure projects. Thus, due to the fact that the implementation of infrastructure projects requires large investments and limited financial resources of the state to meet them, in the implementation of these projects, preference is given to private investment. In this case, the private sector finances infrastructure projects and manages such projects over a long period of time, gradually withdrawing their investments and transferring the infrastructure to the state. Through this mechanism, the world provides funding for the repair and construction of airports, railways, seaports, highways, infrastructure for public services such as electricity, water, gas, telecommunications lines. Increasing the effectiveness of economic reforms in Azerbaijan also necessitates establishing close cooperation with the private sector, the main issue requiring attention in this direction is public-private partnership. Recently, serious steps have been taken in Azerbaijan to improve the business environment and stimulate investment opportunities. However, large socio-economic projects in the country are still funded from the state budget. With all this in mind, the Strategic Roadmap for the Production of Consumer Goods at the Level of Small and Medium Enterprises in the Republic of Azerbaijan, approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016, defines the development of public-private partnerships as one of the main goals. At the same time, as you know, as a result of the 44-day Patriotic War, which began on September 27, 2020, most of the territory of our country, occupied by terrorist Armenia, was liberated from enemy captivity. It is important to create an infrastructure zone to ensure normal life in the liberated territories. The implementation of these projects at the expense of the state budget can cause many social and economic problems in the country. From this point of view, the implementation of this work once again actualizes the development of public-private partnerships in our country. The article is devoted to the scientific research of the problems of the development of state-business cooperation in Azerbaijan. The article examines the economic significance of the application of state-business cooperation in the economy of Azerbaijan and its individual spheres, the role of state-business cooperation in accelerating investment activity in the country's economy and the problems of developing state-business cooperation in Azerbaijan. The purpose of the study is to study the problems of the development of state-business cooperation in Azerbaijan and prepare proposals and recommendations for their solution. Our research shows that in our country there are serious problems of state-business cooperation. It is necessary to take a number of measures to solve the existing problems in the field of public-business cooperation in our country: to create a legislative base serving this area, to achieve the normal development of the financial market, especially the credit and securities market, to determine the priority areas of cooperation between the public and business, etc.
Keywords: *Business, business environment, cooperation, government, investment*

1. INTRODUCTION

One of the important tasks facing our country in modern times is to ensure the effective participation of the economy in the international division of labor, to achieve the development of productive forces through the involvement of foreign capital, advanced technology and management experience. Undoubtedly, in such a situation, one of the most important factors for ensuring the economic development of any country is investment flows. Professor M. Porter, an American economist known as a prominent researcher of the problem of competition, notes that one of the four stages of the country's competitive development is development based on investment advantage. As can be seen, the achievements of individual countries and companies are largely determined by the level of their investment activity. Recently, in most countries, public and business cooperation is increasingly used to increase investment activity and reduce the burden on the public budget. Public and business cooperation is understood as an institutional and organizational alliance established between the public and business for the implementation of projects of various levels with a large public content. Usually, such alliances are created for a certain period of time for the implementation of specific projects, and after the completion of the project, these alliances cease to exist. Recently, serious steps have been taken in Azerbaijan to improve the business environment and stimulate investment opportunities. However, large social and economic projects in the country are still funded by the public budget. Taking all this into account, the "Strategic Roadmap for the production of consumer goods at the level of small and medium enterprises in the Republic of Azerbaijan" approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016 identifies the development of public and private partnership as one of the main goals (1). For countries like Azerbaijan, the public and private partnership model serves not only the purpose of attracting capital, but also innovation, creativity, flexibility and effective governance.

2. THE ESSENCE AND IMPORTANCE OF PUBLIC AND BUSINESS COOPERATION

There is still no consensus on the definition of public and private partnership. However, according to more common approaches, public and business cooperation does not involve the public's involvement in business projects, but the application of mechanisms for the involvement of the private sector (business) by the state in public projects. A public-business partnership is "an organizational and contractual partnership between the public and the private sector for the presentation of a good or service to the state" (4). The first applications of the public and private partnership model began in England in the 1660s with road construction projects involving the private sector. In particular, the application of the public and private partnership model with canal and railway projects reached its peak in the 1860s after the industrial revolution, but many investors went bankrupt with the economic crisis in Europe. After the United Kingdom, the model of public and private partnership was applied in the United Publics and France. Again, the Suez Canal, supported by Egyptian Governor Said Pasha and completed in 1869, is the product of a public and private partnership. Analysis of the experience of different countries at different stages of socio – economic development shows that this type of cooperation includes the construction of transport infrastructure (roads, railways, airports, seaports, pipelines, etc.), social (health, education, recreation and tourism) is more successfully applied in the sectors of infrastructure creation, utilities (water supply, electricity supply, water treatment, gas supply, etc.) and the provision of such services.

Figure following on the next page

Total cost of projects by sector
(with billion euros)

Number of projects by sector
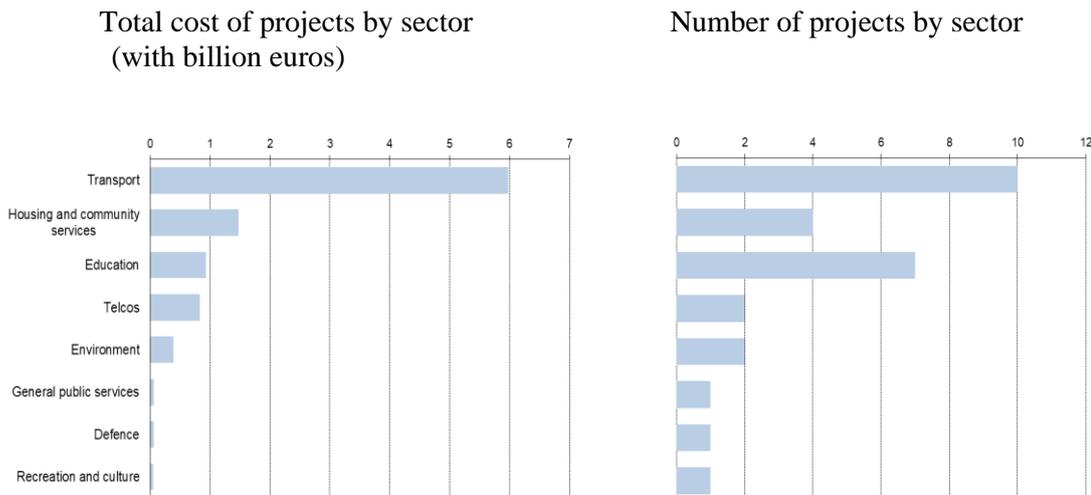
*Figure 1: Sector distribution and cost of PPP projects in countries around the world in 2019
(Source: https://www.eib.org/attachments/epec/epec_market_update_2019_en.pdf)*

In international practice, the model of public and private partnership is widely used in the implementation of state (public) infrastructure projects in a number of countries. Among them are the United States, Great Britain, France, the Netherlands, Australia, South Korea, Turkey, Brazil, India, China, Mexico and others countries can be especially noted. According to the World Bank, between 1990 and 2018, 6,135 public and private partnership projects worth about $ 1.5 trillion were implemented in developing countries (10). A significant part of Turkey's major projects, including Istanbul's new airport, Eurasia Tunnel, Yavuz Sultan Selim Bridge, Osmangazi Bridge, a number of city hospitals and railway projects across the country, has been implemented through a public and private partnership model. According to the World Bank's Private Participation in Infrastructure Projects database, the $ 35 billion Istanbul Airport project is the largest public and private partnership project involving private investment. To other important projects of cooperation between the public and business may have been due Nord Stream gas pipeline project ($ 10 billion) connecting Russian gas fields with EU energy markets, THD Grand Est, the largest fiber – optic project in France (1 billion euros) and the construction and renovation of stadiums for the Euro 2016 football tournament (for example, the construction of the Pierre Mauroy stadium in Lille for 618 million euros), Afsluitdijk Dam (810 million euros), 1915 Canakkale Bridge in Turkey (3.1 billion euros) and Bilkent Laboratory (711 million euros), etc. The chart below shows the public-private partnership market in Europe in 2018 (9). The public and business cooperation model plays an important role in terms of attracting local and foreign investors to the implementation of relevant infrastructure projects by reducing public investment expenditures and applying alternative financing mechanisms (3). In some countries (Australia, the Netherlands, Chile, etc.) even public and business cooperation projects are selected only from the projects included in the public investment program. Relevant support is provided by the Asian Development Bank, the European Bank for Reconstruction and Development, the Sustainable Infrastructure Fund, the Islamic Development Bank, the International Finance Corporation and other international organizations to improve the public-private partnership environment and develop public and private partnership projects.

Figure following on the next page
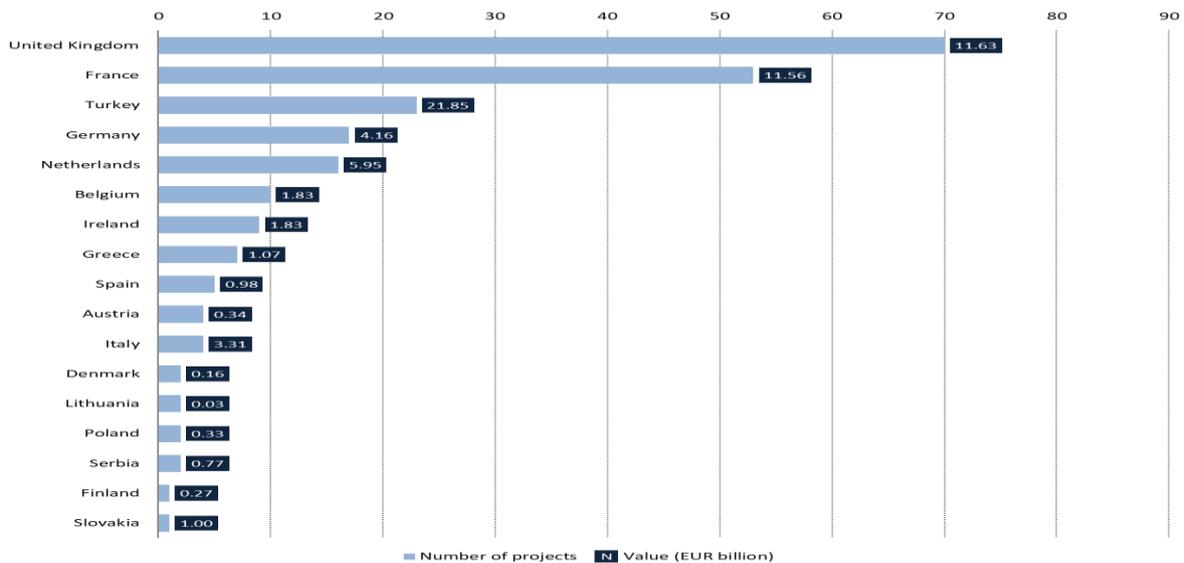
Figure 2: Development of the European PPP market by country (2015 – 2019)
(Source: https://www.eib.org/attachments/epec/epec_market_update_2019_en.pdf)

It should be noted that in developed countries in recent years, increased attention has been paid to the implementation of public and private partnership (green) projects related to the green economy. These countries are investing heavily in renewable energy sources, improving energy efficiency and protecting biodiversity. Unlike developed countries, education and health are not priority areas for public and private partnership in developing and transition economies. The low level of economic and social development in these countries means that investments attracted through public and private partnerships are mainly focused on transport infrastructure, including the construction and repair of roads, railways and ports. In developing countries, private business is particularly interested in financing the energy sector, transport, water supply, sewerage, and telecommunications. In such countries, concessions, production sharing agreements and joint ventures are more commonly used as a form of cooperation. In Central and Eastern European countries (Bulgaria, Czech Republic, Hungary, Croatia, Poland, Romania), China, the Baltic States and the former USSR, the areas of public and business cooperation are the construction of roads, bridges, tunnels, subways, airports and seaports. The purpose of public and private partnership is the efficient use of public and private sector resources to ensure sustainable economic development and increase the welfare of the population. Public and private partnership is a concrete mechanism formed within the framework of norms and rules, which allows each cooperating party to build relations on a legal basis (8). Various forms of public and private partnership are used. Institutional and funding models are differentiated according to the objectives of the cooperation. In most cases, a combination of different models is used in the framework of cooperation. One of the important issues of public and private partnership is that the state determines what infrastructure and services it needs, and the private sector representatives make proposals in accordance with the requirements of the state. The most important issue of cooperation is the sharing of risks and opportunities among the participants. In the end, the solution to a specific problem is left to the partner who offers the highest efficiency. The strategic roadmaps approved by the President of the Republic of Azerbaijan, as well as conceptual documents aimed at the socio – economic development of Azerbaijan, set the goal of increasing the role of the private sector in economic development through public-private partnership mechanisms. In this regard, the Public Entrepreneurship Partnership Development Center was established within the Small and Medium Business Development Agency (SMBDA) under the Ministry of Economy to ensure systematic activities to promote and support public and private partnership projects.

By the Decision of the Board of the Ministry of Economy of the Republic of Azerbaijan dated July 16, 2019, the Model Regulations on the State Entrepreneurship Partnership Development Center were approved. The main activities of the State Entrepreneurship Partnership Development Center are as follows:

- Submission of proposals on the development of the legislative framework and institutional infrastructure for public entrepreneurial partnership;
- Development, implementation and coordination of programs and projects on state entrepreneur partnership;
- Ensuring the expansion of SMEs' participation in state entrepreneur partnership programs and projects;
- Enlightenment and capacity building of all stakeholders in public and private partnership;
- Analysis, research of projects in accordance with the criteria of state entrepreneur partnership and work for the implementation of these projects.

However, a look at the property structure of domestic investment in fixed assets in the country's economy shows that most of these investments fell to the public sector (graphic 3).
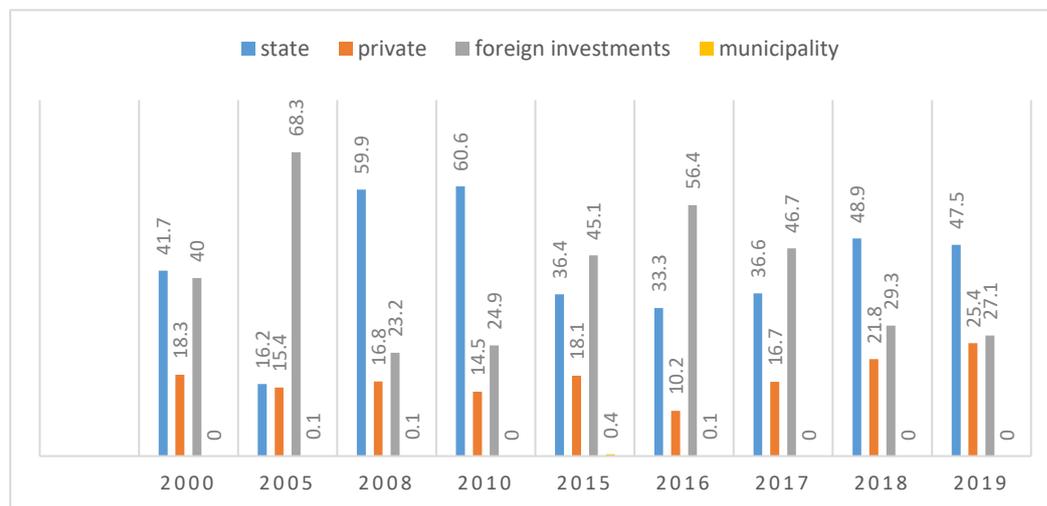
Figure 3: Distribution of investments in fixed assets by type of ownership (Specific weight in total, as a percentage)
(Source: Azerbaijan State Statistical Committee)

3. LEGAL BASIS OF PUBLIC AND BUSINESS COOPERATION IN AZERBAIJAN

The study of world experience shows that the scope and scope of public and private partnership is expanding year by year, new forms of business cooperation with the state are emerging. World experience also shows that the application of this model has a positive impact on the socio – economic development of the country, while creating a perfect legal framework for the development of public-private partnership. This is because the legal framework determines how the state will conclude a private partnership agreement, how long it will last, and how the responsibilities for the service will be distributed. In countries implementing public-private partnerships, they have created a legal framework for these models. For example, the first legal basis for the PPP model in Turkey dates back to the Ottoman Empire (Menafii Universal Privilege Act of June 10, 1910). The legislative framework for public-private partnership in Azerbaijan is being formed. There is no separate law on concessions, public-private partnership or production sharing in Azerbaijan. One of the most important laws in this area – the Law of the Republic of Azerbaijan "On the implementation of investment projects related to construction and infrastructure facilities on the basis of special funding" was adopted in March

2016. In addition, the "Regulations on the transfer of state owned enterprises (facilities) on a contractual basis", the Law "On Public Procurement", the Civil Code of the Republic of Azerbaijan, approved by the Decree of the President of the Republic of Azerbaijan No. 437 of February 9, 1996, the laws "On investment activity" and "On protection of foreign investment" can also be considered to some extent the legal basis of public and business cooperation. "Regulations on the transfer of state enterprises (facilities) to management on a contractual basis" is the main legal and normative document for the transfer of infrastructure facilities to the management of the private sector. The Regulation was developed in order to implement appropriate measures to ensure the revival of state institutions (facilities) on the basis of individual projects. According to the regulations, enterprises (facilities) can be transferred to management on a contractual basis if the privatization of the facility is either not economically feasible or not yet timely. There is an article in the Law of the Republic of Azerbaijan "On Protection of Foreign Investment" adopted in January 1992 on concessions, which is a form of such cooperation. Article 40 of the law is called "Concession Agreements". The article reads: Foreign investors are granted the right to search explore and develop mineral deposits and use other natural resources on the basis of concession agreements concluded with them by the Cabinet of Ministers of the Republic of Azerbaijan and approved by the Supreme Soviet of the Republic of Azerbaijan. Unless otherwise provided in the agreement, unilateral change of the terms of the concession agreement is not allowed (2). However, even if the Law of the Republic of Azerbaijan "On Investment Activity" does not contain specific provisions on public and business cooperation and its forms, there are articles on which it is possible to draw certain conclusions on the application of this law to public and business cooperation. In Article 2 of the law entitled Investment activity also includes paragraph 3, entitled "Joint investment activities carried out by citizens, legal entities and states of the Republic of Azerbaijan and foreign countries", which may apply to investments made in cooperation with the state and the private sector. Finally, as mentioned above, the most important law in this area is the Law of the Republic of Azerbaijan "On the implementation of investment projects related to construction and infrastructure facilities on the basis of special funding." The law was adopted in March 2016. The purpose of the law is to ensure the implementation of investment projects related to construction and infrastructure facilities on the basis of special funding - in accordance with the "build – operate – deliver" model. "Build – operate – deliver" model ("BOD" model) – investment costs (including income) of investment projects related to construction and infrastructure facilities are contracted to the investor, consumers of goods and services produced by him or the authorized body provides for payment by purchase accordingly (2). At the same time, in connection with the application of this law by the Decree of the President of the Republic of Azerbaijan dated December 07, 2016, terms of implementation of investment projects related to construction and infrastructure facilities by investors within the framework of "Build – operate – deliver" model ("BOD" model) – investment costs (including income) of investment projects related to" model, requirements to investors according to types of construction and infrastructure facilities, features and conditions of concluded contracts, goods to be obtained as a result of investment and the Rules for Determining the Cost of Services and by the Decision of the Board of the Ministry of Finance No. Q – 06 dated May 22, 2017, the Rules on the methodology for calculating the amount of cooperation assistance and guarantee liability under agreements concluded under the "Build – operate – deliver" model was approved. The mentioned legal framework envisages the implementation of public and business cooperation projects in the country on the basis of the "Build – operate – deliver" ("BOD" model) model. Despite the existence of these legislative acts, as in countries with extensive experience in this field, our country needs a special law to legally regulate the process of public and business cooperation. Taking this into account, the law "On public and business cooperation" should be prepared in Azerbaijan.

The following should be clarified when drafting a law:
- principles of public and business cooperation;
- powers of state bodies exercising control and management of public and business cooperation processes;
- procedure for providing state support;
- objects of public and business cooperation;
- signs and conditions of public and business cooperation;
- forms and methods of public and business cooperation;
- procedure for starting public and business cooperation;
- procedure for preparation, implementation and management of public and business cooperation projects;
- procedure for concluding, amending and terminating the public and business cooperation agreement;
- issuance of guarantees, distribution of risks;
- procedure for exercising control over public and business cooperation;
- responsibility of public and private partners.

4. POTENTIAL AREAS OF PUBLIC AND BUSINESS COOPERATION IN THE COUNTRY

Every year, a large amount of money is allocated from the state budget to finance investments, which increases the burden on the state budget. Thus, it amounted to about 2.7 billion manat in 2017, about 4.8 billion manat in 2018, about 6.8 billion manat in 2019, about 4.9 billion manat in 2020; it is projected to be 3.6 billion manat in 2021, 3.4 billion manat and 4.9 billion manat in 2022 and 2023, respectively. The sharp decline in oil prices on the world oil market compared to previous periods has a negative impact on the state budget. It is known that more than half of the state budget in our country is formed due to transfers from the State Oil Fund of the Republic of Azerbaijan (SOFAZ) to the state budget. Thus, in 2011, 9203 million manats were transferred, while in the 2020 budget this figure was 11767.5 million manats. Transfers from the State Oil Fund of the Republic of Azerbaijan (SOFAZ) to the state budget in 2021 are expected to amount to 12 billion 200 million manats or 50.2% of all budget revenues. It should be noted that the vast majority of investment projects financed from the state budget are spent on infrastructure projects. Thus, according to forecasts, in this area in 2021 will be 2.5 billion manats, 2.3 billion manats in 2022 and 3 billion manat in 2023 are expected. In general, about 17 billion manats is expected to be invested in the state investment program in 2020-2023, of which about 3.1 billion manats will be realized through foreign loans (11). It is during this period that the use of various forms of public and business cooperation would reduce the burden of the state budget on investment, allowing the distribution of risks in social infrastructure projects by placing a portion of this burden on the private sector. As can be seen from the table below, a large amount of money is allocated to the transport sector in the state budget every year in our country. We believe that there is a great need to develop public and business cooperation in this area in order to reduce investments in the transport sector in the state budget.

Table following on the next page

	2014	2015	2016	2017	2018
Total	2432,4	2195,3	1391,0	1774,3	1922,8
Activities of surface and pipeline transport	416,2	553,1	345,8	127,1	305,2
Railway transport	4,3	1,6	1,9	2,1	7,1
Other road transport	358,2	237,6	194,1	38,5	129,8
Pipeline	53,7	313,9	149,8	86,5	168,3
Water transport	142,6	112,7	53,1	112,2	115,4
Air transport	82,2	397,2	10,2	402,2	39,4
Warehouse and ancillary transport activities	1791,4	1132,3	981,9	1132,8	1462,8

Table 1: Transport oriented investments (million manat)
(Source: Azerbaijan State Statistical Committee)

In addition to the above, as is known, as a result of the 44 – day Patriotic War, which began on September 27, 2020, most of the territory of our country occupied by terrorist Armenia was liberated from occupation. It is important to create an infrastructure area to ensure normal life in the liberated areas. Implementation of these projects at the expense of the state budget can cause many social and economic problems in the country. From this point of view, the implementation of this work makes it necessary to develop public and private partnership in these areas in our country.

5. CONCLUSION

1) A law on public and business cooperation must be drafted in Azerbaijan. The draft law should clarify the following:
   - principles of public and business cooperation;
   - powers of state bodies exercising control and management of public and business cooperation processes;
   - procedure for providing state support;
   - objects of public and business cooperation;
   - signs and conditions of public and business cooperation;
   - forms and methods of public and business cooperation;
   - procedure for starting public and business cooperation;
   - procedure for preparation, implementation and management of public and business cooperation projects;
   - procedure for concluding, amending and terminating the public and business cooperation agreement;
   - issuance of guarantees, distribution of risks;
   - procedure for exercising control over public and business cooperation;
   - responsibility of public and private partners.

2) The experience of countries that apply models of public and business cooperation shows that the application of these models in all areas is not effective. Therefore, priority areas for public and business cooperation projects should be identified.

3) As noted, one of the main objectives in the implementation of the model of public and business cooperation is to prevent corruption in the country. In this regard, transparency in the selection of private partners should be ensured. For this, the state must develop a special mechanism.

4) The experience of countries implementing models of public and business cooperation shows that the successful implementation of these models depends on the development of the existing financial market in the country. From this point of view, it is important to achieve the normal development of the financial market in our country, especially the credit and securities market.

5) As in some countries (for example, India), the establishment of a PPP Evaluation Committee to facilitate the evaluation and approval of projects can help develop public-business cooperation in the country.

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INTERNATIONAL TRADE OF THE REPUBLIC OF CROATIA WITH THE EUROPEAN UNION: TRENDS AND PERSPECTIVES

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ABSTRACT

International trade refers to economic transactions that take place between different countries. International trade is extremely important in today's global economy, and can be defined as the exchange of products and services between two or more countries of the world. Generally speaking, international trade allows countries to focus on industries and production in which they can be most productive and efficient. Thus, international trade, very often, raises the standard of living of both producers and consumers. The European Union is a member of the World Trade Organization and its trade policy promotes free trade in the world, which is a cornerstone of EU trade policy. Currently, the EU is one of the largest actors in international trade and accounts for about 17% of total foreign trade. After joining the EU in July 2013, Croatia began to implement the EU's Common Trade Policy on international trade, which led to increased exports and imports of products and services to EU member states and increased economic growth in Croatia after accession to the Union.
Keywords: Croatia, the European Union, trade exchange, CEFTA, common trade policy

1. INTRODUCTION

International trade refers to economic transactions that take place between different countries. Consumer goods such as clothing and televisions, capital goods such as for example machinery, and raw materials and food are most often traded. Other transactions include travel services and payments for foreign patents. International trade allows countries to expand their markets and access products and services that would not otherwise be available in the country. As a result of international trade, market competitiveness emerges. This ultimately results in more competitive prices, and brings consumers a cheaper product to the domestic market. International trade transactions are facilitated by international financial payments, in which the private banking system and the central banks of trading states play an important role. International trade has many advantages and disadvantages. The advantage of international trade is that exports create new jobs and strengthen the country's economic growth, and domestic companies more experience in production for foreign markets. Also, over time, companies gain a competitive advantage in world trade, and some research has shown that exporters are more productive than companies that focus exclusively on the domestic market. On the other hand, international trade also has certain shortcomings. International trade is reducing the number of jobs in domestic industrial plants that are increasingly difficult to compete in a competitive world. Large and profitable companies are moving their offices and technology production to countries with lower living and manufacturing costs. Furthermore, countries with traditional economies could lose their local agricultural base because developed economies subsidize their agribusiness. This is done by both the United States and the European Union, which undermines the prices of local farmers in other countries.

2. THE IMPORTANCE OF INTERNATIONAL TRADE

Modern economic trends and developments are characterized by a long-term trend of increasing international trade and increasing the importance of foreign trade for overall economic development. International trade can be defined as the total volume of trade between countries around the world. In other words, the totality of trade in the global market. International trade and accompanying financial transactions are mainly conducted for the purpose of giving the nation goods it lacks in exchange for those it produces in abundance. Such transactions, functioning with other economic policies, tend to improve the living standard of the nation. With the development of social productive forces, the international exchange of various goods and services is also increasing. It was the development of capitalism and the transition from manufacturing to machine production that influenced the development of international trade. Through international exchange, all countries of the world are united into a single global economic system, which is why international trade becomes the bearer of economic development and the common interest of all countries. International trade is a reflection of internal developments in the economy, production and consumption of goods and services, supply and demand of products and services in the economy of a country that is open to foreign markets. In order for international trade to affect a country's economic growth and development, it must be able to maximize economic growth. International trade is of great economic importance for all countries, especially countries exporting products and services. Every country in the world is to some extent dependent on the exchange of goods, which is true for countries such as Croatia as well. On the other hand, for developed countries that have surpluses of energy, goods and services, international trade is an opportunity to get rid of surpluses at the best possible conditions and prices in foreign markets. Unlike exports, imports of goods and services occur in order to meet the needs of the local population with products that are not enough in the country in which they live. Furthermore, there are a number of other reasons why international trade and import and export of products are important. The sale of products on foreign markets enables the increase of the product range, development of export-oriented industry, creation and development of new professional occupations and creation of new jobs, etc. Also, companies that successfully export their products create good conditions for importing products. in this way it encourages the overall economic and economic development of the country. Competition with competing countries affects the increased production activity of local producers, not constantly improving production technology, which leads to the creation of higher quality products. New technological processes reduce production costs and enable lower product prices on the market. The growth of the world economy today has a marked effect on the growth of international trade. The most important factors influencing the growth of international trade today are the incentive factors, which will be explained in more detail below. There are three main reasons why economic development affects the expansion and growth of international trade:

1) Constant economic development and growth opens up great market opportunities that enable companies to expand globally. Also, the slower growth of the domestic and local markets is a signal that opportunities should be sought in the global markets of other countries,

2) Due to the aforementioned growth of the world economy, the resistance of foreign companies to entering the domestic market has decreased. Namely, a foreign company can operate successfully on the domestic market without taking the job away from local companies, because local companies can ask for help from governments if there is no economic growth and

3) The stimulus of international trade was initiated by privatization and the opening of once closed markets. The opening of the market has enabled the economic growth of many international companies (Keegan, 2011: 15-20).

Furthermore, numerous multilateral trade agreements, as well as economic integrations and organizations (EU, CEFTA, WTO, NAFTA, etc.) have accelerated the processes of international trade. Economic and political stability in the world since the middle of the 20th century has resulted in the creation of the International Monetary Fund and the World Bank, thus laying the foundations of the international economic system as well as norms on exchange rate changes. Today's global economic order and the integration of countries into economic integration has provided legal certainty which also affects the development of international trade without some great uncertainties. Patents and intellectual property protection are easier to enforce, and exchange rate control policies are more flexible. The very international activity of a company affects its market advantage over other companies. The most important advantages are the transfer of experience, economies of scale, global access to resources and the use of the global concept of international marketing. The global concept of international business and marketing is reflected as the greatest competitive advantage of an international company. The global concept is based on an information system that the world trade environment to be able to detect opportunities, threats or trends in a timely manner. Global competitiveness, accelerated launch of products on the market, but strong technological development requires increasing financial investments from companies, which is especially felt in the fields of informatics and electronics and pharmacy. In these areas, investment in development and research is the key to success in the international market. Time and cost barriers related to distance have dropped significantly in the last century. Since communication between employees and consumers (both current and potential) is important for the development of international trade, the development of air transport and reducing the cost of telecommunications tools (e-mail, fax, mobile phones) are of paramount importance. Technology today makes it possible to change the business of almost all companies. Every new technological solution is available in a very short time all over the world, and it is quickly becoming universal. Today, the 21st century is characterized by the equalization of consumer tastes, even in local markets, which affects the great opportunity and progress of global marketing (Andrijanic, 2012: 14-15).

3. COMMON TRADE POLICY OF THE EUROPEAN UNION

The forerunner of the European Union was created after the Second World War. The first steps were to foster economic cooperation: the idea was for countries that traded with each other to become economically interdependent and thus more likely to avoid conflicts. The result was the European Economic Community (EEC), created in 1958, which initially increased economic cooperation between six countries: Belgium, Germany, France, Italy, Luxembourg and the Netherlands. From then until today, 22 more members have joined the European Economic Community, thus creating a huge single market that continues to develop to its full potential today. What started as an exclusively economic union, has developed into an organization that covers the development of various policy areas, from climate, environment, health to migration, external relations and security. Officially, the European Union was created by the Maastricht Treaty, which entered into force on November 1st, 1993. The treaty is designed to strengthen European political and economic integration by creating a single currency (the euro), a single foreign and security policy and common rights to citizenship. On January 31st, 2020, the United Kingdom officially left the EU, with a one year-transition period (https://europa.eu/european-union/index_en). Trade in products and services contributes significantly to increasing sustainable growth and job creation. More than 30 million jobs in the EU depend on exports outside the EU (https://www.consilium.europa.eu/en/policies/trade-policy/). About 90% of future global growth is projected to occur outside European borders. The European Union is the world's largest trading power, accounting for 16.7% of world trade in products and services. Foreign trade in goods and services accounts for 35% of EU GDP.

One in seven jobs in the EU is export-dependent (Hoekman and Puccio, 2019). Imports give EU companies access to inputs that help them compete in the market by improving productivity and reducing overall production costs by giving EU consumers the opportunity to buy a wide range of goods and services that meet their needs. The main goal of the European Union's trade policy is to increase the trading opportunities of European companies by removing trade barriers such as tariffs and quotas and guaranteeing fair competitiveness. This is necessary for the development of the European economy as it affects economic growth and employment. The Council of European Union is committed to a rules-based multilateral trading system. Trade policy is accompanied by a high level of transparency as well as effective communication with citizens about the benefits and challenges of trade in open markets. Trade policy is the exclusive competence of the EU. This means that the EU, not the member states, enacts laws on trade issues and concludes international trade agreements. If the agreement covers issues of mixed liability, the Council may conclude it only after it has been ratified by all the Member States. By acting together on the global stage, rather than with more separate trade strategies, the EU takes a strong position when it comes to global trade. The EU manages trade relations with third countries in the form of trade agreements. They are designed to create better trading opportunities and overcome trade barriers. The EU wants to ensure that imported products are sold at a fair and equitable price in the EU, no matter where they come from (more in: https://www.consilium.europa.eu/en/policies/trade-policy/). Trade regulation in the form of trade defence instruments is a means of protecting EU producers from harm and combating unfair competition from foreign companies. The Common Trade Policy (CTP) enables the EU to speak with one voice on trade policy issues and to use the single market to improve access to foreign markets for EU companies through the negotiation of trade and investment agreements. Economic globalization is characterized by the growth of international trade and the growing interdependence of economies at the global level. EU trade policy is a central tool for responding to the challenges posed by globalization and turning its potential into real benefits. EU trade policy protects Europeans by ensuring that imports comply with consumer protection rules. The EU also uses its trade policy to promote human rights, social and security standards, respect for the environment and sustainable development. EU trade policy consists of three main elements:
1) Trade agreements with non-EU countries to open new markets,
2) Trade regulations to protect EU producers from unfair competition and
3) EU membership of the World Trade Organization, which sets international trade rules.

The European Union's trade policy today faces a number of challenges, both internal and external. It is very important to ensure that trade policy is in line with the purpose of a European service-oriented economy and to address the concerns of many citizens with the effects of globalization. European trade policy leadership should launch global trends towards protectionism, prevent the collapse of the multilateral trading system and support work on negotiating a framework of rules dealing with the current trade conflicts. Many EU citizens see globalization as a threat to employment and a growing source of growing inequality. This explains the growing involvement of trade policy in internal political debates and activities. An example of this is the large-scale protests that took place in Germany whose citizens oppose the ratification of the agreement with the US and Canada. Concerns focus on the implications of trade agreements on regulatory powers, their prominence in addressing non-economic concerns such as environmental protection and labour standards, and in the case of neighbouring countries it is feared that trade agreements could be the first step towards possible EU accession. Managing and addressing EU citizens' concerns about the potential consequences of trade agreements is important for the EU. They are the main tool of foreign policy. They are also a key mechanism by which to respond to greater recourse to protectionism by the US and major

emerging economies as an obstacle in the event of a failure to revitalize the WTO. In addition to internal, there are also external challenges. For example, the search for a "America first" policy included US unilateral protectionist measures, including global safeguards against imports of washing machines and solar panels, and restrictions on steel and aluminium imports motivated by national security. Foreign imports from China are subject to additional tariffs in retaliation for alleged unfair Chinese trade practices. These measures led to retaliation against U.S. exports. EU countermeasures affect U.S. exports of grains, juices, tobacco, clothing, iron and steel products, motorcycles and boats. The EU has also launched a safeguard action to prevent the diversion of steel from the US to the EU and to challenge the legality of US' protectionist measures before the WTO. In response to countermeasures, the U.S. has launched a national security investigation into car imports. An increase in tariffs on imports of automotive products would have a significant negative effect on EU producers. Although the US remains a key trading partner of the EU, developing economies have become more important. China ranks first as a source of imports from the EU and second as a destination for exports to the EU. Asian countries are the largest market for exports from the EU, accounting for a third of total exports of goods, followed by North America (27%) and European countries outside the EU (23%) (Hoekman, Puccio, 2019). Given the importance of trade flows between the EU and China, a bilateral trade agreement could recoup costs for both the EU and China if trade conflicts with the US continue to prevail. It could also make it possible to negotiate provisions that address a number of issues the EU has with China, such as public procurement, the treatment of EU investors and the activities of state-owned enterprises. The EU benefits from an open trade policy and an effective, rules-based multilateral trading system. The rise of protectionism in major trading countries (especially the US and several large emerging economies) can only be detrimental to the EU economy. Internal and external factors challenge the EU's ability to use the CTP and at the same time increase the prominence of trade policy as a foreign policy instrument.

4. REPUBLIC OF CROATIA: TRADE WITH THE EUROPEAN UNION MEMBER STATES

International trade is one of the key factors in Croatia's economic development. Croatian trade in goods accounts for about 55% of GDP. However, its exports of services exceed exports of goods due to a strong tourism sector, so, taking into account trade in goods and services, the trade openness indicator increases to approximately 85% of GDP. Nevertheless, Croatia is among the least open countries in the Central and Eastern Europe (CEE), and improving this indicator is important for stronger economic development. The country mainly exports petroleum oils, medicines, human and animal blood, wood, while imports are driven by petroleum oils and crude oil, cars, medicines and electricity. Although exports of goods have never been sufficient to cover imports in any year since 1995, after the outbreak of the global economic and financial crisis, the trade deficit has fallen sharply, mainly due to weak adjustment of demand and imports. In the period from 1998 to 2016, Croatia recorded a constant trade deficit with an export-import coverage ratio of around 53% on average (Ranilovic, 2017). The slower growth of exports than imports in Croatia can be partly explained by the late integration into international economic institutions. First, unlike other Central and Eastern European countries, which joined the World Trade Organization in 1995, Croatia became a member in the year 2000. Second, the lack of an Association Agreement with the EU has deprived Croatia of preferential access to the EU market. The weak growth of Croatian exports can also be explained by a number of factors, including the low share of high value-added products, the lack of a clear national export strategy, low inflows of foreign direct investment in the tradable sector, high operating costs compared to peer countries and relatively low investment in research and development.

However, the overall structure of Croatian trade changed after Croatia's accession to the EU in July 2013. It was only after Croatia's accession to the European Union that the country's economy gradually began to grow only in 2015, after Croatia experienced six consecutive years of economic recession. Only in 2019 did Croatia experience economic growth from 2.7% to 2.9% compared to the previous year, which was mainly caused by domestic demand and public investment from EU funds. According to the data from the International Monetary Fund from April 14, 2020, due to the economic crisis caused by the epidemic of the COVID-19 virus, the economy is expected to decline by 9% (https://www.nordeatrade.com/en/explore-new-market/croatia/economical-context). During 2018, the European Union accounted for 68.6% of Croatian exports (mainly to Italy, Germany and Slovenia), followed by Bosnia and Herzegovina (9.4%) and Serbia (4.9%). In terms of products and services, Croatia has a structural trade deficit. According to the latest data from the World Trade Organization, exports of goods in 2018 amounted to 17.4 billion US dollars (+ 8%), while imports grew faster (+ 13%) and thus reached the amount of 28.1 billion US dollars. As a result, Croatia's trade balance was negative (-11 billion US dollars). Also, according to the World Bank, the total trade deficit was an estimated 0.8% of GDP (https://www.nordeatrade.com/en/explore-new-market/croatia/economical-context). The process of EU enlargement as well as the creation of a single market combined with external factors such as the activities of the World Trade Organization and changes in the overall political situation in the world have led to significant changes in the legal basis of EU international trade policy. New legal acts and instruments increasingly comply with the norms and principles of international trade law. The harmonious development of world trade, the abolition of restrictions on international trade and the reduction of customs barriers are the main objectives of the European Union's common trade policy. The realization of foreign trade policy is carried out on the basis of the drafting of certain normative acts. Special attention in the above normative acts is paid to the regulation of import and export of goods, the system of trade protection measures, quotas and licensing. In the continuation of the paper, the most important instruments of the international trade policy of the European Union, which are also applied to the trade policy of Croatia, are presented:

4.1. Regulations on the import of goods

Regulations on imports of goods and services are classified into customs and non-customs. The most important instrument of customs regulation in the EU is the Common Customs Tariff (CCT), the introduction of which is an important precondition for the formation of a customs union. The main objectives of the application of the CCT include:

- increase in the costs of imported goods, and thus support for domestic production,
- increase in EU budget revenues (90% of all collected customs duties),
- combating trade practices that violate fair competition on the world trade scene,
- creation of mechanisms and instruments for economic integration (customs unions, free trade zones) and for assistance to developing countries,
- achieving a positive balance of payments by reducing the volume of exports,
- the possibility of introducing urgent protective measures against products that harm domestic producers,
- difficulties in exporting raw materials, food and other goods at prices lower than world prices, and thus preventing a deficit of such goods,
- encouraging the progress of certain industries by granting favourable customs regimes.

4.2. Regulation of export of goods

An important component of EU trade policy is the regulation of exports. This is achieved by regulations establishing general EU export rules. As regards customs regulation of exports of goods, the European Union consistently pursues a policy of deducting export duties.

This is fully in line with the purposes and principles of GATT. Export duties are applied only in exceptional cases in order to prevent the outflow of vital products from the EU. The basic principle is formulated in the Regulation - the principle of freedom of export and rejection of quantitative restrictions, except for the restrictions provided for in the founding treaties. The information and consultation procedure necessary for the export of goods is regulated by the Regulation. There are also rules for the application of the EU safeguard measures, as well as rules on Member States' national restrictive measures and rules for the export of agricultural products. There are lists of goods that are excluded from the operation of the principle of freedom of export. The Regulation also reaffirms the competence of Member States to impose restrictions on exports for reasons of public morality, public policy and public security, protection of human life and health, protection of national cultural, historical and archaeological values, protection of industrial and commercial property. A number of important raw materials are excluded from the entire export policy (agricultural products, metal ores, scrap iron, fuel, etc.).

4.3. System of protective measures
The system of safeguard measures in the European Union includes legal norms in the field of anti-dumping (Regulation No. 1225/2009) and countervailing duties (Regulation No. 2026/97). Using these legal norms, the EU has implemented international agreements accepted under the GATT. Anti-dumping and anti-subsidy measures are aimed at combating various types of unfair trade practices, as well as compensating for the trade balance. These measures are caused by the action of third country companies on the EU market. The aim of the compensatory measures is to eliminate the trade imbalance within the European Union, which has arisen from unfair subsidies to EU exports by exporting countries. In addition to protection against dumping and subsidization, EU legislation presupposes retaliatory measures aimed at combating illegal restrictions on the access of EU goods to third country markets. Such restrictions are called "foreign trade barriers" and include customs and non-tariff measures of third countries.

4.4. Quota and licensing system
As already mentioned, the European Union in some cases uses quantitative restrictions on imports and exports of goods. The most common forms of quantitative restrictions are quotas and licensing. The quota system is based on the Common Commercial Policy and considers the principle of free movement of goods within the EU. Regulation (EC) No 717/2008 provides the legal basis for quotas and establishes common procedures for managing quotas among importers (exporters).

Quotas can be applied in one of the following ways or in a combination of these methods:
- traditional allocation – this method is based on traditional trade flows, and quotas on imports and exports of goods are allocated primarily between traditional importers, i.e. exporters, or importers or exporters who can prove that during the "reference period" they imported or exported products to EU;
- Allocation in the order of receipt of applications – based on the order in which applications are submitted, those who applied first for the allocation of quotas will be the first to receive their licenses. Licenses are valid throughout the European Union, except in cases where they are granted to individual Member States or regions of the EU. The duration of the licenses is four months.
- Proportional method – a method of allocating quotas in proportion to the quantity requested at the time of application, in other words, data are collected relating to the number of applications and the quantity of goods requested (Prytula, 2015: 164).

5. REPUBLIC OF CROATIA: TRADE RELATIONS WITH THE WESTERN BALKANS COUNTRIES, MEMBERS STATES OF CEFTA

The Republic of Croatia was a member of the CEFTA (Central European Free Trade Agreement) from 2003 to 2006 and thus had fully liberalized trade relations with the member countries of that integration. Accordingly, trade with neighbouring Bosnia and Herzegovina has been fully liberalized, and reduced customs rates have been applied to exports to Serbia, Croatia's second most important partner among CEFTA members. However, after Croatia's accession to the European Union on 1 July 2013, all national regulations in the field of trade policy and trade relations concluded before Croatia's membership in the EU ceased to apply, i.e. agreements concluded with CEFTA member states ceased to be valid. e. Trade with the countries of the region, Bosnia and Herzegovina, the Republic of Albania, Montenegro, Kosovo, the Republic of Macedonia and the Republic of Serbia is conducted in accordance with the Stabilization and Association Agreements. Also, with Croatia's accession to the EU, in addition to the Stabilization and Association Agreements with CEFTA countries, the European Commission concluded additional protocols with Bosnia and Herzegovina, the Republic of Albania, Montenegro, Macedonia and the Republic of Serbia, all in order to maintain traditional trade policy. In the continuation of the paper, Croatia's trade relations with three countries in the region will be presented: Bosnia and Herzegovina, the Republic of Serbia and Montenegro. Diplomatic relations between Croatia and Bosnia and Herzegovina began when Croatia recognized Bosnia and Herzegovina on January 24, 1992, and both countries signed an agreement on mutual friendship and co-operation. In June 2008, Bosnia and Herzegovina signed a Stabilization and Association Agreement (SAA) with the European Union, an important step towards EU membership. The SAA between the EU and Bosnia and Herzegovina officially entered into force on 1 June 2015. The most important part of the SAA is the establishment of a free trade zone between Bosnia and Herzegovina and the EU/Croatia, enabling the mutual abolition of customs tariffs and quantitative restrictions on the mutual exchange of goods between Bosnia and Herzegovina and the EU. The entry into force of the SAA should increase investor confidence in the country, both domestic and international. When exporting / importing industrial products from the EU/Republic of Croatia to Bosnia and Herzegovina, the zero customs rate is applied to: industrial and agricultural products, and the basic customs rate is applied to: cattle, pigs, dairy products, fruits, cigarettes and fig (Čudina, Sušić, 2013). The Republic of Serbia signed the Stabilization and Association Agreement with the EU / Croatia on 29 April 2008, which entered into force on September 1st, 2013. The Protocol on Technical Adjustments to the Stabilization and Association Agreement between the EU and the Republic of Serbia for the Membership of Croatia in the EU was signed on 25 June 2014 and provisionally applied from 1 August 2014. When exporting / importing industrial products from the EU / The Republic of Croatia applies a zero rate of customs duty to Serbia, namely to: industrial and agricultural products and fish and fish products, the basic duty rates (0-30%) are changed to seasonal fruits and vegetables, and the basic duty rate (20-70%) on milk, meat, fruits and vegetables, flour, etc. Furthermore, Montenegro signed a Stabilization and Association Agreement with the European Union/Croatia on 15 October 2007, which entered into force on May 1st, 2010. When exporting/importing industrial products from the EU / Republic of Croatia to Montenegro, a zero-duty rate is applied to: industrial and agri-food products, fish and fish products, the basic duty rate is applied to a part of agri-food products, 50% of the basic duty applies to lambs, sheep, prosciutto, dairy products, etc., and tariff quotas on trout, carp, gilthead sea bream, sea bass and canned sardines.

Table following on the next page

Table 1: Republic of Croatia: Trade with economic groupings 2010-12 (in billions of Croatian Kunas, HRK)

		2010	**2011**	**2012**
EU	Exports	36.623	42.632	42.106
	Imports	66.387	74.842	76.197
CEFTA	Exports	12.137	13.670	15.164
	Imports	5.916	7.170	7.455
EFTA	Exports	744	1740	950
	Imports	2.238	2.446	3.004
OPEC	Exports	2.384	1.731	1.324
	Imports	606	969	1.196

Source: author's work according to Croatian Central Bureau of Statistics, https://www.dzs.hr/

Figure 1: The most important export products of Croatia 2010-12, before accessing the EU
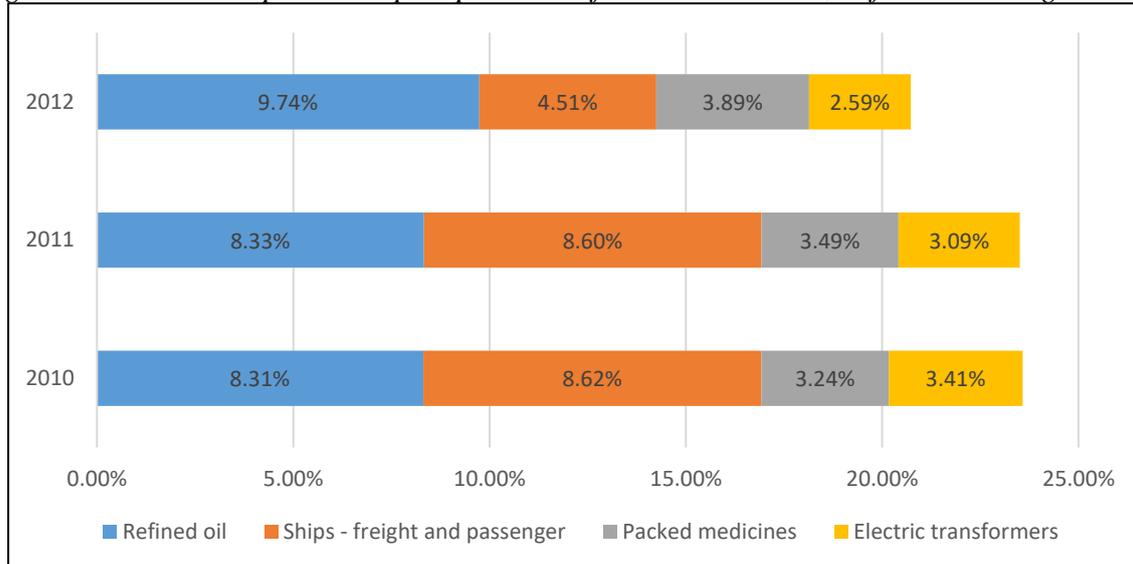
Source: Author's work according to OEC – The Observatory of Economic Complexity, https://oec.world/en

Figure 2: Croatia's exports and imports rate 2010-12, before accessing the EU
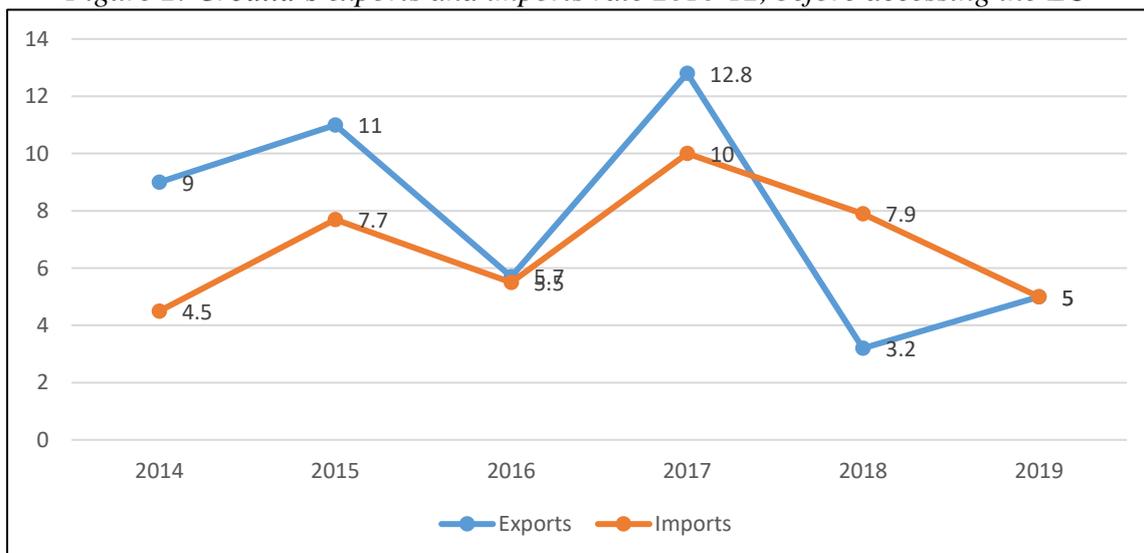
Source: Author's work according to Croatian Central Bureau of Statistics, https://www.dzs.hr/

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Table 2: Republic of Croatia - Trade with the EU member states 2014-19 (in billions of Croatian Kunas, HRK)

	2014	2015	2016	2017	2018	2019
Exports (in bln HRK	50.528	58.518	61.627	67.867	74.189	77.716
Growth rate (%)	12.7	15.8	5.3	9.8	9.3	4.8
Imports (in bln HRK)	99.819	109.830	114.683	127.496	137.652	148.984
Growth rate (%)	8.0	10.0	4.4	11.2	8.0	8.2

Source: Author's work according to Croatian Central Bureau of Statistics, https://www.dzs.hr/

After Croatia's accession to the European Union, as expected, the share of exports to EU countries in total exports of the Republic of Croatia has increased, as well as the share of imports to EU countries. The highest growth rate of exports of products and services to EU member states is visible during the first and second years of membership, 2014 and 2015, after which exports began to decline slightly. Imports also grew every year, and the highest import growth rate of 11.2% can be observed in 2017, i.e. after coming out of the economic crisis that has affected the whole world. Also, the share of exports and imports of the Republic of Croatia with EU member states in the total trade exchange was higher than 60% each year. The share of exports to the EU fell slightly during 2016 and 2017 and then began to rise again. On the other hand, the share of imports had the largest increase in 2015, after which it fell slightly. The largest total share of imports into the EU can be observed during 2017 and 2018, while in 2019 this amount decreased by almost 1% of the total trade of the Republic of Croatia.

Figure 3: Croatia's total trade in comparison with the trade with the EU
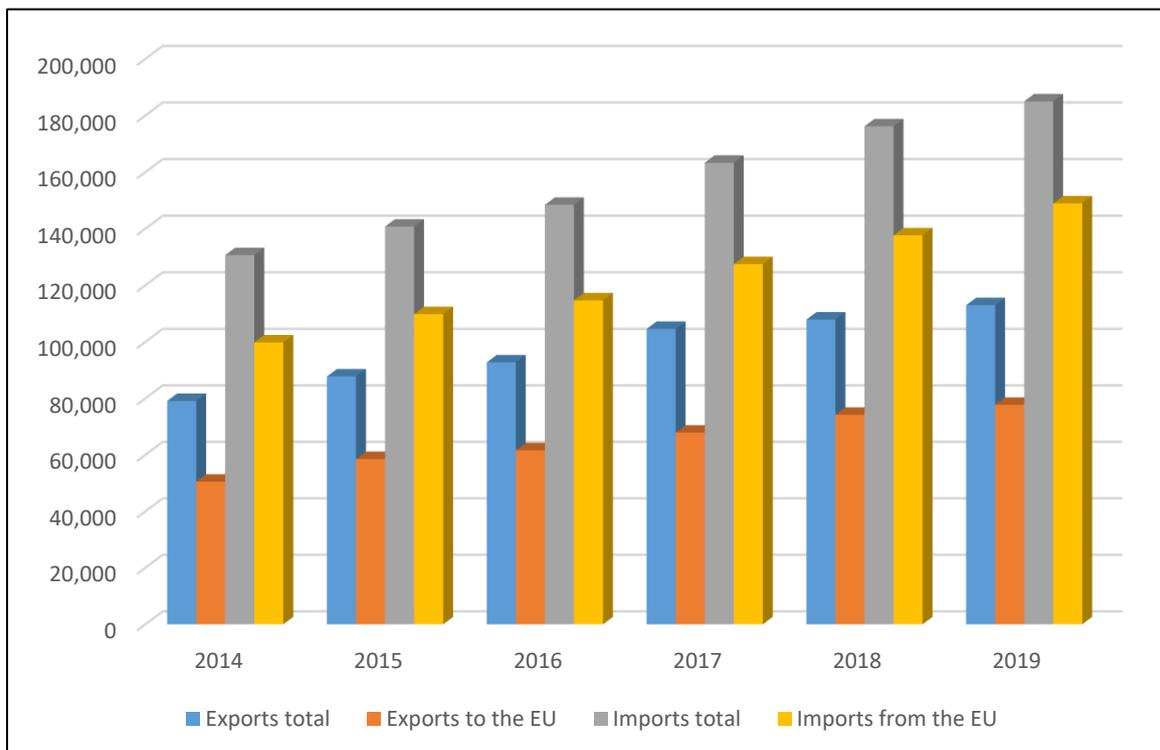
Source: Author's work according to Croatian Central Bureau of Statistics, https://www.dzs.hr/

The largest export foreign trade partner of Croatia since the accession to the EU was Italy with the largest share in the total export of the Republic of Croatia. Exports to Italy grew every year, and the highest growth rate is visible in 2017 when exports to Italy increased by almost 5%. On the other hand, the largest exports to Italy were recorded in 2019, when they amounted to 16 billion Kuna with a share in total exports of 14%. In the first three observed years (2014-2016), Slovenia was in second place as Croatia's export foreign trade partners, and since 2017, exports to Slovenia have fallen by 3%. Since 2018, exports to Slovenia have been growing again, reaching 11% of total Croatian exports. The third largest foreign trade export partner of the Republic of Croatia is Germany. Unlike Italy, exports to Germany rose sharply in 2017 (by almost 18%) and continued to grow steadily throughout 2018 and 2019. In 2019, exports to Germany approached the figure of as much as HRK 15 billion and a 14% share in total Croatian exports. All of this confirms the thesis that Croatia is highly export dependent on only a couple of trade partners – in the EU, these are mainly Italy, Germany and Slovenia. These three countries are also Croatia's largest import partners. Croatia is highly integrated into the EU common market, hence in the period 2014 to 2019, Croatia's exports to the EU amounted for about 64 to 69 percent of total exports, with a slow rise in trend, whilst the imports to Croatia from the EU in the same period amounted for a steady 76 to 78 percent of total imports. Among CEFTA member states, Bosnia-Herzegovina is the most important trade partner of Croatia.

6. CONCLUSION

International trade is the exchange of capital, goods and services across international borders. International trade is extremely important for the continuation of globalization, but also for the economic development of countries. The economic basis of international trade is that countries have different products and resources, which is why they gain a competitive advantage over other countries. The comparative advantage helps the country move closer to allocative and productive efficiency. A comparative advantage means that a country can produce a particular product at a lower opportunity cost than other countries, which plays an important role in international trade. International trade is one of the key factors in the country's economic development. Croatian trade in goods accounts for about 55% of GDP. However, exports of services exceed exports of goods due to a strong tourism sector, so, taking into account trade in goods and services, the trade openness indicator increases to approximately 85% of GDP. Croatia became the 28th member state of the European Union (EU) on 1 July 2013. However, the liberalization of trade policy vis-à-vis the EU began long before that date, which led to EU member states becoming Croatia's most important trading partners. Croatia's accession to the EU has affected not only trade with Member States, but also trade with Southeast European countries due to its simultaneous exit from CEFTA. accession to the Union, Croatia has had a number of long-term and short-term effects on international trade. The short-term effects relate to the removal of customs and non-tariff barriers, and the long-term effects relate to a larger and more competitive European market. Based on the research, it can be concluded that trade (imports and exports of products and services) of Croatia with EU member states grew every year from 2014 to 2019, while exports of goods to CEFTA member countries fell. Also, there was a reduction in consumer prices in Croatia. The most important foreign trade partners of Croatia in the observed period were Italy, Germany and Slovenia. While Italy was the most important export, Germany was the most important import foreign trade partner of Croatia in the observed period. The highest export rates are recorded in the manufacturing industry and the production of motor vehicles and pharmaceuticals. On the other hand, during the observed period, the most imported products to Croatia were refined products, refined oil and coke, and the production of engines and motor vehicles.

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ASSESSMENT OF THE IMPACT OF PUBLIC HOUSING POLICY ON THE SOCIOECONOMIC DEVELOPMENT OF THE COUNTRY

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ABSTRACT
The article assesses the impact of public housing policy on socio-economic processes in the country. At present, the concept of "housing policy" is not reflected in the Housing Code of the Republic of Azerbaijan or in any normative legal acts. This leads to different understandings of the goals and objectives of public housing policy, the basic principles of its formation, as well as its role in the socio-economic development of the country. It is the relevance of the research topic. The purpose of the research is to assess the impact of public housing policy on socio-economic processes in the country. The research was conducted on the basis of generalization, systematization and economic-statistical methods. An article analyzes the theoretical and practical approaches to the definition of the concept of "housing policy", the definition of goals and objectives of public housing policy, as well as the basic principles and problems of its formation and implementation. The author gives an explanation of the impact of housing policy on the socio-economic development of the country. The main goals, objectives, basic principles of the successful formation of the public housing policy are systematized, the role and importance of its implementation in solving the problems of socio-economic development of the country are substantiated. The proposed approach to the results of housing policy has allowed to systematize the main goals, objectives and basic principles of its implementation, while examining the existing problems in this field. The scientific novelty of the research is the comparative analysis of housing and affordability in Azerbaijan and a number of developed countries, the development of priority areas for improving socio-economic policy based on the model of interaction between public housing policy and socio-economic development of the country. It is considered that all this will contribute to the formation and implementation of an effective public housing policy in the country in the future. The results of the research can be used by government agencies accountable for the formulation and implementation of public housing policy.
Keywords: public housing policy, socio-economic development, housing maintenance, housing affordability, social welfare

1. INTRODUCTION
Housing policy is one of the components of public policy. Housing policy to help improve the living conditions of the population not only reflects the quality of the population life, but is also a locomotive for the development of almost all sectors of the national economy. The implementation of public housing policy (PHP) involves the use of a complex system of various social, economic and political tools and mechanisms that must comply with the principles set at this stage of a person's socioeconomic development. Besides, the assessment of the effectiveness of the PHP should be based on a system of well-grounded criteria for a particular country, taking into account existing economic conditions and relevant indicators.

2. METHODOLOGY FOR PHP IMPLEMENTATION: PRINCIPLES AND CRITERIA FOR EVALUATION OF ITS APPLICATION EFFICIENCY
There are some editions of authors in the economic literature, which consider various aspects of the methodology of housing sector developmente: measures to promote the development of

housing construction [1], local factors that significantly reflect housing markets, which can lead to local price bubbles [2], an approach to assessing the role and importance of housing investment in the sustainable socio-economic development of the city [3], systematization and typology of methods of state support for providing housing to citizens [4], methodology to assess housing affordability for the population [5], methods of mass appraisal of real estate used by municipalities [6], procedure for improving the housing conditions of lower and middle-income citizens [7], crisis on the impact of mortgages on housing policy measures [8], mathematical models to assess the impact on the cost of housing, the form of application for citizens - parameters such as rent or credit for property [9]. Authors Bardasova E. V. [10], Bondaletov V. V. [11], Kalashnikov S. V. [12], Nezhnikova E. V. [13], Ponomareva EG [14], [15], Prokophiev K.Yu. [16], Shashko A.A. and Shashko T.D. [17] have formulated PHP principles in their job, each of the authors presenting their own criteria, in our opinion, none of them is complete. Authors Ovsyannikova T.Yu. [18], Pchelkin V.A. [19], and Allen [20] developed various indicators of housing affordability, however, did not consider defining criteria for evaluating the effectiveness of PHP implementation. At present, there is a liberalization tendency of the Republic of Azerbaijan in HPH and other countries of the world, but the social aspect remains important. A rational system for the application of PHP should be based on a number of principles that meet the requirements of the current stage of socioeconomic development of a particular country. Let's also look through the indicators to evaluate the effectiveness of the PHP application. Let's analyze the most commonly used indicators both abroad and in the Republic of Azerbaijan, and substantiate the author's set of indicators and the criteria they meet for the assessment of PHP. In accordance with the "Strategic Roadmap for the Development of Affordable Housing in the Republic of Azerbaijan" approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016, defines the consolidated goals for implementation. These indicators are:

1) Level of housing per capita.
2) The volume of commissioned apartments at the expense of all financial sources.
3) The average cost of 1 m2 of the total area of housing built with state support (excluding individual builders) - in the country as a whole.
4) The share of individual housing construction in total housing construction - in the country as a whole.
5) The share of extra-budgetary sources of financing in the total financing of housing construction - in the country as a whole.
6) The share of the total area of multi-apartment energy-saving residential buildings in the total volume of commissioned housing (excluding individual residential buildings) - in the country as a whole.

The Organization for Economic Co-operation and Development (OECD), an international economic organization for developed countries, is also interested in indicators that represent the principles of democracy and a free market economy. The goal of the research is to review such indicators for housing conditions, developed by the OECD and which can be used to assess the effectiveness of HPH in improving the living conditions of the population. In 2017, the OECD published another periodical, " How's Life? Measuring Well-being" [21]. In this edition, we are interested in indicators such as the average number of rooms per person, the share of housing with basic utilities to assess the quality of housing. According to the OECD, these indicators, this set of minimum indicators are the most important for each person. HAI Accessibility Index in the calculation of the housing affordability index for the population of the National Association of Realtors of the United States: HAI = (MI: Im): 100%, HAI Accessibility Index in the calculation of the housing affordability index for the population of the National Association of Realtors of the United States: HAI = (Mİ: İm): 100%, MI is the

median family income, currency; Im - the medium statistical unit of income, currency, which is enough to get a long-term mortgage loan to buy a house. A value of 100% indicates the availability of credit, because the average family income corresponds to the income required to obtain a long-term mortgage loan. This methodology does not take into account the fact that households carry consumer expenditures at minimum subsistence level, and it is difficult to determine the amount of income required to obtain a mortgage loan, which is sufficient to buy a medium-sized apartment. According to the UN-HABITAT Housing Affordability Index (HAI): the number of years that the medium family will raise funds to buy housing with an medium statistical value, provided that the income of the whole family is used for these purposes:

$$HAI = Mİ : MOD,$$

MI - Median Family Income, currency, MPH- median priced home (excluding the space of the apartment).

Since this indicator is generally a generalized feature of every object, process or its result, concept or their properties expressed in numerical form, the evaluation criteria or indicators should also be determined on the basis of the evaluation of the results of the PHP. Thus, the analysis allowed to formulate the following system of criteria for evaluating PHP results and their relevant indicators (Table 1).

Table 1: Criteria for evaluating PHP results and relevant indicators

Criteria	Indicators that ensure the achievement of criteria
Housing affordability for the population	The housing affordability index is the number of years it takes for a median family to raise funds to acquire an average home, given that a person's desire to buy a new home is so great; total and volume of housing per 1000 population;
Residential comfort for the population	level of housing per person; adaverage number of rooms per person; ka share of the population living in houses equipped with sewerage system; the share of individual housing construction in total housing construction.
Efficient use of budget resources to provide state support in solving housing problems of the population	share of extra-budgetary sources of financing in the total volume of financing of housing construction.

3. PHP PRINCIPLES IN THE REPUBLIC OF AZERBAIJAN

According to the author's methodology, let's estimate the effectiveness of the PHP application in the Republic of Azerbaijan. Let's take the example of the Republic of Azerbaijan and follow the principles of PHP formulated by the author. In my opinion, some principles of the PHP are not fully observed in the Republic of Azerbaijan:

- Division of labour. Thus, due to the commercial use of the state housing fund by the state, housing construction is applied to lease it to citizens. The small-scale construction of such apartments allows to solve the housing problem for a small number of citizens and does not have a serious impact on the rental housing market in the country. At the same time, private investors do not invest in this type of activity, which indicates the low investment attractiveness of rental housing construction. As a result, the task of the state is to create incentives for developers in the construction of rental housing;

- power and responsibility. Thus, this principle is violated in Azerbaijan, for example, when the Cabinet of Ministers of the Republic of Azerbaijan assigns positions to the executive authorities in the field of PHP without their consent, local authorities are responsible for the results obtained. An example is the definition of annual targets for the commissioning of the total area of residential buildings in the regions of the country.
- justice. There are many violations of this principle in the PHP of the Republic of Azerbaijan. Thus, for example, a tax deduction is given to citizens of the Republic only if the property is an apartment, and when renting an apartment, it is not possible to apply a tax deduction for citizens. In the construction of engineering, transport and social infrastructure, the areas of residential buildings are preferred over the areas of property development. Besides, the citizens of our country have the right to receive state support for the construction (purchase) of housing, provided that they belong to the categories defined by law. All interested citizens in the world are provided with state support in solving the housing problem, but only once in a lifetime. The existence of privileged categories of the population entitled to receive state support in the construction (purchase and sale) of housing in the Republic of Azerbaijan leads to an increase in social tensions;
- Purposefulness. Often, the goals and objectives of the Azerbaijan PHP are not provided with financial and other sources. Thus, for example, the task of building infrastructure on the eve of the commissioning of residential buildings can not be provided with existing funding in all areas of residential development;
- scientific. Thus, for example, instructions on the volume of commissioning of residential buildings in the Republic of Azerbaijan by regions are approved by the Cabinet of Ministers of the Republic of Azerbaijan to local authorities without the use of scientific forecasting methods.
- normalization. There is no normative criterion for the effectiveness of PHP application in the country;
- economic and social efficiency. Failure to comply with this principle has led to the fact that today a very large part of the population is in need of improvement of their living conditions. This figure is the result of the increase in various benefits provided to citizens in solving housing problems over the past twenty years;
- freedom of choice. Currently, the process of creating alternative mechanisms for financing the construction and purchase of housing is extremely difficult, as we see a decrease in the volume of preferential lending for housing construction by citizens in the country. For example, mechanisms such as the mortgage and housing savings system have not yet begun to work in the country, although they have proven their value in many countries around the world.
- Promotions and guarantees. The extraordinary social guardianship of the citizens of the republic by the state, the efforts of many citizens to solve their housing problems on their own, while relying on the support of the state, led to the emergence of social dependence among the population. The share of the population's own funds in the total volume of housing construction financing, although declining over the past few years, is still very high.

4. CRITERIA TO EVALUATE THE EFFICIENCY OF PHP IMPLEMENTATION IN THE REPUBLIC OF AZERBAIJAN

To assess the housing affordability for the population of the Republic of Azerbaijan, let us analyze the housing affordability index and the volume of housing per 1,000 population as a whole. Official figures do not indicate that percentage of the population in Azerbaijan needs a new apartment due to poor housing conditions. But, it is no secret that the current situation is not heartwarming.

Observations, other official statistics and international comparisons show that the majority of people, especially the younger and relatively young generation, suffer from homelessness. Although there has been significant progress in 2019 compared to 2000 in terms of the total area of apartments and dwellings per 1,000 population, this is not acceptable (Table 2).

Table 2: Dynamics of key indicators related to housing construction in Azerbaijan

№	Indicators	2000	2005	2010	2015	2018	2019
1	Number of commissioned apartments per 1,000 population	0,7	1,9	2,0	1,7	1,7	8,7
2	Total area of commissioned houses per 1000 population, m2	61	164	229	203	226	945
3	Total area of residential houses commissioned at the expense of all financial sources, thousand m2	487	1593	2049	1932	2250	9469

Source: Construction in Azerbaijan. Statistical yearbook. 2020, p.155, 158

Under such conditions, in the last years, on average, there are 200-250 m2 of housing per 1,000 people (Table 2). According to official data, currently the living space per capita in Azerbaijan is about 13 m2, even in urban areas - 11.5 m2. In developed countries, this figure varies from 300 to 600 m2. In Russia, this figure is about 20 m2 [22, p.41]. While there are only 180 apartments per 1,000 people in Azerbaijan, in developed countries this figure varies in the range of 450-600. A comparison of Azerbaijan with the CIS countries in terms of the number of apartments commissioned per 10,000 population shows that while this figure is 73-78 in Russia and Belarus, it is equal to only 19 apartments in Azerbaijan (Table 3). The lack of supply in the primary housing market is explained by many reasons. The monopoly on housing construction is strong, it is the only area that is subject to double taxation (simplified tax and VAT). An extremely high amount is required for each square meter of construction to allocate land. All this leads to the sale of expensive apartments. After the houses are built, there are problems with their state registration. The unreasonably high cost of construction materials also contributes to the rise in housing prices.

Table 3: Comparison of Azerbaijan with the CIS countries in terms of the number of apartments commissioned per 10,000 population

Countries	2005	2010	2013	2014	2015	2016	2017	2018
Azerbaijan	19	20	23	19	17	15	16	17
Armenia	5	11	7	5	7	4	5	6
Belarus	44	89	67	73	59	52	46	49
Kazakhstan	29	34	34	37	45	50	56	62
Kyrgyzstan	10	14	16	17	21	20	25	20
Moldova	11	14	16	15	21	22	34	27
Russia	36	50	65	78	...	80	78	73
Tajikistan	12	25	17	18	17	15	14	13
Uzbekistan	21	25	28	...	27	26	29	33
Ukraine	16	17	23	25	28	26	30	24

Source: Construction in Azerbaijan. Statistical yearbook. Baku, 2020, p. 266.

Mortgage loans offered to help citizens are also unsuitable for most people due to their high interest rates. Given the above, there is a great need for serious reforms in this field, the implementation of certain concrete measures at the state level.

One of the reasons for the low supply of housing in Azerbaijan is the low solvency of the population. Thus, the subsistence level in Azerbaijan in 2021 amounted to 196 AZN, which is 3.1 percent more than in 2020. For comparison, in 2021 the cost of living for the able-bodied population will be 207 AZN, for pensioners - 162 AZN, for children - 175 AZN [23]. According to some experts, the solution to the housing problem in Azerbaijan should be found only by the citizens themselves in accordance with the requirements of the market system, and they try to justify it with the existing facts in this field in market economies. However, the reality is that the incomes of the population of these self-sufficient countries are much higher than the incomes of Azerbaijani citizens. For example, in order to buy an apartment, it is enough to collect a salary for 4-6 years in Western European countries and Turkey, 2.7 years in the United States, 3.5 years in the Dominican Republic, and 4 years in Chile [24, p.145]. Honored Economist of the Republic of Azerbaijan, Professor T.H. Huseynov, in his monograph "Azerbaijan's national economic development model: theory and practice" published in 2015, rightly considers self-sufficiency as a basic principle of a market economy and shows that although the problem is solved individually for every country, all countries that have chosen a model of socially oriented economic development have given priority to public assistance in solving the housing problem. Thus, the practice of the state building houses and renting apartments to citizens is widespread in most countries. Rent is calculated not on the basis of market prices, but on the basis of the cost of housing and inflationAfter paying the rent determined in this way during the lease period, the citizen becomes the owner of the apartment. Thus, the state creates a social housing fund, develops and implements housing leasing or rental programs. In most market economies, social housing is created at the expense of the state and made available to the population on favorable terms. As an example, there is a practice of providing housing subsidies to low-income families in Great Britain [24, p.145]. In 2018, the level of self-sufficiency of the Azerbaijani population, with a minimum wage of 130 AZN, a subsistence level of 173 AZN and a need criterion of 130 AZN, it does not seem realistic that it will soon reach the level of developed market economies. It should be noted that at the beginning of 2020, only 13 square meters of housing per capita fell in Azerbaijan, which is far behind European standards, as well as other countries. According to experts, the average selling price of an apartment in Baku through the mortgage line reaches 80,000 manat, but the purchasing power of the population does not exceed 45,000-50,000 manat [24, p.146]. Despite the large gap between the incomes of the population, the cost of one square meter of housing in Baku is 30 percent higher than in Prague and is about the same as in Berlin.

5. CONCLUSION
The author's principles of the PHP can be used by public authorities to more rationally define the author's indicators and appropriate criteria for assessing the strategy for the selection of public housing policy instruments and the effectiveness of the PHP implementation. PHP will allow to analyze the dynamics of the results and make cross-country comparisons.

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THE SOCIO-ECONOMIC PROBLEMS OF INVOLVING FOREIGN INVESTMENT TO THE NON-OIL SECTOR

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ABSTRACT

At the article, it is investigated and evaluated the socio-economic problems of attracting international investment in the non-oil sector of the Azerbaijan's economy and gave relevant recommendations on how to eliminate them. Among the many issues currently considered by world economic theory, the problem of foreign investment is one of the most pressing, because the attraction of foreign investment, especially foreign direct investment (FDI) can play a key role in the structural and technical restructuring of the economy. Foreign investment in the country plays an extremely important role in economic development. It is known from world experience that the main goal of countries is to support the production of competitive export-oriented products in the market. In this regard, there is a need to attract financial resources to ensure competitiveness. In this regard, it is necessary to study foreign direct investment in terms of ensuring sustainable economic development as the main source of economic growth. FDI affects economic competitiveness. In order to clarify the nature of the problem in more detail, the motives and mechanisms for attracting foreign direct investment, as well as the reasons for foreign investment, are substantiated. The main purpose of the search is to stimulate the growth of exports to the non-oil sector and identify new sources of foreign investment in the context of improving the attraction of foreign investment in the non-oil sector of the economy and increasing their socio-economic efficiency. The research used the methodology of a systematic approach, methods of analysis, comparison and generalization. The article analyzes theoretical and practical approaches to the main theoretical and methodological principles of FDI research, substantiates the role of placement factors in attracting foreign investment in the context of globalization, and evaluates the impact of foreign investment on the economy of host countries and foreign investment policy. The scientific novelty of the research is to conduct comparative analysis with other countries in the field of attracting foreign investment to Azerbaijan, to develop relevant proposals to improve the attraction of foreign investment in the non-oil sector of the economy.
Keywords: *non-oil sector, foreign investment, foreign direct investment (FDI), export stimulation, competition*

1. INTRODUCTION

The deepening international integration, as well as the increasing of economic cooperation between the countries leads to an increase in the role of external factors in the system of economic growth factors. Foreign investment also plays an important role among these factors. At present, it is difficult to find a state that does not attract or use foreign investment. It is important to increase investment in order to achieve economic growth and ensure competitiveness in all sectors of the economy. At present, due to the limited investment opportunities of Azerbaijan, there is a need to attract foreign investment in various forms and in large quantities. Therefore, it is very important to attract these investments, use them correct and rationally, as well as get the maximum benefit from their use. The investment concept has a broad content and structure. Private foreign investment, like investment in general, can be classified according to various criteria. However, the most common is the following classification: Private foreign investment 1) Foreign direct investment (hereinafter FDI) 2)

Portfolio foreign investments 3) divided into other foreign investments. A foreign direct investment is any investment made by a direct investor who owns the entity or controls at least 10% of the shares or stakes in the entity's authorized capital and has the right to manage it, and the degree of control varies from country to country. Thus, the US is a direct investment when the investor has at least 10%, in Japan - 25%, in the EU - 20-25%, in Australia, Canada - 50%. [1, p. 2] FDI investment is control, not profit. The portfolio foreign investments is an investment in foreign securities and other financial assets that do not give the investor to real control over the investment object. These are often called "passive" because the investor does not try to manage the enterprise in which the investment is made, but only aims to make a profit commensurate with the share earned, which in international practice generally does not exceed 10%. Other investments include trade and other loans, foreign loans, bank deposits. At present, more attention is paid to the issue of foreign investment, both foreign and internationally. Economists believe that foreign investment is an important element of economic development in all countries, especially in developing countries. From a macroeconomic point of view, they are often seen as the creators of employment, high productivity, competitiveness and technological flows. For the least developed countries, foreign direct investment means higher exports, access to international financial markets and international currencies, which is an important source of funding.

2. BASIC THEORETICAL-METHODOLOGICAL PRINCIPLES OF FDI RESEARCH

Foreign investors can make foreign direct investments in the Republic of Azerbaijan in the following ways: [3]
1) Participation in enterprise and organizations established jointly with legal entities and citizens of the Republic of Azerbaijan;
2) Establishment of enterprises wholly owned by foreign investors;
3) Acquisition of enterprises, property complexes, buildings, facilities, participation shares, stocks, bonds and other securities, as well as other property that may belong to foreign investors in accordance with the legislation of the Republic of Azerbaijan;
4) The right to land and other natural resources, as well as other property rights;
5) To sign agreements with legal entities and citizens of the Republic of Azerbaijan providing for other forms of foreign investment.

Investment is an important factor in ensuring both the broad and narrow aspects of the country's economic competitiveness. Foreign direct investment impacts economic competitiveness in two ways. First, if domestic savings are not enough to finance economic development, such investments are a means to generate significant foreign exchange earnings that help eliminate the deficit. Second, the existence of foreign companies is a positive factor in the national economy. The great role of the government in the economies of countries such as Azerbaijan is to emphasize the role of foreign direct investment in promoting sustainable economic development. By the sense, these are the main innovative priorities observed in the country's investment policy in modern times:
- Implementation of investment policy for stable development.
- Integration of investment policy into development strategy.
- Ensuring the consistency and effectiveness of investment policy.

The importance of foreign investment for host countries depends on the situation of the host country. In some cases, while seen as the ultimate goal of economic efficiency, it poses a threat to national sovereignty and other negative consequences.

Historically, disagreements over foreign investment have been more widespread than other investment flows. This is due to the fact that foreign direct investment is managed by host countries under the control of large multinational companies (TNCs).

3. FOREIGN INVESTMENT IN THE FRAMEWORK OF GLOBALISATION: TRANSITION FACTORS

Globalisation is the integration of national economies into single global system. Globalisation in the economy is often referred to as the "post-global market economy" and the managed "global market." F. Braudel understood the capital accumulation all over the world under the "world economy". According to Manuel Castells, the global economy is an economy that can function as a single system in real time on a global scale. Globalisation manifests itself in all major processes and elements of the economic system. For the first time in history, ongoing financial management in global financial markets is carried out in real time. New technology allows investment to move from one economy to another in a short time. The economies of different countries, as well as investment and currency, are interconnected, interdependent and global. Thus, globalisation means the transformation of the world economy into a single market for goods, services, labor, investement and knowledge. This is a new and higher level of internationalization. The world is becoming a single market for TNCs and is open to the activities of all countries. In the economic literature, they are sometimes called borderless states. At present, their main goal is to maximize the market rather than increase profits. Because if their main goal is to increase profits, then they will lose to other companies in the competition. Globalisation transfers international competition to domestic markets. Although economic and social changes in every country occur under the influence of internal socio-economic forces and processes, the causes, nature and prospects of development of these transformations, it is not enough to analyze only from the internal prism of these countries, because it can lead to erroneous results and the modern nature and scale of the exchange require that the processes in individual countries be considered in terms of their participation and adaptation to the international financial and economic environment. There are various factors for the export and import of foreign investment. Many research led by UN economic agencies show that there are more specific reasons for the export and import of foreign investment, but their relative roles are different [5, p. 191]. It seems that some factors that identify the export and import of foreign investment do not coincide. For example, technological leadership, the level of qualification of employees, the advantage in advertising and the large of the enterprise act as both export and import factors. [6, p. 131] The size of the economy, the high degree of centralization of production and the need for natural resources are the only export factors of foreign investment. Other factors such as the need for investment , low production costs and the large size of the domestic market are the only reasons for imports. When attracting foreign investment, the conditions in the host country are important. Conventionally, these can be called the factors of the country in which they are located. All transition factors in the country form the investment atmosphere. The investment environment is a set of political, socio-economic and other conditions that are specific to a particular area at a given time and constitute the opportunities and attractiveness of investment activities. Political factors. The focus of foreign direct investment is primarily on the economic and political stability of the country. FDI has an element of risk . Countries with uncertain political situation will be a major disincentive. Also, economic crisis can discourage investment. For example, the recent economic crisis, combined with economic sanctions, will be a major factor to discourage foreign investment. This is one of the reasons why former Communist countries are keen to join the European Union. The EU is seen as a signal of political and economic stability, which encourages foreign investment. Related to political stability is the level of corruption and trust in institutions, especially judiciary and the extent of law and order.

Economic factors are the effective among the groups of factors. The most important economic factor for foreign investment in the host country is the size of the market. Exchange rate stability is also an important factor in involving foreign investment. The trading capacity of every foreign direct investment is based on exchange rate stability. This means that the value of the national currency should not fall abnormally, in which case the foreign investor will lose a lot in the return of funds. The factors that involve foreign investment are often a number of factors, not some of the above. Therefore, in order to involve foreign direct investment, the country must take into account all the placement factors and combine them to develop an appropriate foreign policy. The government must adopt flexible policies to allow foreign direct investment in all field. Based on the results of various research and different investment ratings, the following advantages of the Azerbaijani economy can be noted.

- Favorable geographical position at the intersection of international transit routes;
- Azerbaijan has a developed international transport network (air, water, rail and road, oil and gas pipelines). This facilitates the establishment of close ties with foreign partners;
- Adequate domestic market. In most cases, there is no competition for local goods and services. The need for technical modernization of production and infrastructure.
- A very important indicator is the significant resource potential (especially oil).
- Macroeconomic stability, public debt in Azerbaijan is relatively low. Despite falling oil prices, the foreign trade balance was positive at the end of last year.
- Relatively low production cost, skilled and relatively cheap labor.
- Relatively low price of buildings and structures, as well as land.
- Ability to organize the export of goods produced by Azerbaijani enterprises using Western technologies on the basis of low production costs using the sales networks of foreign partners.
- Bilateral investment agreements. Azerbaijan has signed bilateral investment protection agreements with China, France, Georgia, Germany, Britain, Iran, Italy, Kazakhstan, Kyrgyzstan, Pakistan, Poland, Turkey, Ukraine, the United States and Uzbekistan. For some investors, these bilateral agreements can be a guarantee of a reliable investment atmosphere and attract them.
- Interstate economic agreements with leading countries of the world, accession to international treaties and agreements, inclusion of Azerbaijan in international and regional economic organizations, etc. Azerbaijan's policy of "friendship" with other countries and very favorable conditions for foreign investors can also be noted. It is necessary to use these advantages of our country to accelerate the attraction of foreign investment and remove barriers to business development.

In addition to the benefits, there are also negative factors. These are associated with both external factors - the unresolved issue of Nagorno-Karabakh, as well as domestic - high inflation in recent years, the reduction of state budget expenditures. High crime rates, low security levels and bureaucratic hurdles are also negative factors. One of the important negative factors is the low level of economic diversification, dependence on the oil sector, the insufficient level of development of the non-oil sector and therefore, all foreign investment in the country is directed to the oil sector.

4. THE IMPACT OF FOREIGN INVESTMENT ON THE ECONOMY OF HOST COUNTRIES AND THE STATE'S FOREIGN INVESTMENT POLICY

Different forms of international investment inflows have different effects on the country's economy. The impact of foreign investment on the economies of developing countries and economies in transition can be both positive and negative. Foreign investment plays an important role in promoting economic growth in direct host countries and can indirectly

contribute to external balance through infrastructure development, diversification of domestic consumption, offering a broad range of products and increasing employment. Foreign investment is currently the main and real source of economic reconstruction and modernization of production. Most countries recognize the potential value of foreign direct investment and liberalize investment regimes to involve it. There are elements of the potential benefits of FDI to the host country: [7, p. 197]

1) Foreign investment is the main source of capital. Countries that invest in more long-term projects, they facilitate the flow of capital to host countries without debt to pay them off. In addition, many TNCs have financial resources that firms in their home countries cannot access due to their financial stability. These funds can be obtained from the company's internal sources, or large TNCs, due to their reputation, can more easily borrow from the capital markets than the owners of local firms.

2) Foreign investment contributes to the flow of advanced technologies, (SREDW) Scientific-Research and Experimental-Design Work results embodied in new technology, licenses, patents, know-how. Evidence suggests that the vast majority of economic studies examining the link between foreign investment on the one hand and productivity or growth on the other have had a positive effect on productivity and growth in most host countries through technology transfer through foreign investment.

3) Foreign investment increases the country's competitiveness. Thus, TNCs, which use high-tech production, experience and knowledge, produce high-quality products, while local firms are forced to compete with foreign firms to survive, resulting in improved product quality and therefore increased competitiveness. Small or inefficient local firms that cannot compete with the quality of large TNCs are forced to contract or leave the industry altogether. This leads to progress in the whole sphere.

4) FDI also increases productivity in the field. The performance advantage of TMKs also extends to local firms, as they will continue to increase productivity to compete with high-tech TNCs in order to maintain competitiveness and position in the market.

5) Foreign investment plays a vital role in increasing the export potential of host countries, import substitution and their integration into the world economic system. In the process of attracting foreign investment, the economy is improved by the application of new technologies, the achievements of SREDW and their application to local production, and foreign investment also leads to an increase in the quality of products. As local products become more technologically advanced and competitive, the country can enter the world market with its products and increase its share of exports.

6) Foreign investment provides the accumulation of organizational and management skills, the entrepreneurial ability of brands and market access. FDI also promotes the dissemination of best corporate governance practices, accounting rules and legal traditions. Foreign investment increases the information base available in the host country through the transfer of knowledge, job training, management and organizational skills transfer. Foreign management skills acquired through foreign investment can be very useful for host countries.

7) Foreign investment helps to increase employment in the host country, increase the skills of local workers and create conditions for the development of human capital. Foreign investment helps create additional jobs. It is also possible to create additional jobs in new local industries that support new market participants and provide material. Aaron (1999), in his study on the dependence of employment on foreign investment, claims that foreign investment is directly responsible for 26 million jobs in the developing world. In addition, 1.6 additional jobs were created indirectly for each individual job created by the FDI through production relations between the FDI and the local sector.

8) Foreign investment helps to improve the balance of payments and increase tax revenues, which allows the state to finance various programs.
9) The presence of TNCs in the local market helps to increase confidence in the country, which can involve new foreign investors.

The relations between foreign TNCs and host countries changes greatly between countries and regions. The inflow of foreign investment leads to the transfer of technology and at the same time stimulates the efficiency of delivery to local firms. This creates conditions for more efficient use of available resources. Of course, the effectiveness of technology is always taken into account. This helps to increase competition in the host country.

5. WAYS TO IMPROVE FOREIGN INVESTMENT IN THE NON-OIL SECTOR OF THE COUNTRY'S ECONOMY
In addition to the positive effects of involving foreign investment, there may be disadvantages. [6, p. 197]

1) deterioration of payments balance of the host country, redistribution of capital and the return of the bulk of income in various forms (dividends, rate, etc.).
2) economic, social and financial dependence can ultimately lead to political dependence on the homeland.
3) Although increased competition helps to increase the country's competitiveness in general, it leads to the displacement of weak local producers and they leave the sphere because they cannot withstand strong TNCs. In this situation, the state should support local producers so that they can support competition by TNC.
4) Inefficient use of natural resources, partial use of natural resources, large losses and damage to resource renewal mechanisms, as TNCs are not interested in their protection.
5) dependence of economic indicators on the activities of TNCs and, as a result, restrictions on the state's independent economic policy.
6) Environmental impact. Many TNCs relocate waste production to host countries because it is more profitable than using expensive wastewater treatment plants in their home countries. Because indifference has catastrophic consequences in many parts of the world, local environmental legislation must pay due attention to foreign investors.

The disadvantages of foreign investment in Azerbaijan are as follows: [8, p. 332]
• increase external public debt,
• Focusing FDI on raw material-oriented production and the fast-growing service sector.
• very low share of foreign investment in the country's manufacturing industry,
• practically no foreign investment in other regions as a result of gathering everyone in the Absheron region.

Public policy in the field of foreign investment is a single set of interrelated goals that ensure the level and structure of investment required for various sectors and spheres of the country's economy and increase investment activity. [2, p. 316] In fact, only a liberal or only centralized development of the FDI process is not possible. Foreign investment policy uses elements of both liberal and centralized government policy. Government policies to involve foreign investment change depending on the economic impact of these two policy elements. For example, if the economy is recovering, there is no need to use elements of a centralized system. Otherwise, investment activities need to be stimulated, especially during the crisis. The investment policy of the state consists of two parts: regulation and stimulation [9, p. s. 19].
The regulatory system ensures maximum return for each unit of capital.

One of the main conditions for involving foreign investment is the creation of a legal framework for the operation of foreign capital, ie the adoption of relevant laws, regulations and decrees. The legal regime of foreign investment in Azerbaijan is formalized at 4 levels:
- at the level of laws - in the constitution
- at the level of bilateral and multilateral interstate agreements - at the level of international multilateral agreements On January 15, 1992, the Law of the Republic of Azerbaijan "On protection of foreign investments" was adopted, which provides state guarantees for protection of foreign investments. Amended and supplemented on November 7, 1992, and November 5, 1996, the law provided state guarantees for foreign investment in matters of change of laws, nationalization, compensation, transfer and use of profits. [3]

On January 13, 1995, the Law of the Republic of Azerbaijan "On Investment Activity" was adopted, which was amended and re-adopted on April 19, 2005. This law provides effective guarantees for the flow of foreign investment into the country's economy, the development of international cooperation and independence. One of the advantages of the Law on Investment Activity is the tax exemption for foreign entrepreneurs who bring agricultural technology to the country for production or service purposes. This is a major factor in the creation of integrated production and service fields, which will be reflected in the creation of future free economic zones. Thus, the entry into force of this law facilitated the inflow of foreign investment to the regions [10]. The inflow of foreign investment into the Azerbaijani economy began in 1994. In total, between 1994 and 2019, foreign companies invested more than $ 200 billion. 77.2% of foreign investments were made at the expense of FDI and 22.8% at the expense of loans. 73% of foreign investments were directed to the oil industry. Taking into account the distribution of the share of countries in investement between 1994 and 2019, it should be noted that the United States and the United Kingdom accounted for 25% of foreign investment. Turkey is in third place. According to the SSC of the Republic of Azerbaijan, in 2019, the total foreign investment in the country's economy amounted to 7129.1 million manat, of which 4275.3 million manat or 60% are foreign direct investment. 78.2% (3345.2 million manat) of foreign direct investments were directed to the development of the oil sector, 21.8% (930.1 million manat) to the development of the non-oil sector. It can be said that the absolute and relative indicators of investment in the non-oil sector of the country are very low. Given the importance of the non-oil sector, all available economic tools should be used to involve foreign direct investment to this sector. Therefore, in order to involve foreign direct investment to the oil sector of the economy, appropriate government measures are required to stimulate foreign direct investment. At the current stage of development, one of the main tasks of the national economy is to increase foreign direct investment and qualitatively change their structure. This means, first of all, direct foreign investment in the non-oil sector. Such fields are the production of consumer goods and services. It is observed positive changes in this direction. It is important to note that the share of foreign investment from Turkey has increased since 2014. It ranks first among the CIS countries in terms of per capita foreign investment. Thus, foreign investment has played a key role in the economic revival of Azerbaijan. Economic development as a result of foreign investment has been supported by extremely high investment in the oil sector [8, p. 327]. Economic policy to create a favorable investment atmosphere includes: a) identification of potential sources of investment - foreign sources (foreign investment and financial assistance) b) formation of market entities capable of effective investment c) formation of a stable economic environment (assistance in attracting funds from the population, their investment) investments, reduction of inflation, its restriction, antitrust policy) d) tax incentives, tax strikes, income tax benefits for foreign companies, facilitation of lease relations, discounts on activities related to SREDW, etc.) financial incentives, reimbursement of part of expenses Provision of state subsidies, loans, credit guarantees with certain benefits, benefits for state insurance.

The experience of recent years, the analysis of the existing economic literature shows that the purposeful activities of the state to increase investment attractiveness are as follows:

- Ensuring intensive control over the search for foreign direct investment for the development of various forms of ownership;
- ensuring the activities of foreign direct investment in priority fields within the country;
- Strengthening state control over the targeted use of FDI funds;
- further improvement of the legal and regulatory framework to increase the attractiveness of foreign capital;
- preparation of measures to resist the economic crisis and other possible negative consequences of the FDI in the country's economy. This includes. a) protection of property rights and improvement of corporate governance; b) improving business information support;
- to achieve a sharp increase in the volume of foreign investment in the non-oil sector by all sources, provided that the total volume of foreign investment does not decrease;
- To achieve the expectations of the economic interests of economic entities producing export-oriented industrial products in the field of investment and distribution of goods to ensure the economic security of Azerbaijan in strategic directions.

6. CONCLUSION

Summarizing the above in the framework of state-funded scientific research, we can put the following conclusions:

1) The main principles to be considered when determining national and international investment policies aimed at ensuring the export potential of the competitive environment in the country are: investment in stable development, strategic compliance, constructive dynamic policy, balancing rights and obligations, openness to foreign investment.

2) Reasons for importing foreign investment include: technological leadership, specialization in the workforce; excellence in advertising; the scale of the economy; the size of the enterprise; providing access to natural resources, etc.

3) The advantages of Azerbaijan in attracting foreign investment are: favorable geographical location at the crossroads of international transit routes, significant resource potential, cheap and high-quality labor, bilateral investment agreements, a sufficient domestic market, a developed transport network.

4) Azerbaijan's advantages in involving foreign investment include a favorable geographical position at the crossroads of international transit routes, significant resource potential, cheap and high-quality labor, bilateral investment agreements, a sufficient domestic market, and a developed transport network.

5) Stimulate the involving of export-oriented foreign direct investment in accordance with the priorities for the development of the non-oil sector and, as a result, increase the volume of exports of the non-oil industry and ensure access to new markets. It is necessary to achieve this goal: to identify and allocate priority areas for involving foreign investment, to continuously improve the business and investment climate in the country, to establish government mechanisms to support local exporters, to simplify foreign trade procedures to promote non-oil exports.

6) It is proposed to take the following steps to successfully involve foreign investment to the country:
   - Selection and justification of suitable industries, companies and investors for the non-oil sector of the country with investment potential.
   - Effective placement of investments and assistance to foreign investors.
   - Organization of an international conference on "Opportunities to attract foreign investment in the non-oil sector."

- Development of a global website with downloadable e-books and development of investor control systems.
- Development of international logistics programs. Launch of international campaigns through social media and search engines.
- Organizing and promoting seminars and presentations for business associations and embassies that promote commercial missions to potential investors.

7) In many cases, when developing a government program to attract foreign direct investment to the non-oil sector, the main priority is government programs for individual sectors of the non-oil sector of the economy. This approach to problem solving cannot be considered correct. Therefore, we believe that a systematic approach to solving the problem of attracting foreign direct investment in the non-oil sector, as well as to ensure the balance of development of all oil sectors of the economy. There is a need for scientific and practical research to develop investment projects to increase the efficiency of the use of funds invested in non-oil sectors of the economy. It should be noted that the preferences given to foreign direct investors, first of all, imply the requirements determined by technological, environmental, production and other conditions. When setting these conditions, it is necessary to study the conditions for investing in competitive countries. This compliance is achieved through the conclusion of agreements on taxation and other conditions.

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FACING CHALLENGES IN AN OMNICHANNEL WORLD

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ABSTRACT

American Marketing Association's first ever intellectual agenda has identified seven big problems that all marketing community currently confront in the modern world. Jaworski, Malcolm& Morgan pointed out "the AMA's intellectual agenda seeks to serve as a big tent source of guidance and inspiration that includes both theoretical and applied knowledge that will ultimately provide actionable insights, frameworks, tools, and resources for the AMA community". The fifth problem listed by the agenda is dealing with an omni-channel world. As the emergence of digital media omni-channel has become a priority for marketers. Haukingham (2017) claims that a customer using several different channels buys up to 30% more compared to a mono-channel customer. Nowadays, the marketing industry not only understands the advantages of the omni-channel marketing but is confronting a compulsion from customers to be omni-channel as a standard. Despite the importance of omni-channel strategy to marketers, delivering a seamless customer experience across multiple channels is a complex, multi-faced challenge for them. Implementing a successful omni-channel strategy requires adjusting management methods as well as management itself otherwise it can end up a huge amount of loss. According to a study conducted by 1WorldSync (2017) "45 percent of merchants and suppliers have lost more than $1 million in revenue due to cross-channel commerce challenges, and more than one in ten have lost more than $3 million". Therefore, in order to overcome challenges and be successful in the omni-channel world, marketers need to be more careful while implementing the strategy.
Keywords: omnichannel marketing, marketing strategy, marketing, omni-channel

1. INTRODUCTION

In the current world, the emergence of the internet which brought connectivity and transparency has led to drastic changes in the power structure. As every aspect of life, the marketing community has been affected by the power shifts, and so, old theories and practices start to be challenged by new ones. One of the new strategies is omni-channel marketing. Rigby, the first person originated the term, defined omnichannel as the integration of all available channels for making customer shopping experience seamless. These channels could be physical stores, websites, kiosks, direct mail and catalogs, social media, call centers, mobile devices, televisions, gaming consoles, home services, networked appliances and more (As cited in Singh, 2017). In other words, since companies have started to compete in global marketplaces which have been changed by new technology, companies need to reach the customers wherever they are, on whatever device they may use, in whatever way they wish to purchase. Mosquera, Pascual& Ayensa added that advances in information technology and communication have caused an increase in a number of retailing formats such that consumers get in touch with companies during the customer path (2017). Moreover, in spite of the fact that omni-channel, multi-channel, and cross-channel are used interchangeably in some literature, omni-channel should not be confused with multi- or cross-channel. According to Piotrowicz & Cuthbertson (2014), while multi-channel means using different channels that work independently, "in an omni-channel environment, the channels work together, such that customers can use digital channels for research and experience the physical store in a single transaction process". While interacting the companies at any time, customers suppose to have a similar brand experience as

the channels are managed together (As cited in Mosquera, et al., 2017). Dorman added that in a multi-channel business model, each channel is functioning separately to reach different segments of customers (2013). Nonetheless, "cross-channel retailing is the set of activities involved in selling merchandise or service through more than one channel or all channel widespread at the same time but with a partial interaction with the customers and/or a partial integration controlled by the retailer" (Simone, Sabbadin, 2017). Shortly, the main factor that differentiates omni-channel from multi- or cross-channel is that in omni-channel strategy different channels are used through one purchasing process. For instance, one channel used to obtain pre-purchase information, another channel for sales fulfillment and yet another channel for post-purchase service (Valos, 2009). The review excluded sources about optimization of the physical channel and advanced payment systems and focused only on changes in channel management and threats of channel integration. In addition, the scope of the review was to find the answer to the question: what are the new challenges in implementing the omni-channel retailing? The rapid development of the e-commerce industry has a significant impact on traditional retailers in terms of moving into the online market. Namely, "retailers and e-tailers are facing pressure to adapt since a strategy focusing on a single channel may no longer be sufficient to attract the demanding customers of the 21st century" (A Deloitte Point of View, 2015). Nevertheless, omni-channel marketing is harder than it may seem. Hence, omni-channel retailing requires to consider new risk management techniques including reconfiguring internal processes to provide new services previously not required. Valos (2009) spoke up for the idea that omni-channel marketing creates some challenges that include "the internal politics when the role of a traditional channel is reduced or modified, understanding synergies when multiple channels provide complementary roles, and balancing effective and efficient performance measures". Consequently, when the retailers decide to implement an omni-channel marketing, they ought to consider the new development requires an adjustment in the functional and operational management. Since achieving success in omni-channel marketing relies on the capability to design and implement an intensive strategy for how to be present in the channels that customers desire, both now and later, management needs to invest significant time in planning before executing. If they establish independent and disintegrated channels, it is hard to go forward (A Deloitte Point of View, 2015). Secondly, while talking about integration threats, channel cannibalization can be an important concern for retailers who are trying to advance the integration among their channels according to some researchers. Thus, some retailers are still reluctant to implement omni-channel marketing due to the cannibalization threat. According to Webb (2002), "they believe that this kind of strategy would move their customers from their current channel into the new one and thereby cannibalize the sales instead of increasing total sales" (As cited in Simone& Sabbadin, 2018). After all, despite the fact that omni-channel marketing is a new trend in the marketing industry, dealing with an omni-channel world has certain challenges such as managing the channels and channel cannibalization. The purpose of the review was to find an answer to the question what are the new challenges in implementing the omni-channel retailing? Conclusion driven from the review was that managing channels and cannibalization threat are the factors that have to be considered before implementing omni-channel marketing strategy. Namely, managing channels correctly is sometimes challenging for companies as it requires precise efforts and more time. Furthermore, integrating channels may lead to cannibalization which dismantles the sales rather than growing total sales. Consequently, managers have to be more careful while integrating channels and implementing omni-channel since a small mistake can result in huge issues. The result was contributed and explored deeply in the research project.

2. DISCUSSION

Nowadays, consumers on average seamlessly move between the physical and digital worlds. For example, a consumer may search a product online and then go to a store to test it. After comparing different prices online, he or she finally purchase the product. From the example, it is shown that both digital and physical spaces are involved in purchasing experience as they blur more closely together. The reason why an omni-channel marketing approach is so powerful is that consumers engage with brands in an omnichannel manner, and this trend increases day-by-day. Therefore, brands need to adjust their strategies to readily deliver the right message to the right person at the right time. Brennan asserted "the brands who are able to make this transition effectively, and provide the contextually relevant experiences consumers expect, are the ones that will thrive in the long term" (2018). Nevertheless, it is not an easy task to build and implement a strong omni-channel marketing strategy. According to the report by Brightpearl (2018), despite the fact that 9/10 retailers and brands currently possess or are planning to have an omni-channel strategy, only 0.8 out of 10 believe they succeed in omni-channel. These numbers show that most brands fail to be successful in the omni-channel world, and most commonly there are two reasons behind the failure: failure to integrate sales channels and failure to manage out-of-stocks and share inventory visibility. First of all, one of the most common missteps taken by retailers is to treat each channel separately instead of integrating sales channel into one omni-channel platform. Consequently, brands have to manage these independent channels with their own supply chain and inventory allocation processes. In addition, as each channel is designed separately, they are unable to easily communicate with each other which lead to dissatisfaction of consumers. According to a study conducted by Forrester, half of the customers suppose that they will be able to buy online and get in-store (Miller, 2014) which would not be possible in separate sale channels. The second failure scenario is that if a customer searches a product online and then visits the store to purchase where are told that online inventories are available, but in-store stocks have been cleared, or other way around. "27% of consumers would be very likely to leave and visit another retailer's store if a product is out of stock" as reported by Miller (2014). The example indicates a lost opportunity for the brand. Also, except lost revenue, it means the loss of a potentially loyal customer which nowadays is a company's most valuable asset. To overcome these challenges and achieve to execute strong omni-channel marketing strategy there are a few steps that brands should consider. Jordano suggested, "developing a strategy to optimize customer and prospect engagement at every touch point, targeting the right audience at the right time with relevant content and accurately determine what target markets will best react to your messaging are the tips and best practices for implementing an effective omni-channel strategy" (n.d.). Furthermore, integrating sales channels completely, understanding individual consumer preferences deeply, providing consumers with real-time updates on availability of a particular product are some of the tactics that should be considered by brands to be successful in the omni-channel world. After all, omni-channel marketing provides a seamless experience in the path to purchase as customers jump from one channel to another; therefore, if all these techniques are implemented correctly, it will eventually end up with driving up productivity especially increasing commitment. In conclusion, in the modern digital era, omni-channel marketing which means providing an integrated online/offline experience for customers regardless of touch points has become key to marketing success. However, companies face challenges in executing effective omni-channel strategy such as integrating sales channels and managing out-of-stocks and sharing inventory visibility. Therefore, brands should use certain techniques to overcome the obstacles including, integrating sales channels completely, understanding individual consumer preferences deeply and so on. The successful omni-channel marketing will lead to increases in productivity specifically higher commitment.

3. LEARNING OMNICHANNEL MARKETING FROM OASIS

In today's world, consumers suppose much more from their shopping experiences than ever before. For example, they want to be able to search a product on mobile, order it on their computer during lunch break, and finish it off at a physical store. Therefore, the customer path to purchase must be seamlessly integrated between online and offline experiences. In short, the goal of omnichannel retail is to make sure that consumers achieve a sale regardless of what channels are used. When we talk about the integrated channel that provides shoppers a seamless experience across online and offline channels, Oasis British fashion retailer, one of the best example of an omni-channel retailing company, comes to the mind first. Oasis started to operate in 1991. It has approximately 500 stores in the UK and other 26 countries including Europe, Scandinavia, the Far East, Middle East, Mediterranean and South America plus an e-commerce website, app and around 80 standalone stores, 200 concessions within other department stores. In 2011, the company introduced an investment program worth £7m to renovate its brand image and increase market share through the integration of all its retail channels. Oasis could successfully implement the omni-channel retail concept and therefore, was verified as one of the top omni-channel performers globally in 2011. The key factor lying behind the success is channel management. Namely, as the retail industry has a high BAR median but narrow BAR range, success is often determined by channel proximity and accessibility to key markets. Correspondingly, driving customers to its sales channels through traditional and digital media has helped Oasis to become a leading example in the industry. One of the key factors to be successful in the omni-channel world is an effective and efficient use of digital media. Hence, use website, social media, and mobile application has helped Oasis success in implement omni-channel retailing. First of all, the company has certainly all image-led social media accounts on Instagram, Facebook, and Pinterest. With the use of social media, Oasis promotes exploration of their website. Even though the company does not include a direct "like2buy" link on their social media accounts, each product code for an item is provided to the customers in the description of the posted image which leads straight to the item when customer paste the code into the online store search bar. Thus, this strategy increases people's awareness of the brand, and they become familiar closely. Secondly, instead of just saying "we offer a personal shopping service", Oasis makes the customers feel improved user experience in their website by separating out their personal shopping section of their site into occasions and allocating them each a time. Customers can find enhanced delivery options on the website including nominated day delivery, next day and evening delivery and so on. Overall, the website's contemporary design and innovation deliver modern customer experience and create a seamless customer journey. Correspondingly, this is very appealing to the customers and can easily grab their attention. Additionally, customers can install the company's mobile application as a supplement to their online or in-store shopping experiences. In short, digital marketing especially the new website, social media, and mobile app have helped Oasis to become a leading example in omni-channel marketing. Using innovative ways that motivate purchase decision and facilitate customer path is another factor. This includes fully customized service, using advanced technology in stores, and easy returning. Firstly, in Oasis' 15 stores across the UK costumers are able to book an appointment with professional stylists. That helps the company to strength customers' online and in-store connection further and adds value to customers as it enables them to pick the exact occasion for their personal shopping experience. Moreover, customers can book these appointments online which is very comfortable. Therefore, a customer can ask whatever they want, and the professional will direct and link them to the brand. Next, Oasis make sure all sales assistants have been given iPads that provides most up-to-date stock information. That is why if a product is out of stock salesperson does not simply leave the customer unsatisfied, he or she can immediately make an online order directly to customer's home, maximizing the potential for a sale to be made.

Also, the iPads are functioning as cash registers; therefore, a sale can be made anywhere in the store which is a perfect example of in-store and online integration, and this accelerates purchase decision making. Thirdly, online customers can benefit from a similar service. Thus, if a product is sold out online, Oasis' "Seek & Send" service can help customers whereby the retailer searches its stores for the product and ships it to the customer. When the product is located, the customer gets a notification email that let them track their items. The service helps customers who are in act stage and facilitate their purchase decision. Finally, when it comes to returning items customers have convenient and free options provided by Oasis. In addition to shipping the products back or return them by heading to any Oasis branch, customers can use an easy service named "Collect+" that let them return items through a network over 5,000 drop off points in local stores which allows to return products outside of the ordinary 9 to 5 post office hours. So, the post-purchase service helps Oasis turn its customers into brand evangelists, and obviously, as a result of the convenient service, customers will become advocates of the brand. Generally speaking, with the use of creative ways including an appointment with experts, electronic gadgets, easy returning Oasis can succeed execution of omni-channel marketing. To sum up, in the contemporary omni-channel world, Oasis, fashion retailer, are one of the leading example. Operating in an industry with high BAR median, narrow BAR range requires mapping all touchpoints across the five A's. A well-designed and managed shopping experience, that blurs the lines between online and offline marketing utilize all possible touchpoints and channels across the customers' path. With the help of successful omni-channel strategy, Oasis could efficiently integrate and manage its channels. Also, innovative website, effective social media strategy, supportive mobile application, fully customized appointment service, new information technologies, and returning strategy have helped the company to drive the customers to its sales channels and accelerate the steps across the five A's.

4. CONCLUSION
Omni-channel marketing, one of the seven big problems of the modern marketing world identified by American Marketing Association, has already become one of the key factors to survive and operate successfully in the business world. As literature review shows, even though implementing omni-channel marketing is an essential step to survive in the contemporary world, some brands are reluctant to execute the strategy since they face certain challenges such as threats of channel integration and channel management. Furthermore, the companies who are trying to implement the omni-channel strategy are struggling to integrate sales channels and manage out-of-stocks and share inventory visibility. Despite all these difficulties, certain brands such as Oasis, UK fashion retailer, could take advantage of the omni-channel marketing, and so, they stand one step ahead of their competitors in the omni-channel world. The research findings can possibly be applied by marketers, sales experts and people who are interested in effects of the new trends in the modern business world. Furthermore, the study can be used as a model by whom wish to explore challenges that companies deal with in the omni-channel world, and also, causes of changes in b-to-b markets created by omni-channel can be studied in further researches.

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DEVELOPMENT AND PLACE OF MODERN ENTREPRENEURSHIP IN AN INNOVATIVE ORIENTED ECONOMIC DEVELOPMENT

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ABSTRACT

This scientific report on the topic of innovation based on socio-economic development reflects development trends and the place of modern entrepreneurship based on innovation-oriented economic development. Thus, the transition of the Republic of Azerbaijan to the path of innovation development is an absolute condition for its development. , development of criteria for selection of optimal option, selection of more perspective ideas, completion of ideas taking into account criteria and development of business plans, assessment of business plans and conditions of its implementation, creation and application of case studies, analysis of sales data and relevant adjustments reflected. In addition, the availability of information and financial markets has become a key development factor, which has led to the density of contacts and the proximity of decision-making centers in terms of communication. Thus, the development of Azerbaijan's innovation system on the basis of regional modules is considered expedient. It is also stated in this scientific report that Innovative entrepreneurship in a market economy is a creative activity of those who develop innovations of the country's economic development potential.considered commercialization. Innovative entrepreneurship is the development and application of new technologies, equipment, goods and services in order to make a profit. The reflection of the specific organizational form of innovation activity, which is important for meeting the individual needs of developers and innovators, was noted in detail. In recent years, the systematic implementation of state support for entrepreneurship, increasing the effectiveness of state support measures for entrepreneurs has created conditions for significant achievements in this area. The normative-legal documents adopted for this purpose, the further improvement of the mechanism of state financial support for entrepreneurship have increased the self-confidence of businessmen, stimulated the expansion of entrepreneurial activity, especially the launch of new business entities in the regions. Regarding the role of small business in innovation-oriented economic development, it is noted that the integration function of the enterprise is considered as their main intersection in terms of raw materials, information, financial, technological, labor resources flows. At the same time, it reproduces economic connections and relations with other elements of the macroeconomic system (with elements of the external environment). As an element of the global system, it implements and reproduces macro and micro interactions and relationships.
Keywords: Business plans, innovative ideas, entrepreneurship, technological order

1. INTRODUCTION

In recent years, due to the strong development of science and technology, as well as the ever-increasing demand of society for these innovations, innovation is increasingly becoming an integral part of entrepreneurial activity. The need for the development of innovative entrepreneurship is due to the following factors: - Intensification of intensive factors of production development; This allows the application of STP in all spheres of economic activity; - with the defining role of science in improving the efficiency of development and application of new technology; with the need to develop creativity; - with the specific features of the scientific and technical production process. This is mainly reflected in the uncertainty of the results, the diversity of research, the presence of risk and the possibility of obtaining negative

results; - with the increase of the enterprise and costs during the development of new products; with rapid moral deterioration of equipment and technologies; with the objective necessity of rapid application of new equipment and technologies. Innovative entrepreneurship as a process can be divided into four main phases: - search for new ideas and their development; - development of a detailed business plan on the developed idea; - search for necessary resources; - implementation of management and control processes. The transition of the Republic of Azerbaijan to the path of innovation development as an absolute condition of its development implies the creation of innovation development zones in the country. Creating a comfortable environment for normal approach and operation in these areas, the emergence of the necessary mobile highly qualified innovation ideas, submission of these ideas for consideration and formalization, development of criteria for selecting the optimal option, selection of more promising ideas, completion of ideas and business plans preparation, assessment of business plans and the conditions of its implementation, creation and application of a pilot project, analysis of sales data and relevant adjustments. In addition, the availability of information and financial markets is becoming a key development factor. Therefore, the density of contacts, the proximity of decision-making centers in terms of communication are becoming important development factors. Thus, it is expedient to implement the development of Azerbaijan's innovation system on the basis of regional modules, for which we consider it necessary to develop and implement the following measures: development and implementation of development programs for closed territorial units, their effective integration into economic and social development; State support for the establishment of scientific centers in different regions of Azerbaijan, as well as the placement of technology transfer centers in economic regions; identification of places for the placement of higher education institutions in the regions of the republic, providing the integration of scientific and educational activities conducting fundamental research in the priority areas of development of science and technology for the state, performing the function of research institutes. .[1.page-196] These educational institutions should be located primarily in the regions that serve as a "locomotive of development" for Azerbaijan and have a more multiplier effect on other regions; investment and innovation development program of the regions (development of production-technological infrastructure-technologies of innovation activity, innovation technological centers, business incubators); The creation of special economic zones (technical application and industrial production) in the territory of the Republic of Azerbaijan, small business in the real sector of the economy has significant potential for the effective application and development of innovative technologies.

2. RESEARCH

First of all, it should be noted that small business has a great ability to adapt to changes in the market environment, which allows it to be sustainable and long-lasting advanced technologies. Innovations implemented in small production units do not require large financial investments and operating costs. The operativeness of management by small business structures helps to rapidly improve and apply new technologies. Due to the transition to new production due to the small volume of production, the risk of loss is relatively small. Innovative entrepreneurship in a market economy is the commercialization of the creative activity of those who develop innovations of the country's economic development potential. Innovative entrepreneurship in a market economy is the commercialization of the creative activity of those who develop innovations of the country's economic development potential. Innovative entrepreneurship is the development and application of new technologies, equipment, goods and services in order to make a profit. As a rule, the most effective business entities of innovative entrepreneurship are small innovation enterprises (SIE). SIE reflects the specific organizational form of innovation activity, which is important both for the development of the country's economy as a

whole, and for meeting the individual needs of new technology developers and innovators. When applying innovations to entrepreneurial practice, it is necessary to study and evaluate the factors that can slow down or accelerate the innovation process: scientific, technical, organizational, financial, legal, political, socio-psychological and cultural factors. When considering the basics of small innovative entrepreneurship, we believe that the concept of technological systems should be remembered. Technological system is a group of technologies that are connected to each other by the same type of technological chains and create those who reproduce the whole. Each subsequent technological process begins when a fundamentally new "set" of innovations is placed at the disposal of producers of goods and services. [2.page-69] Currently, fifth-generation technologies dominate in developed countries, and sixth-generation technologies are emerging. Characteristic features of the fourth system are a new machine base, complex mechanization of production, automation of many basic technological processes, widespread use of skilled labor, increased specialization of production, superior development of electricity, a new type of consumption characterized by mass demand for durable goods, use of synthetic goods. transition. The main features that distinguish the fifth technological system are the development of computer technology, software, aviation industry, telecommunications, robotics, optical fibers. The features of the sixth system include biotechnology, nanotechnology, photonics, optoelectronics, aerospace industry. The formation of a new technological system in the Azerbaijani economy is due to the fundamental change in the technical and technological base, an element that provides additional benefits to the SIE. The small size and narrow specialization of firms allow them to re-equip faster and cheaper, to apply and approve new technologies designed for the application of mini-equipment. Therefore, although small businesses have unlimited resources, they have traditionally played an important role in the implementation of many areas of STP, as it provides an opportunity for the development of narrow-based research. It is clear from research that new market segments are now being developed with the wider use of innovative enterprises. In order to stimulate innovative entrepreneurship, the state has intensified institutional changes in the economic and legal infrastructure to support entrepreneurship. The concept of enterprise, being the most important structural element of the economy, is a key feature of the paradigm of radical organizational change. As an element of the macroeconomic system, the enterprise performs production and integration functions. [4.page 237]. In the first case, the enterprise is defined as an organizationally sustainable whole and an independent technical and economic system isolated from the environment. This system concentrates resource flows and directs them to the production process. At the same time, the enterprise is focused on the reproduction of economic connections and relationships in the internal environment at the level of the micro and macro interaction system. The integration function of the enterprise is considered as their main intersection in terms of raw material, information, financial, technological, labor resources flows. At the same time, it reproduces economic connections and relations with other elements of the macroeconomic system (with elements of the external environment). As an element of the global system, it implements and reproduces macro and micro interactions and relationships. An important task of organizational engineering is the creation of multi-level and multifunctional system management mechanisms that reflect the industrial enterprise. The mechanism of development and application of innovations can be effective if it is based on the interaction of the production process with the external and internal environment, a detailed study of internal and external subjects of innovation development. The process of organizational development is multifunctional and involves the integration of new elements, their blocks and subsystems capable of ensuring the external growth of the enterprise on a new organizational basis in different spatial and temporal frameworks. In fact, integration processes are associated with the need to adapt to the external environment and ensure stability and the optimal operation of a complex multi-level system.

Restructuring of the enterprise is understood as a purposeful impact on the socio-economic system, which provides greater efficiency of the new multi-level structures created as a result of intra-firm (intra-system) and inter-firm (external systems) interactions in the process of organizational development. If changes within the system mobilize internal sources of growth and improvement, then inter-firm interactions based on integration and differentiation processes provide external sources of enterprise growth focused on new opportunities for profit maximization. This is due not only to the expansion of the boundaries of the system, but also to the introduction of certain regulation and stability from the outside, while simultaneously increasing the dynamism of the economic system. As a result of restructuring due to inter-organizational changes in the economic system, new elements capable of playing the role of mediators, intensifying communication processes, innovations, new knowledge, changes, etc. carriers, economic, production, transaction, etc. process accelerators occur. Enterprises, institutions, financial-industrial groups and other economic agents of different sizes play the role of new elements of the system. The design of external organizational changes is based on the selection of alternative institutions, economic, social and technological structures in order to maximize the external development and activity of the re-emerging organism. [5.page-218] Designing new organizational interactions at the expense of external growth sources should be both a way of differentiation and integration into the system. Differentiation characterizes a certain state of the structure and leads to the strengthening of the specialization necessary for the self-preservation of the system. The high degree of differentiation of production systems significantly increases the likelihood of realization of new goals of reengineering activity, increases the possibility of achieving the goal and the efficiency of activities, new social structures. Differentiation in the system of structural changes is associated with both the deepening of specialization and the development of different types of diversification. Integration expands the boundaries of the production system through external sources of growth, integration processes through various forms of separation, merger, technology transfer, license acquisition, know-how, market transactions, the involvement of intermediaries in the process, infrastructure facilities, etc. can expand as a result. Integration processes can spread across different spatial and temporal frames, on a temporary and permanent basis. Integration structures lead to the expansion of the range of economic activities and functions of the enterprise. The analysis of the mechanism for implementing new structural changes allows us to draw the following conclusions: organizational redesign ensures the continuous evolution of production systems; organizational development helps to increase the dynamism of the economic system and the reproductive cycle; Organizational changes at the expense of external sources demonstrate the growing opportunities for adaptation, improvement, sustainability, optimality of activities and strengthen the structural processes for differentiation and integration in the activities of economic entities; Organizational changes, which are closely related to the development of innovation in the enterprise, allow to intensify the process of radical restructuring and renewal of production by expanding the boundaries of the system, accelerating the introduction of innovations and attracting external sources of STPK and new technologies; organizational reengineering to expand the boundaries of self-development and organization of the economic system, to involve in the production process different groups of enterprises of different profiles, different sizes, stakeholders, clients, intermediaries, investors, innovators, as well as to freeze the activities of backward structures and radicalize allows to create new organizational bases for innovative changes; Inter-organizational changes lead to the washing away of sectoral boundaries, and the strengthening of intersectoral interactions in the reengineering system also leads to a significant increase in the economic efficiency of measures through profit maximization, redistribution and diversification of risks; Restructuring based on innovation reengineering deepens the diversification of supply and demand, stimulates entry into new markets, creates opportunities for the enterprise's innovation monopoly.

In order to increase the effectiveness of organizational reengineering measures, it is necessary to identify the exact compatibility of organizational structures, organizational interactions, the type of economic strategies, the types of technology used and the sectoral characteristics of the market. It is known that the organizational type depends on the nature of the technological process (discrete or continuous, closed or open technological cycle, etc.), as well as the cost of production, the level of standardization and unification, etc. depends. Small-scale production and unique technology require strict internal organization and coordination of work, narrow technological specialization. Base standards are aimed at expanding the scale of production on the basis of large-scale and mass production integration based on technology. In the chemical, petrochemical, food industries, and metallurgy, it focuses on continuous, heavy-duty production lines and functional structures, and is less important for horizontal inter-firm interactions. Discrete small-scale production processes can be divided into intermediate stages, which leads to effective inter-firm interaction on a contractual, market-based basis. These types of organizational structures tend to be horizontal arrangements or mixed structures based on linking integration and commodity diversification. Stable and intensive technologies are the basis in most areas of the processing industry. They are characterized by a high risk of reengineering, low adaptability, and insufficient flexibility to meet market demands. Both sides are characterized by open technological systems and a raw material-oriented economy. [6.page-97] The technologies of science-intensive fields, which are characterized by high variability, tendency to change and innovation, are based on straight horizontal organizational structures in their development. The process of organizational change takes place on the basis of differentiation and diversification, and diversified enterprises move beyond sectoral markets. In order to deepen the reorganization of the enterprise, the process of diversification of related productions must take place. Thus, in the case of product diversification in science-intensive areas (productive with a short life cycle), a large enterprise needs to establish relationships with different types of economic organizations based on new principles of organizational interaction. From a organizational point of view, the "classical" types of interaction are almost non-existent. Determinated approaches are required for optimal operation of production systems and production of high quality products. At the same time, meeting the various pictorial and selective demands and effective service to the market requires adaptive structures and capabilities of maneuvering. Therefore, the formation and maintenance of permanent partnerships must be matched by the rapidly changing channels of sales conditions, marketing activities, STPK, temporary interactions and acquisition of new technologies based on horizontal inter-firm structures. In this case, in order to coordinate the principles of self-organization and purposeful structuring of the economic system, it is important to comply with the following conditions: 2. To increase the effectiveness of reengineering and structural change, a strategy of coordinating, structural and institutional change based on diversification of methods of operation and external sources of growth is necessary. It is clear that external organizational changes are seen as a means of limiting negative development trends. However, the main purpose of inter-organizational changes is to change the structures of interaction, institutional rules and norms of economic interaction of economic entities. Institutionalization helps to connect and regulate the elements by changing the rules, norms, structures and patterns of behavior of the subjects in order to maintain and improve health at the expense of external system sources. In this case, large production systems can be organized institutionally: they come from various forms of industrial enterprises, government agencies, fundamental research funds, investment and venture funds, research institutions, academia, information centers, technology associations, etc. may consist of. These organizational changes are based on the creation of a system called structural module specialization. The institutional structural scheme of entrepreneurship is given below. As the country develops economically, the support of the state and local authorities for small business increases proportionately.

Because the correct and lawful functioning of the market mechanism, the lack of monopoly in the country, the formation of the middle class are the pillars of the market economy, the country's economy adapts more quickly and flexibly to the market, maintaining political stability, dynamic economic development and so on. For some reason, small business must constantly develop, which is possible only with the support of the state and local authorities. From 1950 to 1955, a large number of science parks, industrial parks and technology parks were established in America. The reason for their development was the measures taken by the US government in the field of economic development of the country. Thus, as part of the concept of economic development, the state has allocated large sums of money for scientific and technical programs and projects (space, military, the creation of a new generation of computers, the creation of new technologies in microelectronics). The universities are involved in the implementation of this program with their fundamental and applied research, a number of government agencies, contractors, small entrepreneurs, etc. working in this field. firms joined, and as a result, this concept gave impetus to the emergence of a large number of innovative small enterprises. For more than 30 years, this project has been implemented in the United States to create thousands of jobs, improve the living standards of the population, the dynamic economic development of the state, and so on. caused. However, in the early 1980s, a crisis began in the development of parks, due to the overgrowth of the network and the inability of the state to properly coordinate. At the same time, they increased their individual initiatives and began to form in venture firms. The most important reason for the crisis was that the state did not allocate as much money in this area as before. All this has led to the formation of business incubators in America. These self-paying companies began to spread rapidly. In 1986, 170 such companies were registered, in 1988 there were 300, and in 1990 there were 500 such business incubators. In the United States, the average lifespan of an enterprise in a business incubator is several months. According to official statistics, 87% of new enterprises operating in business incubators remain in the market and grow. 84% of them are developing in the sphere they support. The statistics of enterprises operating in business incubators for the last four years were examined and it was found that during this period, profits increased 8 times and the number of employees increased 4 times. According to 2006 statistics, of the 1,300 business incubators operating in the United States: 47% provide services to companies in various fields of activity; 37% of business incubators mainly produce new equipment, technology, new products; 7% of business incubators work with industrial enterprises; 9% work with enterprises providing various services. Founded in 1990 in the United States, the Business Technology Center is a mixed-use business that works with both industry and service. Along with the city administration, the provincial government is also providing assistance to this city. Along with the city administration, the provincial government is also providing assistance to this city. In 2005 alone, the incubator generated $ 30.1 million in profits that supported 25 firms, employed 344 individuals and paid them $ 2.7 million in wages. The Austin Technology Incubator, based at the University of Texas, aims to equip start-ups with high-tech equipment. This Business Incubator helps start-ups find a source of funding, study the target market and target segment, and ensure product expansion in the market, which in turn contributes to the well-being of the population and economic development. Since 1989, the incubator has partnered with 140 companies in Austin, earned more than $ 1.4 billion for university graduates and clients, created 2,880 high-paying jobs, and raised its foreign capital to $ 600 million. The Atlanta Technology Incubator at the University of Georgia has been operating since 1980. The purpose of creating the incubator was to turn innovations in public universities into a source of income for the local economy. It already functions as a center and combines three incubators. In 2004, the center worked with 44 companies and provided a total of $ 94 million in financial assistance. These companies, in turn, created 4,900 high-income jobs that year, earning $ 684 million.

The Biotechnology Innovation Center in Lavale, Canada, won the Business Incubators Association's highest award in North America in 2006.

Table 1: Information on newly established enterprises in the regions of Azerbaijan Republic

Economic regions	Years					
	2004	2005	2006	2007	2008	Total
						5 year
Absheron	320	287	242	268	448	1565
Ganja-Kazakh	311	246	251	246	404	1458
Shaki-Zaqatala	144	196	195	152	192	879
Lankaran	200	204	198	265	215	1082
Quba-Khachmaz	84	119	149	142	150	644
Aran	440	562	498	539	943	2982
Nagorno Karabakh	144	105	81	109	116	555
Kalbajar-Lachın	61	43	31	23	-	158
Upland Shirvan	35	102	72	47	95	351
Nakhchıvan	266	326	366	210	68	1236
Total by regions	2005	2190	2083	2001	2631	10910
Baku	2916	3326	3040	3144	4236	16662
Total by country	4921	5516	5123	5145	6867	27572

3. CONCLUSION

The main task in the field of investment policy is to create a free competitive environment for all investors in order to expand investment opportunities in all sectors of the economy and provide a more favorable investment climate consists of improvements. As noted in the new Program for the Development of Regions, the implementation of a transparent and efficient privatization process will continue in the coming years in the enterprises opened for privatization. Purposeful work will be carried out to support the investment activities of enterprises in the non-oil sector, and the import of modern production equipment will be encouraged. Public investment policy should be aimed at creating new jobs in the regions, ensuring the reliable operation of infrastructure facilities, the implementation of priorities such as the development of human capital and strengthening the social protection of citizens. One of the important directions of the employment policy is to eliminate the factors limiting the creation of new jobs and create conditions that stimulate the growth of employment. In this regard, measures aimed at the development of entrepreneurship, especially small and medium enterprises, are of particular importance. In the coming years, the main goal of employment policy will be to ensure the effective employment of the population through the fullest use of labor resources. [9.page 431]. Entrepreneurship development will be one of the leading directions of state policy in terms of diversification of the country's economy.

This policy will be aimed at increasing the level of regulatory, organizational and financial support for business activities in all sectors of the economy, especially in priority areas of development.

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FINANCIAL SECTOR IN A PANDEMIC: NEW CHALLENGES AND OPPORTUNITIES

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ABSTRACT

Amid the spread of the new coronavirus infection (COVID-19), many countries have taken large-scale measures to support the financial market and the economy since the end of February 2020. The actions of financial regulators were aimed at creating conditions for maintaining the volume of financing for the real economy, supporting affected borrowers and ensuring an adequate level of liquidity for financial institutions. The pandemic has a negative impact not only on people's health, but also on their well-being. In this regard, the financial system, which is compared to the circulatory system of the body, can play a very important role in terms of mitigating the negative consequences of a slowdown in the economy for businesses and the population. The crisis caused by the coronavirus pandemic has affected the asset quality of many banks in the CIS countries. Recently, digital technologies have been actively developing in the financial sector. The pandemic of the new coronavirus infection COVID-19 has only spurred this process. The author also concludes that the quality and successful functioning of the financial sector depends on the level of digitalization of the financial sector. Along with regulatory measures, government support plays a key role in combating the economic consequences of the COVID-19 pandemic, which mainly includes loan programs, guarantees, credit holidays, wage subsidies, direct payments to the population and businesses, and an increase in unemployment benefits. various tax breaks. The amount of government support measures differs significantly in different countries: according to the IMF, in the EU they amount to 4.3% of GDP, in the USA - 14.3% of GDP, in China - 2.5% of GDP, in Brazil - 6.5% of GDP. , and in Japan - 21.1% of GDP. Azerbaijan is implementing economic support measures worth up to 3.3 billion manats (about 2 billion US dollars, or 4% of GDP).
Keywords: *financial sector of Azerbaijan, digitalization of the financial sector, pandemic, digitalization, fintech, central bank*

1. INTRODUCTION

The global spread of the coronavirus infection COVID-19 has led to a global recession and destabilized global financial and commodity markets. According to IMF estimates, the fall in global GDP in 2020 will be the largest since the Great Depression. Already, the crisis is accompanied by a sharp increase in unemployment in a number of countries, significant sectoral effects, a decrease in investment activity, and a deterioration in the credit quality of borrowers and bank portfolios. The situation in the global financial markets, despite some stabilization, remains unstable. In these conditions, regulators around the world are implementing large-scale support measures (fiscal, monetary, financial) to limit the economic damage from the pandemic. The capital and liquidity buffers accumulated over the past decade in the financial system make it possible to implement countercyclical measures. However, the measures being implemented may not be enough to quickly restore global growth. Crisis trends may intensify if the passage of the peak of the epidemic is delayed or in the event of a second wave, as well as in the scenario of massive corporate defaults and sales of assets in the market.

The impact of COVID-19 on the Azerbaijani economy is large-scale and is realized through the deterioration of external economic conditions, primarily a drop in demand and oil prices.

2. RISKS OF THE GLOBAL ECONOMY AND WORLD FINANCIAL MARKETS

The World Health Organization has officially declared the coronavirus outbreak a global pandemic on March 11, 2020. The epidemic quickly spread outside China, with the number of officially registered cases in many countries exceeding the number of those in China. In total, the epidemic affected more than 200 countries (5.495 million reported cases of infection and 346 thousand deaths as of May 25). Against the backdrop of the pandemic, the global economy entered a recession. According to the baseline forecast of the IMF, global GDP will decline by 3.0% by the end of 2020, after rising by 2.9% in 2019, which will be the most significant fall since the Great Depression. At the same time, the GDP of developed countries will decrease by 6.1% (against growth by 1.7% in 2019), the GDP of emerging markets and developing countries - by 1.0% (against growth by 3.7% in 2019.). In the baseline scenario, the IMF expects a rapid recovery of global economic growth by 5.8% in 2021, although it does not rule out the implementation of negative effects for a longer time (Обзор финансовой стабильности (2020). The urgent introduction of large-scale monetary and fiscal stimuli as support measures from the governments and central banks of the largest countries of the world helped to stabilize the situation in global financial markets since the end of March.

The impact of COVID-19 on the Azerbaijani economy is large-scale and is realized through the deterioration of external economic conditions, primarily a drop in demand and oil prices.

3. ANTI-CRISIS MEASURES IN THE COMMONWEALTH OF INDEPENDENT STATES (CIS)

In the CIS region in March, two problems were immediately apparent: the decline in business activity due to the new coronavirus and a simultaneous rapid reduction in oil prices. Some CIS countries responded quickly to the alarm and have already introduced active anti-crisis measures. In this section, we will consider key anti-crisis measures in the CIS countries. At the end of March, the Central Bank of Russia published a complex of measures aimed at helping citizens, businesses and the financial sector in the event of a pandemic. In particular, to support business in all sectors of the economy with the support of the Bank of Russia, a special program of refinancing loans for small and medium-sized businesses with the establishment of interest rates. Also, until the end of September 2020, the Central Bank recommended banks not to worsen the assessment of the financial condition of customers for the purpose of forming reserves and, if possible, to restructure the loans of borrowers, which are located in complex finance [http://www.cbr.ru/finstab/review/]. The monetary regulator also introduced a number of measures to support citizens with the financial system. In particular, banks and microfinance organizations (hereinafter MFIs) are not recommended to impose fines and, if possible, to restructure the debt of borrowers-individuals, if the latter was confirmed by the correction. In case of deterioration of the quality of debt service or financial condition of such officials, banks are not obliged to create additional reserves until September 30, 2020 (Лузгина А (2020). In turn, the National Bank of Ukraine recommended banks to consider the possibility of loan deferrals for individuals and businesses, which were partially or completely deprived of income as a result of quarantine. In particular, it was proposed to establish a special grace period for the payment of the principal amount of the debt. For that, the financial system was able to fully work in the conditions of deteriorating economic situation due to the pandemic, the central bank of Ukraine developed and gradually introduced a number of tools to ensure the adequacy of the banking system [level]. The following measures should be taken to support the banking system with the support of the National Bank of the Republic of Belarus. The regulator announced the possibility of extending the terms of refinancing and providing loans to banks for a period of

up to half a year at the refinancing rate and recommended to financial institutions to consider the possibility of providing "credit vacations" to individuals with financial problems; In the current situation, it is important not only to ensure the stability of the legal framework, but also to determine the complex of adaptation of some regulatory requirements to work in the conditions of a pandemic, including the easing of control over financial burdens. In this connection, the Central Bank of Russia:

- stopped and rescheduled scheduled inspections of credit institutions;
- increased the deadline for the execution of prescriptions by the banks for 1 month installed;
- restricted administrative charges for non-compliance with bank deadlines reporting, as well as the norm of corporate legislation and took a number of other measures.

The National Bank of Ukraine, in turn, also reduced the administrative burden. This is reflected in the cancellation of departure inspections of banks, the transfer of deadlines for stress testing and the provision of annual financial statements. A lot of work to soften the regulation in part with the implementation of regulations by banks was carried out by the National Bank of the Republic of Belarus. So, until the end of 2020 with the regulator:

- changes in the size of prudential requirements, including liquidity ratios, the value of the conservative buffer capital, the degree of credit risk in relation to credit indebtedness and the value of the prudent paperwork system.
- temporarily canceled the standard risk on new urgent bank deposits (deposits) of individuals and legal entities in Belarusian rubles (Лузгина А (2020).

These actions are aimed at assisting banks in the field of financial support of economic entities and stable operation of the banking system of the country.

4. ANTI-CRISIS MEASURES OF THE CENTRAL BANK OF AZERBAIJAN AGAINST THE PANDEMIC

March 19, 2020 The President of Azerbaijan I. Aliyev signed a decree on the conduct of measures to stabilize the economy and increase resilience to external shocks. According to the order, published on the website of the heads of state, the Cabinet of Ministers to ensure the mayor of the state budget for 2020. 1 billion manat (588.2 million US dollars at the current exchange rate) was allocated. In order to reduce the negative impact of the pandemic on the financial sector, the Central Bank approved a package of additional support measures for the financial sector on April 24, 2020 within the implementation of the relevant decrees of the President and the Cabinet of Ministers. Rule" was adopted. The approved rules include measures to support individuals, as well as pandemic-affected entrepreneurs, reduce the regulatory burden on banks, increase access to credit resources in some economic sectors, reduce the cost of payment services of economic entities during the pandemic, ensure insurance continuity and protect the rights of insured. It is also planned to provide regulatory strikes and benefits to capital market participants:

1) Banks were recommended to restructure loans of individuals and individual entrepreneurs affected by the pandemic covered by state support mechanisms;
2) Risk rates on this category of loans have been reduced from 100% to 50% in order to stimulate mortgage lending by banks at their own expense;
3) Banks were advised not to charge additional penalty interest, penalties and other payments to borrowers in case of delay of credit obligations of legal entities and individuals; d) The classification category of restructured loans in connection with the pandemic has not been allowed to deteriorate and the precautionary requirements have been relaxed;
4) The risk level of microcredits provided by the Agrarian Credit and Development Agency under the Ministry of Agriculture has been reduced;

5) In order to further strengthen the financial resilience of banks and insurance companies against macroeconomic shocks, restrictions were imposed on their payment of relevant dividends on the financial results of previous years;

6) The risk level of business loans for the production of medical supplies and equipment has been reduced (Valiyev E., Mamedov Z. F., 2020.).

The following measures have been taken to reduce the regulatory burden on banks:
1) Banks' total capital adequacy ratio has been reduced;
2) Countercyclical capital buffer was set at 0%;
3) Taking into account operational and market risks in calculating the capital adequacy of banks has been postponed;
4) Taking into account the risks based on the debt burden, maturity and interest rates on consumer loans in the calculation of the capital adequacy ratio has been suspended until January 1, 2021;
5) Comprehensive inspections have been suspended for insurance companies until September 30, 2020, and for banks and investment companies until January 1, 2021;
6) The introduction of new regulatory requirements in banks has been postponed.

COVID-19 contributed to the financial insolvency of banks and companies in a number of countries, mass unemployment, the world economy going through a period of stagnation and, as a result, the transition of the global economy to recession. The pandemic came to Azerbaijan later than to other countries, but the phenomenon of cheaper energy prices began to be observed. Success in maintaining macroeconomic stability in Azerbaijan and decisions taken to prevent global risks have limited the risks of increased global volatility for the Azerbaijani market. There are three channels for transmitting the impact of the pandemic to the country's financial sector: the balance of payments channel, the income channel, and the credit channel. The decline in oil prices and the export of other goods affects the foreign exchange market through the balance of payments channel. Against the background of credit risks, the financial condition of banks may deteriorate, which will force banks to limit the issuance of loans and may have a negative impact on the economy through the credit channel. A decrease in the income of business entities will result in an increase in credit risk, a decrease in demand for financial services and a decrease in the income of the financial sector. An additional channel for the negative impact of the coronavirus pandemic could be a decrease in the potential for activities in the financial sector, primarily in the field of lending. A decrease in the income of economic entities reduces their creditworthiness, which may limit the desire of banks to continue lending to the economy. The impact of the coronavirus pandemic on the credit channel may be associated with the following risks:

• decrease in income of potential borrowers;
• limits your appetite for credit due to the narrowing of the possibilities for servicing loans;
• at the same time, there is serious uncertainty about the future recovery of incomes of citizens and companies;
• a deterioration in the quality of borrowers' loans may occur, may worsen, and an increase in credit risk;
• leads to an increase in interest rates on loans, which limits the demand for new loans;
  - banks can tighten lending standards, including lowering the limits of loan products;
  - A mid deteriorating financial conditions, some banks may face a lack of capital to increase lending.

According to the Presidential Order on a number of measures to reduce the negative impact of the coronavirus pandemic (COVID-19) and the sharp fluctuations occurring in the global

energy and stock markets, on economy of the Republic of Azerbaijan, macroeconomic stability, issues of employment in the country and business entities, four Working Groups were established (Aliyev S. Mamedov Z. F., 2020. p.586). The working group, chaired by the Chairman of the Central Bank, was instructed to assess the alleged negative impact of the pandemic on the financial sector and macroeconomic environment of Azerbaijan, prepare and submit to the Cabinet of Ministers proposals on additional measures to be taken to support the stability of the Azerbaijani manat exchange rate and consumer prices, for maintaining macroeconomic stability in the country. A working group, created under the leadership of the Chairman of the Central Bank, was tasked with assessing the alleged negative impact of the pandemic on the financial sector and macroeconomic environment in Azerbaijan, including:
1) supporting the stability of the rate of the Azerbaijani manat;
2) supporting the stability of consumer prices
3) maintaining macroeconomic stability in the country.

Currently, both social and budgetary, monetary policy in Azerbaijan is mainly aimed at neutralizing the incomes of the population and business affected by the pandemic. The main goal of the measures taken by the Government and the Central Bank is to improve the financial system as a whole and to protect the interests of consumers, in particular their deposits in banks, and to prevent the threat of their loss, to create opportunities for their free use. Due to the pandemic, banks will spend a total of 1.2 billion manat by 2020. About 52,000 loans in the amount of AZN have been restructured and this process is still ongoing. 87% of restructured loans fell to business, 9% to consumer and 4% to mortgage loans. In 2020, measures were taken to expand the financial intermediation of the banking sector and increase access to credit. Thanks to the synchronized measures of the government and the regulator, a sharp decline in lending activity was prevented. The loan portfolio of banks amounted to 14.2 billion manat at the end of the reporting year, excluding closed banks. manat. Excluding closed banks, banks' mortgage portfolio increased by 13% in 2020, the volume of business loans remained stable, and consumer loans decreased by 6.3%. 60% (AZN 8.5 billion) of the loan portfolio is business loans, 26% (AZN 3.7 billion) are consumer loans, and 14% (AZN 2 billion) are mortgage loans. The pandemic has once again proved the need for digitalization of the banking sector, the population and businesses. The expansion of the use of cashless payment infrastructure this year and the increase in the range of innovative payment services provided by banks have helped to whiten economic turnover and shrink the cash economy. In 11 months, compared to the same period last year, the volume of domestic non-cash transactions by payment cards increased by 34%, contactless payments by 5.2 times, Internet and mobile banking by 65% and 90%, respectively (Mamedov Z. F., Qasimov A., 2020).

5. CONCLUSIONS
In the CIS region in March, two problems immediately manifested themselves: a drop in business activity due to the new coronavirus and a simultaneous rapid decline in oil prices. Some CIS states have promptly responded to signals received from outside and have already implemented active anti-crisis measures.To support the financial stability of the banking system, a number of preventive immunization measures were taken before the effects of the crisis began to be felt. That is, so to speak, during the economic and credit boom, measures of countercyclical prudential regulation were taken. So, in the years of boom in the growth of high rates of banking assets, the Central Bank of banks in an active dialogue:
1) called for a prudent credit policy;
2) ensured an increase in the level of capitalization and provisioning;
3) tightened prudential regulation standards;
4) applied the required reserves on foreign loans.

To expand access to financial opportunities in the real sector, a $ 200 million Framework Agreement was signed with the European Bank for Reconstruction and Development. The implementation of the first tranche of more than $ 50 million has already begun.

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IMPROVING THE ASSESSMENT OF THE INTELLECTUAL PROPERTY MARKET IN AZERBAIJAN

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ABSTRACT

In modern times, the economic potential of every country is determined by the ability to expand production, acquire new knowledge, create technologies and identify a variety of new products. Records show that only in this way society can maintain a high level of viability. The revival of production in the country depends on the volume of direct investment and the level of application of new technologies. In the world practice, along with cash, targeted bank allocations, shares, stocks and other securities, the rights to intellectual property are widely used in investment processes. Intellectual property should be considered as the basis of the strongest and most real impact on the development of all sectors of the national economy. As the country's economic potential grows, changes take place in the structure of the economy, which stimulates the development of science-based industries and ultimately increases the demand for intellectual property. This shows that it is vital to determine the norms in accordance with international standards, to conduct methodological and practical work, taking into account the realities of Azerbaijan, in order to take into account intellectual property in the assessment of property. The purpose of the research is to improve the assessment of the intellectual property market in Azerbaijan in accordance with modern international methodology. The research was conducted on the basis of generalization, systematization, comparison and analysis methods. At the article, it gives an author's explanation of the theoretical-methodological and conceptual-legal aspects of the assessment of intellectual property (IP), analyzes the features of the assessment of types of intellectual property. The proposed approach to the results of the assessment of the intellectual property market has allowed to systematize the main goals and objectives, the main methods of its implementation, while examining the existing problems in this field. The scientific novelty of the research is the comparative analysis of the assessment of the intellectual property market of Azerbaijan and a number of developed countries, the development of priority fields for improving the assessment methodology based on the interaction between approaches to intellectual property assessment and human capital development in the country.
Keywords: intellectual property market, assessment, profit, comparison, cost

1. INTRODUCTION

Intellectual property (IP) is a category of intangible assets that express the rights of a juridical person or citizen to the results of intellectual activity. This is equivalent to the means of individualization of juridical person, goods, works and services. The use of means of individualization and the results of intellectual activity, which are purely legal objects, may be carried out by a third side in accordance with the legislation [1]. Depending on the characteristics of the legal regulation, intellectual property can be divided into 3 primary types [2]:

1) results of creative activity protected by patent law - industrial property, which includes inventions, utility models, industrial designs, selection achievements; means of individualization of juridical person, goods, works performed or services rendered (company names, trademark, service mark);

2) results of copyrighted creative activity - science, literature, art, programs for electronic computers, topology of integrated circuits;

3) results of creative activity related to common rights - performers, producers of audio and video products, television and radio programs, etc.

In modern times, the economic potential of country is determined by the ability to expand production, acquire new knowledge, create technologies and identify a variety of new products. Records show that only in this way can society maintain a high level of viability. The revival of production in the country depends on the volume of direct investment and the level of application of new technologies. In the world practice, along with cash, targeted bank allocations, shares, stocks and other securities, the rights to intellectual property are widely used in investment processes. Intellectual property should be considered as the basis of the strongest and most real impact on the development of all sectors of the national economy. [3, p. 10-14]. The opinions of well-known experts dealing with this problem once again confirm it. For example, the American economist J. Helbright, who was best known for his theory, proved that every unit of value spent on raising the intellectual level of people is more efficient (both materially and spiritually) than it is focused on material areas. Therefore, in the economies of developed countries, it is paid more attention to intellectual property. It shows itself more clearly in the acquisition of some enterprises by others, in the technological speed and scale, in communication and information technologies, in the gradual complication and integration of financial markets, especially in the globalization of available resources on a worldwide scale. In more economically developed countries, it is attached great importance to the share of intellectual property in the common property of the enterprise for its image. Thus, if the total number of intellectual property of the enterprise is less than 30% of its total property, such an enterprise is considered technologically backward. They are usually unable to compete and can not raise their economic indicators. Of course, one of the factors characterizing the economic power of the country, perhaps the main one, is the volume of its intellectual property [4, p. 258-261]. As it is well known, intellectual property is an intangible asset of an enterprise's balance sheet. The methodology for assessing intellectual property aims to achieve the following goals:
1) to determine the price and value of intellectual property;
2) to develop the process of intellectual property assessment;
3) to provide a basis for economic analysis of the effective use of intellectual property as a whole and separately;
4) to prepare the main principles and criteria of the report on valuation of intangible assets [5, p. 343-344].

It should be noted that the object of intellectual property is the result of intellectual activity, ie individual and unique, then in each case requires a specific approach to price. This approach takes into account legal, technical, geographical, temporary, technological, environmental, artistic and other features. Thus, it is not possible to use a single form of valuation method for all intangible assets and intellectual property.

2. THEORETICAL AND METHODOLOGICAL BASES OF INTELLECTUAL PROPERTY (IP) ASSESSMENT

According to the current legislation, the structure of the assessed property of the privatized state enterprise (facility) includes fixed assets and other non-current assets, reserves and expenses, cash and other financial resources, other tangible and intangible assets, etc. Intangible assets on the balance sheet include rights to use land, water and other resources, as well as intellectual property rights (inventions, industrial designs, trademarks, etc.). Until recently, the lack of a unified mechanism for assessing the intellectual property of enterprises created certain gaps in practice, which prevented a full assessment of their value. An inventory of intellectual property must be conducted in every enterprise before it can be assessed.

First of all, it will ensure the determination of the volume of intellectual property of both a particular enterprise and the country as a whole and its correct assessment. In developed countries, it is not important to take into account the cost of creating intellectual property when valuing it. In this case, the demand for more intellectual property is taken into account. In the market economy countries, intangible intellectual property is low. Because in those countries it is dominated by demand for material goods. The flow of intellectual property in these countries and therefore the reasons must be explained. As the country's economic potential grows, changes take place in the structure of the economy, which stimulates the development of science-based industries and ultimately increases the demand for intellectual property. This shows that it is vital to determine the norms in accordance with international standards, to conduct methodological and practical work, taking into account the realities of Azerbaijan, in order to take into account intellectual property in the assessment of property.

3. CONCEPTUAL AND LEGAL ASPECTS OF THE INTELLECTUAL PROPERTY ASSESSMENT

Although Azerbaijan is a new in the market economy, it has made significant progress in both the theoretical and practical aspects of the real estate market and property valuation issues. However, it must be acknowledged that the valuation of intellectual property (IP) is one of the least developed fields compared to the valuation of other types of property. Such realities are one of the peculiarities not only of Azerbaijan, but of all countries. However, it should be noted that the assessment of intellectual property has its own peculiarities in both the theoretical and practical rules of professional valuation of all types of property. The most important of these is the predominance of regional principles in the practice of valuing intellectual property and intangible assets. We can show an example that in our country, in comparison with other types of property (real estate, machinery, equipment, business, etc.), the valuation of intellectual property is the historical, gradual formation. In other words, this field of assessment in our country has not been fully exposed to the approaches and methods "dictated" by Western and Russian economists. However, some people consider themselves more knowledgeable and want to "impose" their services on appraisal practice. A number of methodological issues which they propose are not compatible with financial management at all and are subject to some criticism from a modern assessment position. It should also be noted that the assessment of intellectual property is one of the activities that is both improving and expanding. Valuation of intellectual property for business purposes (merger or separation of the company, investment in the authorized capital, trade license, etc.) or non-business purposes has appropriate priorities. However, one of the most important and controversial issues in economics, law and some other sciences is to individualize the concepts and terms used in this field, to select the most important expressions in terms of meaning and content, and to ensure their accurate addressing in the international lexicon. In some literatures, the names of intellectual property and intangible assets are ambiguous, it is found concepts and terms beyond international standards. On the one hand, it can be considered natural. As entrepreneurial activity expands, it increases the need to evaluate transactions with intellectual property, enterprises, intangible assets, franchises, as well as various brands. This, in turn, effects the formation of new concepts and activities in the formation of society. For example, appraiser, auditor, accountant and marketers do not use the same terms to describe the components of "intangible assets". The concept of "trademark", which is more accurate and corresponds to the literary lexicon, is used by some of them as a "trademark" (goods mark).

4. ANALYSIS OF THE FEATURES OF INTELLECTUAL PROPERTY TYPES ASSESSMENT

Proper coordination of stakeholder interests is one of the main tasks and important conditions of both real and fair evaluation. The evaluation of patents and licenses is better developed than other types of IP, both in terms of the availability of practical and regulatory documents. There is more experience and more literature written in plain language. The sale of a patent or license is, in fact, a process of contract of sale an IP. In this case, it is necessary to talk about the market value of IP and its definition. In practice, negotiations on the sale of patents and licenses are held with the participation of professionals in the field. Because the assessment of intellectual property is one of the most delicate and singular fields of evaluation. In this case, every side (seller and buyer) forms its own team and the sides negotiate and reach appropriate agreements. Undoubtedly, it is necessary to have an appraiser among the representatives of both sides. The appraiser should not deny his advice to both the buyer and the seller. An extended system of expertise is widely used in world practice to properly protect the interests of all patent applicants and stakeholders. An extended expertise has a number of advantages. Thus, in accordance with its rules, all orders, except for confidential orders, are published after 18 months. The first advantage of this is that in a competitive environment, stakeholders receive the necessary data. It also helps the reality of the assessment. At the same time, none of the natural and juridical persons who are patent applicants pay the examination duty provided for in the previous procedure. The publication of orders during this period provides temporary protection of the rights of its owner, prevents the emergence of patents for similar inventions by alternatives, encourages the search for new ways to solve technical problems. Cost, market (comparison) and income approaches are used in the valuation of intellectual property, as well as in the valuation of real estate and business. It should be noted that there is no consensus among appraisers as to which of the methods included in these approaches is more suitable or unsuitable to apply in the valuation of intellectual property. It should be noted that many amateur appraisers sometimes use very complex variants of "fictitious" calculation methods that do not meet today's requirements and do not correspond to any "methodological behavior" in determining the value of the property [6]. This leads to fragmentation in the specific data acquisition. Currently, most of the methods used to assess IPO in Russia, Ukraine, Kazakhstan, Belarus and the Baltic States are based on the rules of the license cost calculation. Also, in all cases, the royalty is included in the price of the IP with the same calculation index. This makes it difficult or impossible to predict the sale of an IPO. In this case, the factors that exist under the royalty and other concepts also play a role. Because the level of royalty is set in the range of 5-20%, depending on the efficiency of the IPO. Sometimes the last limit of this indicator is higher and is up to 25%. Like other concepts, royalties have a special role and importance, in the form of deductions from the price of the finished product by the licensee during the period of validity of the license agreement, or a fee paid in the form of profit or unit of output. Also, in connection with the strengthening of the legal and market position of the inventor or entrepreneur of the IPO, it is incorrect to consider royalties as a necessary compromise between the inventor, manufacturer, entrepreneur or buyer. In this regard, the situation around the world is changing in favor of the owner and inventors of the IPO, ie in their interests [7, p. 14-17].

5. APPROACHES APPLİED İN THE ASSESSMENT OF İNTELLECTUAL PROPERTY

Intellectual property and intellectual investment are often the main motive forces and most important asset of a business, creating the basis for market share and increased profitability. IP acts as the subject of mergers and acquisitions, companies are increasingly using licensing methods to plan transfer pricing and maximize value. Cost, market (comparison) and income approaches are used in the valuation of intellectual property, as well as in the valuation of real

estate and business. It should be noted that there is no consensus among appraisers as to which of the methods included in these approaches is more suitable or unsuitable to apply in the valuation of intellectual property. The research identified the following advantages and disadvantages of approaches to IP assessment (Table 1).

Table 1: Advantages and disadvantages of approaches to IP valuation

Approaches	Advantages	Disadvantages
Income approach	• Covers the unique economic characteristics of the asset; • Covers the estimated cost of the future.	• It is based on the ability to accurately predict the future; • Ensures compliance of economic income and investment value indicators.
Market approach	• Provides information on attractive empirical value; • Comparative data is relatively easy to use; • Conceptually comfortable.	• IP operations are generally unique; • Most of the information required for significant comparisons is not publicly available.
Cost approach	• There is no need for comparable market data; • It is suitable when no active income; • Internally disposed of intangible assets or may be subject to liquidation.	• Data may not be available; • A number of adjustments may be required in the financial information.

It is important to determine which approach will be applied and to get as much support as possible, and if possible, the results should be validated and cross-checked using alternative approaches.

6. DEVELOPMENT OF INTELLECTUAL PROPERTY MARKET AND IMPROVEMENT OF VALUATION METHODOLOGY

During the initial legal examination of intellectual property, selection and analysis of the assessment method , the intellectual property appraiser must take into account the following features of intellectual property as a product:

1) intangible form of intellectual property;
2) fixation of intellectual property - introduction of intellectual property on a material carrier;
3) the possibility of the emergence and dissemination of a material form that reflects the results of intellectual property;
4) the possibility of moral obsolescence of intellectual property and the impossibility of physical obsolescence of intellectual property;
5) the necessary to document intellectual property;
6) the possibility of limiting intellectual property both in terms of territory and time (presence of a certain period of activity in a certain field);
7) the necessary to maintain confidentiality (for example, when assessing the value of know-how);
8) absolute character of intellectual property - it is prohibited for another person to use such property without the permission of the owner of intellectual property;
9) the possibility of other protections than the legal protection of intellectual property.

These features should be taken into account in the valuation of property - namely, in the valuation of intellectual property, because they have a significant impact on the growth of the intellectual property value.

7. CONCLUSION

1) The accuracy of intellectual property (IP) assessment and compliance with international requirements depends primarily on legal regulations, their compliance with international regulations and standards. The market value of intellectual property, the vast majority of which is valued at market value, is more affected by depreciation factors. However, unlike other types of property, the effect of depreciation on prices does not depend on the time factor. Sometimes, on the contrary, the value of intellectual property (for example, works of art), which are the product of a long historical period, is higher. There is a great need to use different standards (especially International Valuation Standards) when determining the value of all this.

2) In particular, in the case of copyright and mixed rights (piracy) (audio-video, software, etc.), the amount of the loss is also indicated while the victim is suing. However, in most cases, the main defendant or his lawyer is guided by the high amount of losses and protested it. In records, it arise disputes between the author of the IPO and the person who use it anonymously. If the every music album, film or computer program is secretly copied and owned, in this case , the author (injured) as a plaintiff claims to assess the damage, as well as the methodology proposed by him. However, even if the court and the injured side cannot jointly prove this claim to the other side, even in this case, the court's decision in favor of the injured person cannot be considered fair. When the realities of such problems are accepted by the society, it is considered expedient for an independent appraiser to make calculations based on accurate and international experience in estimating losses.

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IMPROVING THE MECHANISM OF STATE SUPPORT FOR ENTREPRENEURS IN THE AGRIBUSINESS SYSTEM

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ABSTRACT

The article shows the directions of improving the mechanism of state support for entrepreneurs engaged in the production of agricultural products in the agribusiness system of the Republic of Azerbaijan. For this purpose, first of all, the need for special programs to support entrepreneurs in the agribusiness system was substantiated and the main tasks facing it were indicated. At the same time, 3 stages of the program implementation mechanism, as well as the volume and sources of its funding are indicated. In modern economic conditions, it is recommended to apply only guaranteed supply prices from the main types of prices regulated in the Republic of Azerbaijan. The article emphasizes the need for widespread dissemination of the collateral system and identifies areas that will create conditions for its implementation through the application of the principle of collateral in the procurement of products in the agribusiness system. In the agribusiness system, agrarian credit policy faces special challenges in providing long-term loans to economic entities with different categories of ownership. The problem of long-term investments and their financial and credit security is still relevant in the current situation. The directions of regulation of entrepreneurship in the agribusiness system of the country in modern conditions have been identified. Production costs in the agribusiness system have been analyzed in terms of the possibility of calculating subsidies and compensations in accordance with these costs. A model of entrepreneurship regulation in the agribusiness system has been proposed. This model ensures absolute transparency and accurate calculation of subsidies and compensations. Given the above, the solution of the problem through the general management model of entrepreneurship in the agribusiness system consists of three stages.
Keywords: *agribusiness system, agriculture, compensation, entrepreneur, state support, mechanism, price, subsidy*

1. INTRODUCTION

Demand for products produced in the agribusiness system is quite stable, but the supply in this system can change significantly under the influence of natural and biological factors. Decreased elasticity of demand for products in the agribusiness system under market conditions leads to dual economic consequences. First of all, the increase in the price of these products does not lead to a significant reduction in their consumption, but to an increase in inflation. Second, declining product sales often do not produce the desired results, as people prefer to spend the freed money on industrial goods. This idea is confirmed by our economic and statistical research [1, 2, 3, 4, 5, 6, 7, 8]. For example, we have analyzed the relationship between changes in crop productivity and changes in market prices in the agribusiness system. Along with natural and climatic factors, socio-economic factors also affect the change in crop productivity in the agribusiness system. In other words, an increase (or decrease) in productivity may not lead to a symmetrical change in prices. Moreover, the low level of determination coefficients is objectively higher than the level and methods of state regulation of the economy as a whole, including the agribusiness system; the degree of development of productive forces; the level of

food security of the country; The balance of payments depends on the situation in terms of quality and quantity and a number of other factors. Similar studies conducted in the Republic of Azerbaijan have shown that such dependence is not so significant at this level [9, 10, 11, 12, 13, 14, 15]. It should be noted that the dependence analyzed is less on a regional scale. The results of the correlation-regression analysis of the factors on which the market prices of plants depend in the agribusiness system confirm this [16].

2. THE NECESSARY FOR SPECIAL PROGRAMS TO SUPPORT ENTREPRENEURS

According to the results of analytical research, the fact that the prices of products in the agribusiness system do not depend on productivity, on the one hand, allows entrepreneurs to hope that its price will increase in the years when the total harvest of a particular crop decreases. On the other hand, the lack of this dependence can have a very negative impact on producers' incomes, and even in years of low productivity, those producers may go bankrupt if prices fall [1, 17, 18, 19, 20]. Thus, as a result of the low dependence between product prices and productivity in the agribusiness system, the high volatility of entrepreneurs 'incomes makes it necessary to develop a special program to keep entrepreneurs' incomes stable. The purpose of this program is to ensure the stability of incomes of entrepreneurs in the agribusiness system of the country and the formation of the food market. This can create conditions for sustainable reproduction in the agribusiness system, taking into account the selling prices and productivity of plants. The main tasks of the recommended program are as follows:

- stability of business organizations;
- raising prices and productivity, as well as the necessary levels of financing in unfavorable years;
- development of a methodology for assessing the level of annual financial allocations required for the implementation of the program;
- creation of a mechanism for distribution of financial resources allocated for this program;
- control over compliance with the terms of the program.

2.1. Mechanism of program implementation

In the first stage, the list of main crops in the agribusiness system is determined by taking into account the following two factors in the regions of the Republic of Azerbaijan:

- the degree of dependence of the selling price on productivity (for plants included in the program, this dependence is negligible, the coefficient of determination is less than 0.85);
- The share of production of this or that product in the structure of the gross output of the crop sector as a whole (the share of plants included in the program is more than 8-10%).

It is clear from our research that the program of income support in the agribusiness system of the Republic of Azerbaijan should include the following crops: autumn wheat, barley, sunflower, sugar beet, cotton, etc. In the second stage, a guaranteed minimum price is determined for each plant, which ensures the average productivity of plants included in the program and the profitability of production at the level of 15-20%. In the course of our research in the regions of the republic, we have determined the average productivity of the above-mentioned plants over the past 30 years, as well as the minimum selling prices of these products. In the third stage, the agribusiness system determines the conditions for the state to compensate the difference between the minimum income of entrepreneurs and their actual income. Based on the study of foreign experience in the management of such programs, we concluded that at the current stage of agribusiness development in the Republic of Azerbaijan, the amount of income compensation, defined as the difference between actual and calculated income, will be economically justified [12, 21, 22].

2.2. Volume and sources of financing

The amount of funding is determined individually for each region and for each plant, taking into account the dynamics of productivity and prices in previous years, as well as the likelihood that revenues will fall below the critical level. We propose to use a retrospective assessment based on an analysis of the working mechanism of the relevant program for 1991-2021 when planning the amount of financial resources required. Taking into account the planned structure of arable lands, it is possible to predict the average and maximum annual amount of compensation required in terms of financing the proposed program to support the income of entrepreneurs in the agribusiness system of the country. In accordance with all the above, it can be concluded that for a number of objective reasons, there is a need for systematic support of the income of entrepreneurs in the agribusiness system by the state. The program we propose to support the income of entrepreneurs in the agribusiness system can help solve this problem. In the future, it is necessary to improve this program and turn it into an agribusiness income insurance program.

3. THE IMPORTANCE OF PRICE REGULATION IN THE DEVELOPMENT OF AGRIBUSINESS

In the context of market relations, the efforts of state and local self-government bodies should be aimed at improving the mechanism of state support to entrepreneurs and the market in order to increase the efficiency of the agribusiness system of the Republic of Azerbaijan. Price policy plays an important role in the system of economic regulation of the state. The state must both influence the process of price formation and participate in the regulation of the food market by creating economic conditions for the development of production in the required volume and in the required proportions. In this case, the price is not an object of state regulation, but a means of it. The basis of state policy in the agribusiness system is, on the one hand, the proclamation of the principle of free pricing adapted to solvent demand, on the other hand, the application of the mechanism of regulation of supply prices, including collateral, target, limit and other prices. This price system has yielded positive results in countries with developed market relations. However, the contradictions in the existing normative documents on price formation are very slow to create a complete, interconnected price system in the agribusiness system. In addition, the implementation of this system requires significant costs. In modern economic conditions, we recommend that only guaranteed supply prices be applied to the main types of prices regulated in the Republic of Azerbaijan [1]. At the beginning of each year, a food corporation, which needs to be established for the development of the food market and state regulation in the interests of entrepreneurs in the agribusiness system, must conclude quarterly contracts with entrepreneurs for the sale of agricultural products at guaranteed prices. In the agribusiness system, entrepreneurs must be paid an advance of 50% of the value of this product in the form of cash, promissory notes or material and technical resources (fuels and lubricants, seeds, mineral seeds) necessary for the preparation for spring field work. Strict calculations must be made when the product is handed over to the food fund. Secure supply prices should offset the costs incurred by farms and ensure that they make a profit. However, the use of these prices should have a practical impact on the income of entrepreneurs in the agribusiness system as a whole. To do this, the following must be done: first, the volume of procurement for public needs must correspond to the total volume of production; second, there must be budget funds for procurement in the regional food fund; third, farms must sell the remaining produce at a price higher than the cost of production. The study of the scope and principles of guaranteed prices has revealed another aspect of this problem. The price of raw materials purchased at high security prices exceeds the price of the final product, and this product cannot compete with goods imported from other regions.

Thus, the extremely high purchase prices in any region, of course, can lead to higher prices for flour and bread. Processing plants can buy cheaper grain imported from abroad to maintain the current price level and the purchasing power of the population, while grain purchased from local entrepreneurs can remain in warehouses. In the agribusiness system, the minimum guaranteed prices for products delivered to the food fund offered by entrepreneurs may be higher than the approximate prices set by the Ministry of Agriculture of the Republic of Azerbaijan at that time, which will cause great difficulties in selling those products . From the above, it can be concluded that in modern economic conditions, the use of guaranteed prices as a mechanism to support entrepreneurs in the agribusiness system is not yet effective enough, because the state is not able to protect the entire product market with guaranteed prices . In addition, the lack of working capital, price disparities, low purchasing power of the population, etc. Due to these factors, there is an unfavorable situation in agricultural production. Only after this crisis is resolved is it possible to apply the regulator as a guaranteed supply price. In the future, the function of stabilizing the agricultural market can be entrusted to guaranteed prices. The mechanism of this function is based on the fact that products are already purchased from entrepreneurs through low-cost purchases (interventions). If these prices are high, it is practically impossible to buy the product, because the state will not be able to buy the whole product. This means that guaranteed purchase prices can be used for interventions if these prices are significantly lower than average market prices. Therefore, the basis for determining guaranteed prices should not be the costs of all farms, but only the costs of efficient farms. Purchase of products to the procurement fund should be carried out at minimum supply prices, and sale of products from that fund should be carried out at maximum supply prices. In this case, the minimum supply prices must be above market prices and the maximum supply prices must be below market prices. Supply operations in the food market allow stabilizing the price situation, balancing seasonal price fluctuations, as well as sharp price fluctuations due to excessive or very low supply. In addition, if the procurement intervention procedure is simplified compared to the currently proposed procedure, ie if there is a producer who grows grain on the one hand and a buyer representing the state as partners, then the effectiveness of these interventions will be higher. The absence of intermediaries, the establishment of suitable supply points for entrepreneurs who buy grain at the announced price, would allow entrepreneurs to keep their incomes at a pre-determined level. In order to make the solution of the problem of price changes of products more effective in the agribusiness system, commodity-purchasing interventions and customs-tariff regulation measures should be coordinated. In this case, in parallel with government interventions, the agribusiness system may apply a system of measures to regulate the import of relevant types of products and, depending on the balance, provide for measures to stimulate exports when prices fall and imports when prices rise. Export duties should be different depending on the price difference in the world market and the domestic market. For products whose domestic market prices are higher than world market prices, it is advisable to apply export subsidies and import duties. The same approach can be applied to products whose prices remain low in the world market. At present, a clear customs policy regulating operations related to the products of the agribusiness system is necessary. For example, in order to prevent the uncontrolled export of agricultural products whose prices are lower than world market prices, strict border controls must be exercised over the export of those products. Experts note that in the conditions of acute shortage of mineral fertilizers in the Republic of Azerbaijan, these fertilizers are subject to large losses [12, 21, 23, 24]. As a result of unjustified losses of mineral fertilizers, the country loses a significant amount of grain annually in grain equivalent.

4. APPLICATION OF THE PRINCIPLE OF COLLATERAL IN THE PROCUREMENT OF PRODUCTS IN THE AGRIBUSINESS SYSTEM

The collateral system should be widespread in the agribusiness system. Collateral operations can be carried out with the support of the state to clear the market of excess products. In this case, the credit rates that allow entrepreneurs to get a loan in the agribusiness system will act as a price. Collateral prices (rates) from the minimum supply prices to keep the loan, interest payment on the loan, etc. the amount of expenses should be as low as possible. If the producer decides to keep the loan, the goods become the property of the procurement agency, but if the producer decides to sell his product on the market, he must repay the loan. In the agribusiness system, collateral lending for products can take the form of cash and commodities, advance payments (with collateral for future products) and interventions. Entrepreneurs who have concluded an insurance contract may be given priority when future products are pledged. The most likely agricultural product to be pledged is grain [22]. In addition, the seeds of oilseeds, wool, sugar and sunflower oil can be used as collateral in the documents currently under discussion. The application of the principle of collateral in the procurement of products in the agribusiness system will create conditions for the following:

- to ensure timely receipt of credit resources by entrepreneurs in the agribusiness system by pledging their products;
- to guarantee the sale of products at pre-announced prices;
- to weaken the monopoly pressure on entrepreneurs in the agribusiness system by procurement, processing enterprises and trade organizations;
- to accumulate product stocks for the purpose of operative intervention in order to stabilize the food market and keep prices at a socially acceptable level, etc.

5. THE ROLE OF THE FINANCIAL MECHANISM IN STIMULATING BUSINESS DEVELOPMENT

The current mechanism of commodity lending needs to be improved. To do this, the state must control the prices of material and technical resources, which act as a commodity loan. These prices should not be higher than the average level of prices in the respective regions. In order to increase the competitiveness of the market and to ensure that borrowers choose the most profitable lender for them, suppliers of commodity credit resources should be selected on a competitive basis. This is necessary because the effect of the supply and demand balancing mechanism weakens when the government lends goods, and the effect of these mechanisms increases when competition between suppliers is stimulated or oriented to prices in ordinary trade. In the agribusiness system, agrarian credit policy faces special challenges in providing long-term loans to economic entities with different categories of ownership. The problem of long-term investments and their financial and credit security is still relevant in the current situation. High interest rates and a maximum loan repayment period of 2-3 years do not allow businesses with different categories of ownership in the agribusiness system to use long-term loans as a source of extensive reproduction. Such a loan is almost never used, as it is not profitable for businesses operating in agriculture. The agribusiness system needs a special monetary system that is relatively well supported by the state. Concessional credit should serve to make this area profitable. This will ensure the repayment of the loan, put an end to the practice of writing off large amounts of public debt and prolonging their term. Credit cooperatives and partnerships (mutual credit assistance groups, mutual credit societies, credit unions, etc.) could be a promising organizational form of lending to entrepreneurs operating in agriculture. In developed countries, such financial institutions are an integral part of the banking system, which provides loans for both production and rural infrastructure. In the agribusiness system, state support paid directly to the budget in the form of subsidies and compensations to entrepreneurs plays an important role in the system of economic regulation of the agricultural

sector. The need for state support for entrepreneurs in the agribusiness system is largely due to the fact that subsidies and compensations paid for the supply of agricultural products reduce the value of that product for the processing industry and trade. This allows the product to fall in price in the food market and increase the solvent demand of the population. Thus, these subsidies and compensations can be considered as indirect subsidies to consumers of products in the agribusiness system. We would like to note that subsidy support in the agribusiness system is an important element that stimulates the development of entrepreneurship. Unfortunately, the current system of subsidies and compensations does not create incentives for the effective operation of businesses. At present, in practice, the compensatory-cost approach to the distribution of financial resources allocated to the agribusiness system prevails. As a result, farms that use resources less efficiently usually receive more subsidies, and vice versa. Of course, this situation does not create conditions for the economic interest of entrepreneurs in the agribusiness system to increase production and reduce costs. At the same time, if we look at the practice of providing financial assistance to the agribusiness system of countries with developed market relations, we can see that incentives are more effective for entrepreneurs with high incomes [25]. For example, in the US agribusiness system, 326,000 peasant farms (15.5% of the total number of farms), each producing more than $ 100,000, produce 77.4% of the commodity output in the agribusiness system, and the state 57.6% of all subsidies from the state budget are given to these farms, and 309,000 peasant (farmer) farms, which sell products worth 40-100 thousand dollars a year, receive only 25.2% of subsidies. At present, the main problem is that a large part of the total amount of subsidies and compensations paid to entrepreneurs in the agribusiness system does not directly depend on the results of economic activities of businesses. This includes energy resources consumed by businesses, mineral seeds, plant protection products, feed, etc. Refers to different types of costs in the form of subsidies and compensation. Moreover, in the case of the application of fixed standards, the distribution of business entities according to the level of resource costs for the production of each unit of product is not taken into account. Therefore, the excessive costs of a number of businesses, and sometimes just their negligence, are often covered up, there is a general "equalization", a decrease in interest in the efficient organization of production. A similar situation arises in the field of sales prices. The current rule does not encourage the search for new sales channels at higher prices, as the subsidy is paid only for the product sold for state and regional needs. Therefore, it is advisable to consider the possibility of making payments regardless of sales channels. Today, the problem of selling high quality products is quite relevant, because the issue of creating incentives to increase the quality of products sold through the subsidy mechanism has not been developed. In the past, subsidies were increased for high-fat milk and fatter cattle, but now there is no such rule. In our opinion, from the point of view of the approach to the payment of subsidies, the use of indicators such as the number of livestock, the volume of production as criteria for the distribution of funds is not very effective. The disadvantage of these criteria is that their impact on market conditions and the formation of financial results of business entities is not taken into account in practice. As a result, these approaches do not correspond to the current stage of development of the agribusiness system. Such negative situations can be eliminated on the condition that when allocating subsidies, the criteria related to the financial results of entrepreneurs in the agribusiness system should be taken into account and subsidies should be used to increase production efficiency.

6. DIRECTIONS OF REGULATION OF ENTREPRENEURSHIP IN THE AGRIBUSINESS SYSTEM IN MODERN CONDITIONS

The focus on value in the distribution of subsidies and compensations is based on the fact that market relations, the impact of consumer demand and product prices increase in the context of reduced state support for entrepreneurs.

Income is not only a source of production development, but also a social basis that forms a certain level of material well-being and social security of workers. In the system of economic support based on value indicators in the distribution of subsidies and compensations, the largest financial assistance will be received by entrepreneurs who can use it effectively. This will help develop healthy competition among businesses, increase the volume and quality of products, reduce production costs and reduce consumer prices. It should be noted that in the agribusiness system, it is more in the interests of the state to direct most of the budget funds to payments related to the stimulation of the final results and efficiency of economic activity of entrepreneurs. We will try to solve the problem of optimal distribution of subsidies and cost compensation on the example of specific regions. As in the country as a whole, subsidies and compensations allocated to entrepreneurs in the agribusiness system of different regions form only a general idea of their situation, ie do not allow to determine the principle of distribution of subsidies and compensations, nor their impact on production efficiency. This, in turn, contradicts the announced objectives of the allocation of these funds, including the stabilization of production and increase its efficiency, food security, support for price parity between agriculture and other sectors, the convergence of incomes of agricultural and industrial workers. In such an economic environment, farm managers are unable to predict the amount and use of subsidies and compensations, and to anticipate their impact on profits and other farm performance indicators. Subsidies and compensations, which are one of the means of state regulation of the agribusiness system in the country, must also be an economic lever for each individual farm. However, they can be such a lever only if the mechanism of their distribution is clear to the farms and it is possible to calculate the necessary subsidies and compensations for the next production period. Subsidies for products and compensation for excess costs should be non-cost in nature as one of the forms of economic support to entrepreneurs in the agribusiness system, as this creates an incentive for the efficient use of economic resources. The efficiency of resource use can be assessed on the basis of indicators such as the cost and price of the product, the profitability of production and profit. The cost of the product is a classic value indicator. It depends on the total production costs, but in this case the lack of direct contact with the market should be considered a serious shortcoming of this indicator. The price of the product depends on the supply and demand of the product in the market. However, in modern economic conditions, price is also an indicator of the level of state regulation of the economic mechanism. Therefore, price is virtually independent of real production costs, ie it is isolated from economic resources and cannot be selected as an indicator of their efficient use. Profitability (R) is expressed as the ratio of profit (M) to the cost of the product (D) as follows:

$$R_i = M_i / D_i = (Q_i - D_i) \times N_i / N_i \times D_i = Q_i - D_i / D_i$$

Here, Q_i, D_i – is unit price and cost of the product, respectively;
N_i – amount of produced i product.

As it is known from the above formula, the profitability of production is an immeasurable quantity and does not depend on the amount of product produced. Thus, the direct use of this indicator leads to the allocation of equal amounts of subsidies to farms with the same level of profitability and different amounts of output. This property of profitability does not allow it to be used as an indicator of the efficient use of resources, although the distribution of subsidies can be taken into account when assessing the effectiveness of farm management. Only one of the indicators listed above (profit indicator) is free from such shortcomings. Profit is an indicator of efficient use of economic resources. This allows profits to be used not only as an indicator of optimal production planning, but also as a criterion for the distribution of subsidies. In order to maximize these benefits, taking into account subsidies, it is necessary to analyze the cost of production.

7. THE RESULT OF THE ANALYSIS OF COSTS IN THE AGRIBUSINESS SYSTEM

Let's analyze the production costs in the agribusiness system in terms of the possibility of calculating subsidies and compensations in accordance with these costs. During the analysis, it is advisable to proceed from the following provisions:

- it is necessary to choose costs that depend less on the internal factors of the economy and the conditions of its management;
- selected costs should be a significant part of the total production costs;
- Subsidies and compensations for selected items should stimulate farms to reduce costs on those items;
- subsidies and cost compensations must provide maximum efficiency (maximum profit, maximum profitability or minimum specific production costs of the farm);
- Subsidies and compensations in the agribusiness system should not deprive entrepreneurs of market incentives for agricultural production.

The cost of production in the agribusiness system includes the following items: wages and deductions; payment for seeds, planting material, fertilizers, plant protection products, feed, raw materials and supplies, services provided by external organizations and work performed; costs for the maintenance of fixed assets, including oil products, depreciation allowances, costs for the repair of fixed assets, costs associated with the organization and management of production; insurance payments; losses due to loss of animals and destruction of crops; other expenses. After a comprehensive analysis of all elements of costs for the purpose of entrepreneurship in the agribusiness system of the Republic of Azerbaijan, we conclude that the basis of production costs are material costs, and among them the least dependent on economic activity are costs for seeds and planting material; feed, including industrially produced feed; mineral fertilizers; oil products; electricity; fuel; soil fertilization, chemicalization and other measures; zootechnical and veterinary services; purchase of breeding animals. The results of this analysis do not contradict the officially accepted system of distribution of subsidies and compensations by production costs, but the purpose of this study is to optimally distribute subsidies and compensations at the appropriate level, to ensure their maximum efficiency and effectiveness. We would like to note some results that will form the basis of our next proposals:

1) Due to the long production cycle, its regulation by determining subsidies and compensations based on the results of work during the year is characterized by a large delay factor of the control signal, ie this signal no longer affects production in the current year;
2) In accordance with the principles of optimal management, the regulatory impact should be distributed over time throughout the production cycle. In this case, the efficiency of regulation will be higher;
3) Subsidies and compensations should be planned in advance, taking into account the forecasting and planning of production for different types of products;
4) It is necessary to set a limit level of subsidies and compensations. If the sum of subsidies and compensations does not exceed this level, they are meaningless in terms of regulation, ie they are purely charitable. The limit level of subsidies and compensations is determined based on the sensitivity of the model. If the level of subsidies and compensations decreases from year to year, then the model is sensitive to that price. The reduction of subsidies and compensations should take place at the expense of increasing profits on the farms from which they are acquired. The distribution of subsidies and compensations should be planned taking into account the profits of farms. If the profitability of farms is higher than 30% (this is the minimum level required for large-scale reproduction), it is not advisable to allocate subsidies and compensations to these farms, because they can do it on their own.

Subsidies should be directed to farms with higher yields (other than those mentioned above), higher commodity output and planned production than in the previous year;

5) The final report of subsidies and compensations should be made after the sale of the product (at the end of the year) and directed to those farms that have not implemented their plans despite subsidies and compensations. In this case, the remaining amounts must be adjusted accordingly.

8. ENTREPRENEURSHIP REGULATION MODEL IN THE AGRIBUSINESS SYSTEM

The proposed model ensures absolute transparency and accurate calculation of subsidies and compensations. Taking into account the above, the solution of the problem through the general management model of entrepreneurship in the agribusiness system consists of three stages:

- The first stage is to solve the problem of production planning in real conditions (or in the conditions expected for the forecasted planning period) and to evaluate the efficiency of such production.
- The second stage is the assessment of the level of production efficiency, taking into account the existing system of distribution of subsidies and compensations and the conditions of the first stage.
- The third stage - the solution of the problem of optimal distribution of subsidies and compensations, taking into account the conditions of the first stage and the initial data.

Based on the results of the first stage of the calculation, a decision is made on which areas and which types of products produced in those areas need subsidies and compensations, taking into account the current or projected market prices of the product. In this case, the second step is to evaluate the proposed method for the distribution of subsidies and compensations by comparing it with the existing distribution system based on the gross profit of the region or district under study. In the future, this stage of reporting may not be performed when the issue of model (method) evaluation is not on the agenda. In the third stage, two types of problems can be solved: subsidies and compensations should be distributed according to the given level in order to get the maximum profit. The required amount (level) of subsidies and compensations can be obtained on the basis of the current level of profit and the proposed system of distribution of subsidies and compensations. The special case of this issue is to receive the required amount of subsidies and compensations, ensuring that there is no damage both by industry and by type of production. Thus, the proposed model of regulation of agricultural production by addressing the optimal distribution of subsidies and compensations justifies the need to adjust the existing mechanism of subsidizing entrepreneurs in the agribusiness system in order to increase the efficiency of the use of state support. In this case, the transition from distribution to targeted distribution must be ensured, provided that the efficiency of demand and consumption is justified. Preference should be given to entrepreneurs who ensure the sustainability of the agribusiness system and improve their financial situation. At the same time, it should not be overlooked that the effectiveness of subsidy support will remain low unless the state creates conditions to increase the competitiveness of the agribusiness system and stop the outflow of funds from this system.

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WORLD EXPERIENCE OF STATE SUPPORT FOR ENTREPRENEURS IN THE AGRIBUSINESS SYSTEM

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ABSTRACT

The study of world experience of state support for entrepreneurs in the agribusiness system of the Republic of Azerbaijan has become one of the necessary issues. It is substantiated that there is a need to study the practice of developed countries with competitive agriculture, especially North America and the European Union, in order to effectively regulate the state, using the basic principles of market economy in the agribusiness system in our country. The article discusses the mechanism of price regulation in the agribusiness system of these countries. At the same time, it is noted that in terms of the practice of foreign countries in the field of state regulation of the agribusiness system, the study and generalization of government programs implemented in the United States is of great interest. In this regard, the importance of agricultural insurance programs in those countries in order to provide state support to entrepreneurs has been studied. Another group of popular government programs in the United States is federal programs to support the price and income of entrepreneurs in the agribusiness system. In addition to the government programs mentioned in the article, there are many smaller programs, most of which are short-term. The main regulatory directions of the state policy to support entrepreneurs are widely reflected in the article. In developed countries, there are diversified systems that support agribusiness. The agrarian policy of most countries is to ensure maximum food security of the state, to maintain the economic situation in the agribusiness system, to ensure a minimum level of profitability that will attract the industry in terms of investment, to prevent overproduction, to protect the domestic market, to ensure competitiveness of local entrepreneurs. and so on.
Keywords: agribusiness system, entrepreneur, experience, EU, member countries, state support, USA

1. INTRODUCTION

As a result of successful economic reforms in the Republic of Azerbaijan, despite the existence of favorable economic conditions, a number of important problems arise in the direction of deepening economic relations due to the impact of the current global crisis in the process of continuous changes in the world. In order to solve these problems, the modern realities of economic relations in the agribusiness system of our country, its assessment and development

prospects should be studied [1, 2, 3, 4, 5, 6]. From this point of view, the study of the world experience of state support for entrepreneurs in the agribusiness system of the republic has become one of the necessary issues. The development of agribusiness in our country and ensuring food security of the population, the production of agricultural products and related industries directly depends on the application of positive experience in our national economy by studying the world experience of state support for entrepreneurs in the agribusiness system. In this regard, the subject of research is relevant.

2. MECHANISM OF PRICE REGULATION OF PRODUCTS IN THE AGRIBUSINESS SYSTEM OF DEVELOPED COUNTRIES

The practice of developed countries with competitive agriculture, mainly North America and EU member states, should be studied in order to effectively regulate the state using the basic principles of market economy in the agribusiness system in the Republic of Azerbaijan [7, 8, 9, 10]. In general, in the developed countries of the world, especially in the EU member states, three directions of budget support for the agribusiness system have been established. These are direct payments to entrepreneurs from the budget, support for rural development, structural support for agribusiness. Price support for entrepreneurs has a special place in the agribusiness system of the EU member states. Thus, the relatively high level of target prices provides a certain income for medium and large agricultural enterprises. At these prices, public procurement agencies buy their products from agricultural enterprises. The government's purchase of products at predetermined prices is an effective means of preventing market prices from falling below the minimum. The agribusiness system of Western European countries has a guaranteed price mechanism for products. In Finland, for example, there are three types of prices: targeted, subsidized and additional. The Ministry of Agriculture and Forestry sets guaranteed prices every year, and then approves them in agreement with the central structure of entrepreneurs in the agribusiness system. These prices can change depending on the level of inflation throughout the year. In the agribusiness system of the southern region of the country, which has more favorable conditions, the price model based on the cost of the main types of products is taken as a reference for target prices, and subsidies are provided in the regions with more difficult conditions. Subsidy prices are the same as guaranteed prices, but apply to exported agricultural products. When the cost of export products is higher than the subsidy prices, agricultural enterprises do not receive compensation for their losses. Moreover, if the export products exceed the norms, the export surplus is not paid by subsidy prices. The agribusiness system provides additional prices for products produced in excess of existing state norms, which vary depending on the current market situation in the relevant region of the country and are usually cheaper than guaranteed prices. Although maintaining prices in the agribusiness system is a heavy burden on the state budget and taxpayers, this price stability ensures the country's food security and production potential in the agribusiness system. For example, in Switzerland, although food prices are higher than world prices, the population accepts this because they understand the negative consequences of lower prices for agriculture and, consequently, for the economy as a whole. It is clear from practice that in modern times, in developed countries in terms of science and industry, the agribusiness system is supported, albeit at a certain cost to the state budget [11, 12, 13, 14, 15, 16, 17]. One of the main criteria for state regulation of the agribusiness system in the EU member states is the level of budget support for the prices set by agricultural enterprises for products. This indicator reflects the ratio of all budget prices and non-price subsidies for the production and sale of various products, including exports, to the prices of these products by agricultural enterprises [18]. To this end, the state, which regulates the production and sale of products through subsidies, affects the income of agricultural enterprises through prices on the one hand, and their expenditures through preferential taxes and loans on the other.

Usually, budget subsidies are allocated only to agricultural enterprises participating in government programs. In general, in the agribusiness system, the market recovery of the vast majority of products (86-96%) in member countries, where market prices are constantly monitored by EU structures, is achieved either by creating a balance between supply and demand and regulating market prices to a certain level [19]. The general basis of pricing in business organizations operating in the agribusiness system of foreign countries is the coordination of socially necessary costs for the production and sale of purchase prices for agricultural products. In this case, the level and dynamics of world prices are taken into account as much as possible. The main task of the price is to regulate revenues for the further development of agribusiness. The pricing system provides for current monitoring of prices for means of production, income and expenses in agribusiness, prices for products (works and services). Currently, the increase in food prices observed in almost all EU member states is largely offset by a faster increase in incomes. Thus, consumer demand for food is determined not only by the level of income of the population, but also by the price of food products and services. Here, the importance of budget support for the prices of agricultural enterprises is growing. A legal framework has been established for the purpose of state regulation of prices, and statistics on the level and changes in prices are regularly published. This information is usually used to regulate and index revenues. In EU member states, subsidies account for 45-50 percent of the value of agricultural output, while in Finland and Japan they account for 70 percent [18]. Budget support for the agribusiness system in EU member states has changed in recent years. Thus, for example, in 1986-1988, 82% of direct payments were spent in the agribusiness system to keep market prices for products, in 2014 this figure decreased to 67%, and the excess of producer prices over the maximum price decreased from 56% to 31%. The share of public funding in rural areas in the budget support provided to the agribusiness system increased from 13% (1986-1988) to 18% (2011-2014) [20]. Note that this type of support is convenient not only for the producer, but also for the consumer. In such a situation, training and professional development, information and consulting services, and scientific research are also funded. In general, in 2014, the state support of the agribusiness system in the EU member states accounted for 65% of agricultural GDP [21]. One of the main concepts of food pricing in developed countries is to move from the traditional principle of producing and selling products for profit to the principle of marketing, which aims to study and meet the needs of consumers. In fact, according to the marketing principle of pricing, the share of intermediate rings in the retail price of the product should be reduced. In this sense, we believe that the Canadian practice of successfully combining state and cooperative management in agricultural production is more interesting. The main goal here is for agricultural enterprises to earn maximum income by selling their products. Marketing associations (consulting centers) operating in all regions of the country are established by entrepreneurs specializing in a particular product and operate on a community basis and thoroughly study consumer needs in order to expand product sales. These structures have broad powers established by law. For example, the Manitoba Provincial Potato Assembly imposes a single price, and sellers who do not comply with that price are fined two to three times the price [22]. In Canada, there are similar structures at the state level, and together with the relevant areas of regional structures, as well as the Ministry of Agriculture and Food, develops economic standards for regulating agricultural production. The ministry liaises with marketing councils through self-financing trading agencies. So, for example, agencies have been established to sell eggs, poultry and broiler eggs for poultry products. These agencies set sales norms by region, control the market, and do marketing and advertising. The governing bodies in this area are the Canadian Dairy Industry Commission and the Canadian Grain Committee.

The budget of the Committee, which is mainly engaged in grain trade in foreign markets, is formed at the expense of commission fees from sales, but these fees should not exceed 3 percent. For agricultural enterprises, 100 percent profit is provided in grain production.

3. AGRICULTURAL INSURANCE PROGRAMS FOR THE PURPOSE OF STATE SUPPORT TO ENTREPRENEURS

In our opinion, in terms of the practice of foreign countries in the field of state regulation of the agribusiness system, the study and generalization of government programs implemented in the United States is of great interest [8, 23, 24, 25, 26, 27, 28]. Thus, according to the US Department of Agriculture, in 2015, up to 1/3 of the country's agribusiness entities with different property categories received state payments in various forms. Amendments to the U.S. Agriculture Act of 1949 and its successor, the Farm Bill of 2002 (Farm Bill 2002) Act, as a continuation of that law. price support measures, as well as preferential bonds and payments under various programs and measures to protect the environment and soil fertility.

3.1. Agricultural insurance programs in the US agribusiness system

The United States is the world's largest insurance business. US insurance companies control up to 50 percent of the world's industrialized markets. Thus, insurance is the only field of activity in this country that is not regulated by antitrust laws. In 1930, the US Congress decided to fund the State Product Insurance Program, which was aimed at reviving the agribusiness system after the Great Recession. Founded in 1938, the State Product Insurance Corporation (FCIC) under the US Department of Agriculture is still operating effectively and is now managed by the Risk Management Agency. With the adoption of the State Product Insurance Act in 1980, subsidies were introduced to attract private insurance companies, and there was an opportunity to increase insurance coverage. Currently, 14 private insurance companies (authorized insurers) employing more than 27,000 insurance agents are engaged in concluding insurance contracts. Authorized insurance companies can develop insurance products and introduce new ones. However, products participating in the program must be approved by the Risk Management Agency (RMA). The participating companies must also submit annual action plans for approval by the Risk Management Agency. The plan includes information on whether the company is able to cover possible losses on its liabilities, as well as on the classification of certain types of risks for subsequent insurance through the Risk Management Agency. In addition, insurance companies receive subsidies through the Risk Management Agency to cover administrative costs, as well as loss management costs. Reinsurance is also carried out through the Risk Management Agency, by transferring part of the risk and insurance premium to the relevant reinsurance funds. The amount of subsidies and the terms of reinsurance are specified in a standard reinsurance agreement signed by all insurance companies participating in the program. The fact that the insurance program is very effective and colorful attracts agricultural enterprises to these programs. Thus, in the United States in 1997, agricultural enterprises insured 73.8 million hectares of arable land, and in 2014 - 88.3 million hectares, or 62% of all arable land [23]. *The Multiple Peril Crop Insurance (MPCI)* program is one of the oldest crop insurance programs in the agribusiness system, providing insurance against most natural disasters such as drought, excess moisture, flooding, hail, and storms, and more than 70 crops. Covers. According to this program, an insurance event occurs when less than the average (expected) product is taken in the previous few years. The minimum insurance amount is paid entirely from the state budget, and when less than 50 percent of the expected product is taken, the damage is compensated at the level of 55 percent of the price applied by the Risk Management Agency. Agricultural enterprises wishing to participate in the program pay an administrative fee of only $ 100 for each type of plant they insure. This type of insurance is called "Catastrophic Crop Insurance" (CCI).

Extending the insured risks relative to the minimum risk is considered voluntary insurance. Agricultural enterprises can choose the level of risk insurance. Thus, they have the opportunity to choose the insurance coverage of the product (50-85 percent), the price (55-100 percent of the market price). This type of insurance is called Buy-up Coverage (BUP). The Multiple Product Insurance (MPCI) program allows entrepreneurs to protect themselves against the risk of production failure due to unfavorable climatic conditions. However, it is important for entrepreneurs to implement insurance programs that will protect not only crop yields, but also their products from falling market prices. In this regard, the *Crop Revenue Coverage (CRC),* an income insurance program in the United States, has been developed and is being successfully implemented. This program allows entrepreneurs to protect their income from the decline of production, as well as the reduction of prices for their products in the market. However, not all plants in the agribusiness system can be insured under this program. In addition, a separate list of plants has been compiled for each state in the agribusiness system to be insured with CRC. In order to participate in this program, agricultural enterprises pay an administrative fee of $ 30 per plant to be insured. According to the program, the insured event occurs when the income after the harvest (actual productivity $\times$ the market selling price at the time of harvest) is less than the minimum guarantee amount, and the insurance company pays the difference. It should be noted that this program is also implemented with the close financial participation of the state. Thus, as can be seen from Table 1, in 2014, the state subsidizes more than 50 percent of the insurance premiums of agricultural enterprises in the United States.

Table 1: Measures of insurance premiums and payments on insurance programs in the USA [23]

Insurance programs	Insuranced areas		Insurance fee, USD		Total insurance payment, USD	
	Ha	%	Total	Including subsidized by the state	total	%
MPCI	89429804	41,1	1110551792	718763038	990931249	31,03
CRC	53073006	24,4	1023127299	586374453	1085692291	34
Under the general programs	217438938	100	3429971939	2041231913	3193340126	100

Thus, insurance activity in the United States has recently developed rapidly and become an important area. The scientific and efficient organization of the insurance business in this country has to some extent contributed to the sustainable development of economic entities with different categories of ownership in the agribusiness system. The development and regulation of insurance activities with the support and regulation of the state, taking into account foreign practice and adapting to local conditions, should be an effective means of overcoming certain difficulties in the agribusiness system in the Republic of Azerbaijan.

4. STATE PROGRAMS ON PRICE AND INCOME SUPPORT FOR ENTREPRENEURS IN THE AGRIBUSINESS SYSTEM

Another group of popular government programs in the United States is federal programs to support the price and income of entrepreneurs in the agribusiness system. Thus, the agribusiness system has an extensive system of government programs that regulate prices. These are Direct payments (DP), Counter-Cyclical Payments (CCP), Marketing Assistance Loans (MAL), Loan Deficiency Payments (LDPs) programs [24]. Let's take a closer look at each program below.
The Direct Payments Program (DP) is aimed at entrepreneurs who traditionally grow oilseeds such as wheat, corn, barley, oats, cotton, rice, soybeans, peanuts, and sunflowers. The amount of direct state payments is determined through a certain mechanism. Thus, the number of plots of land where crops were grown in the past (Farm Number) determines the basic area and

productivity of plants on the farm. In order not to encourage the increase of arable land, the base area is determined based on the data of the previous, usually 5-7 years, and the basic productivity is determined based on the average yield, for example, 1991-1995 or 1998-2002. The New US Farm Bull (2002), adopted in the United States in 2002, sets the amount of payments per plant. For example, payments for wheat are $ 0.52 / bushel (or $ 1.91 per quintal), for barley $ 0.24 / bushel (or $ 0.59 per quintal), and for soybeans 0.44 (or $ 1 per quintal). $ 0.59). Direct payments to entrepreneurs (DP) are paid as follows:

DP = degree × base productivity × base area × 85%.

It should be noted that these payments are made on farms regardless of whether these plants are currently cultivated or not. If the total income from one agricultural enterprise for the last 3 years has not exceeded $ 2.5 million, a limit of $ 40,000 is set. The total annual amount of payments is up to $ 5.4 billion. Under the Counter-Cyclical Payments (CCP) program, the government provides direct payments to entrepreneurs when products become cheaper. This program includes plants covered by the DP program. The reverse periodic payment program (CCP) is paid as follows:

CCP = target price - rates of direct payments - (more than two: average annual market price or collateral rates).

The New Agrarian Act of the United States, adopted in 2002, sets target prices and collateral rates for 2004-2007. The difference between this program and the DP program is that monetary compensation is paid to entrepreneurs only when market prices fall below a certain level. In this case, as in the DP program, payments are made regardless of the actual production of the relevant plants. In addition, the CCP program sets a limit of $ 65,000 for an agricultural enterprise if the total income has not exceeded $ 2.5 million over the past three years. The total annual volume of payments is $ 5.7 billion. Let's look at the mechanism of the Market Assistance Loans (MAL) program. The new U.S. Agrarian Law, passed in 2002, sets fixed collateral rates for a number of crops. Based on these rates, local fixed collateral rates are applied in each circle based on the specific characteristics of production. If the price of products produced after the harvest is lower than the collateral rates, agricultural enterprises can pledge their products to the state and receive money at local rates. After that, the entrepreneur has 9 months to find a profitable market for his product. If market prices rise, an agricultural enterprise can sell its produce at a higher price and return the money to the Commodity Credit Corporation (CCC) with interest. If it cannot find a more profitable market, the agricultural enterprise can choose one of the following options at the end of the 9-month period:
1) The collateral agrees to the transfer of the product to the ownership of the Commodity Credit Corporation. Usually, the goods transferred to the ownership of the Commodity Credit Corporation are sold after 2-3 months. In this case, the agricultural enterprise may incur certain costs for the storage of that product.
2) An agricultural enterprise shall sell its products at the current market price within its jurisdiction and transfer the profits to the Commodity Credit Corporation.

Finally, the essence of the popular Loan Deficiency Payments (LDPs) program is that the government compensates agricultural enterprises in the amount of the difference between the collateral rate (including interest on the loan) and the market price. In order to receive this compensation, it is not necessary for an agricultural enterprise to sell its products, it is enough to have the necessary quantity and quality of products. Compensation can be received during the calendar period of the program.

This calendar period varies for individual crops: from the beginning of the wheat harvest to March 31 of the following year, and for sunflowers until May 31. The agricultural participant of the program may decide to receive compensation within the specified period. The agricultural enterprise receiving the compensation may at any time sell its produce at the market price at its own expense. According to this program, if the total income of an agricultural enterprise for the last 3 years does not exceed $ 2.5 million, the limit is set at $ 75,000. The total annual amount of payments is about $ 6 billion. *The Conservation Reserve Program (CRP)* has been successfully implemented in the United States since 1986 to increase environmental security, soil fertility, and other natural resources. In order to participate in this program, agricultural landowners sign a long-term, average 10-year contract. During this period, the participant loses the right to cultivate crops in his field and in return receives financial assistance from the state. The average amount of this assistance in the country is about $ 120 per hectare, which varies considerably by region. For example, in Kansas it is $ 94, in Maryland it is $ 295. More than 34 million acres of land in the United States have been taken out of the agribusiness system under the program, and the total amount of payments is $ 1.8 billion.

5. THE MAIN REGULATORY DIRECTIONS OF THE STATE POLICY TO SUPPORT ENTREPRENEURS

In addition to the government programs listed above, there are many smaller programs, most of which are short-term. These programs are implemented by the state for 1-2 years in the agribusiness system in connection with crop productivity, the current market situation, natural disasters and so on. In this sense, it is of great interest to study the practice of regulating sugar beet production in the United States. Support for sugar beet growers in the United States has been integrated into long-standing sugar industry protection and support programs. According to the laws of 1934, 1937, 1948, the Ministry of Agriculture had to determine the necessary consumption of sugar in the domestic market and distribute it among domestic and foreign producers, as well as set the relevant norms. According to these laws, in order to prevent the growth of production, payments were made to entrepreneurs, and tax excises on sugar produced and processed in the country were applied. These programs expired in 1974, and for the next seven years the US market was opened to import sugar at compulsory guaranteed prices paid in 1977-1978. With the Food and Agriculture Act of 1981, as well as the Food Safety Act of 1985, Congress restored mandatory guaranteed sugar prices. Subsequently, the 1990 law, the 1993 budget reconciliation bill, and the 1996 and 2002 laws extended the programs until 2007. The law adopted in 2002 provides for the application of the sugar program on the basis of the principle of "no cost" (in all cases, the state should not suffer). The state policy to support sugar producers includes three main areas of regulation:

- Price Support Loans;
- Marketing allotments;
- Tariff-rates quotas.

The current strategy of the US government is to protect local entrepreneurs by keeping most prices in the domestic market above foreign prices.

5.1. Price Support Loans

Sugar producers who comply with the terms of the bond program can borrow from the state through the Commodity Credit Corporation (CCC) based on the collateral rates in the relevant area, pledging their products. These debts are the main means for the Commodity Credit Corporation to keep domestic sugar prices high. Collateral rates are set per pound of goods. The classification of these rates into separate circles allows taking into account the local characteristics of different regions.

Over the next 9 months, the entrepreneur can find a more profitable market for the product. If market prices rise, a sugar producer can sell his product at a higher price and return the money he received earlier to the Commodity Credit Corporation together with the interest rate (collateral interest rates are 1 percent higher than the Commodity Credit Corporation's interest rates, depending on US refinancing rates. The interest rates of the Commodity Credit Corporation were 2.25% and the interest rates on collateral operations were 3.25%). Unable to find a more profitable market, the entrepreneur agrees to transfer the pledged product to the Commodity Credit Corporation after 9 months. Usually, the goods transferred to the ownership of the Commodity Credit Corporation are sold after 2-3 months. Even so, an agricultural enterprise may incur certain costs for the storage of that product. Prior to borrowing, processing enterprises must agree to pay entrepreneurs the minimum support price set by the Ministry of Agriculture, which depends on the collateral rates for sugar cane and sugar beet. Typically, 60 percent of debt, or 40 percent of sales revenue, goes to entrepreneurs, and the exact amount depends on the quality of the product under the contract. If the processing plant does not use the debt system, the entrepreneurs who supply it with the product are deprived of price support through the debt system. The borrower decides whether to repay the loan and return the pledged product within the specified period, or whether the payment will be made. In case of non-payment, the collateral is transferred to the Commodity Credit Corporation in full without additional penalties. Debts obtained through the Commodity Credit Corporation system are non-current debts, as processing enterprises cannot own the pledged products until the debt obligations are met. If the price of sugar in the domestic market is lower than the statutory collateral rate, the Commodity Credit Corporation must accept the collateral product as a repayment of the debt, taking into account the rates. This mechanism protects sugar producers from harm when selling their products. Sugar transferred to the Commodity Credit Corporation is not immediately sold in order to keep prices high in the market. If the market price exceeds the amount of confiscation (total collateral rates and certain transportation costs), producers return to the market. In this way, the state tries to establish a minimum level of prices in the domestic market. After a while, if there is no increase in production or imports, market prices stabilize themselves. However, this program only provides minimum prices for collateral sugar. Another point is that the collateral must be stored in the warehouses of sugar processing enterprises. However, due to the limited capacity of these warehouses, enterprises are not able to attract large amounts of sugar to the program. Unlike other commodity programs, this system of loans is not addressed to entrepreneurs, but to processing enterprises. Thus, the shelf life of sugar beet and sugar cane is much shorter than the shelf life of sugar, so the need for processing is acute. The law, adopted in 2002, sets federal rates of 18 quintals / pound for raw sugar and 22.9 quintals / pound for sugar from sugar beet for the period up to 2021. These rates have remained unchanged since 1995. The high collateral rates for beet sugar are due to the fact that additional processing is required to obtain refined sugar, which requires less labor than raw sugar. Sugar programs are very different from grain, rice, peanut, and cotton programs. The US Department of Agriculture does not make any direct payments to sugar cane and sugar beet producers and processors. This is suggested by the proponents of the sugar program as a positive aspect of the sugar field. It should be noted that collateral rates cannot determine domestic sugar prices without the implementation of other programs. The Ministry of Agriculture also aims to keep the price of refined sugar below 25.2 quintals / pound. In order to ensure that prices do not fall below the previously indicated level, the state also uses tools such as import norms and market distribution.

5.2. Marketing Allotments
Under this program, which prevents overproduction of sugar, the Ministry of Agriculture can limit sales in the domestic market through a flexible distribution system at a level that meets

the planned domestic demand for entrepreneurs. This program does not restrict the cultivation of sugar beet or sugar cane, but simply restricts the production of sugar for sale. If processing plants produce more than they can sell under another program, they pay for the maintenance of that surplus. Through the distribution, the Ministry of Agriculture has the opportunity to curb the sale of domestically produced sugar until it reaches an acceptable level in order to cover the cost of prices and the amount of collateral, including interest rates. Market distribution for national entrepreneurs is carried out annually by a separate formula. Thus, in fiscal year 2014, the distribution was as follows. The Ministry of Agriculture determines the amount of sugar demand by the end of the period, taking into account the sugar reserves. This figure is subtracted from the existing sugar reserves, as well as the volume of sugar imports (1.5 million metric tons) determined in accordance with the terms of the agreements of the World Trade Organization and NAFTA. The obtained price is also distributed among enterprises producing sugar from sugar beet (54.35 percent) and sugar cane (46.35 percent). Redistribution can also occur during the year due to the influence of various factors. Through market sharing and the debt system, it is possible to prevent the overproduction of sugar by national entrepreneurs, thereby reducing the economic pressure on the sale of sugar at a higher price than the world market. These programs are in stark contrast to programs that support the production of some agricultural crops, such as grain, soybeans, wheat, and cotton. Thus, these products are sold on the world market at a very low price (below cost) under the relevant programs, and under the support programs, the difference between the low price and the cost is paid through direct payments from the state.

5.3. Import tariff quotas (TRQ)
Tariff norms are a historically established system of sugar import management. Thanks to this two-tier system, 41 countries around the world export sugar to the United States at lower rates than usual, thus ensuring a stable volume of sugar consumed in the United States. Countries are allowed to export more sugar than the existing norm, but in this case higher tariffs are applied. These tariffs, which are applied for the purpose of over-import, are so high that the domestic market is reliably protected from excessive sugar imports. As the debt system and market share control production in the United States, the rate of return will be measured by preventing the import of sugar into the domestic market at a rate that would lower domestic prices below collateral rates. Tariffs are an important means of restricting imports in order not to disrupt the internal instruments of inventory management, and hence prices. According to the WTO's commitments, at least 1.256 million tons of sugar a year should enter the US domestic market. Also, under the terms of NAFTA, the United States must import sugar from Mexico. Thus, despite price support programs for entrepreneurs, the United States has never been able to meet its domestic needs through its own production and remains an importer of sugar. However, the existing price regulation system of the domestic market is very effective. Until the early 1980s, national entrepreneurs accounted for 55 percent of US domestic demand, but over the next 25 years, that figure continued to rise thanks to programs guaranteeing sugar prices, reaching 86 percent in fiscal 2011 and 14 percent imports, respectively [24]. According to the analysis, domestic sugar prices in the United States remain stable, mainly as a result of comprehensive government regulation. Thus, given that the system of the Commodity Credit Corporation attracts a large number of agricultural products, it can be compared to a kind of state monopoly system [10, 29, 30, 31, 32, 33]. When the volume of imported sugar produced in the country is estimated below the specified level, the amount that can be sold by administrative distribution of the market is limited. Import norms limit the amount of sugar that can be imported to the US market. Support and protection programs for sugar and sugar beet producers in the United States are so effective due to the tight shackles of improved competition in the agricultural market.

The amount of direct government payments to support the prices and incomes of entrepreneurs in the country's agribusiness system is very large. Thus, from 1995 to 2011, the annual amount of direct government payments for these purposes amounted to $ 15 billion. During this period, the highest figure was recorded in 2006 at $ 32.2 billion. In our opinion, another important sign of the level of state support for the production of various agricultural crops in the agribusiness system is the share of state support in the cost of production. During this period, most state support - 60 percent - was provided to paddy producers. The average amount of payments is $ 12,517, which is equal to 7.4 percent of the average gross income of farms participating in government programs, and 26 percent of net income. One-third of the total payments fell to direct payments, and most agricultural enterprises received such payments. Thus, in developed countries, there are diversified systems that support agribusiness. The agrarian policy of most countries is aimed at ensuring maximum food and food security of the state, maintaining a stable economic situation in the agribusiness system, ensuring a minimum level of profitability that will attract the sector in terms of investment, prevent overproduction, protect the domestic market, competitiveness of local entrepreneurs. to provide and so on.

6. CONCLUSION

The experience of countries with mature market relations shows that with economic growth, the share of public spending in GDP also increases significantly. Thus, the share of GDP distributed through the state budget in the most important European countries (France, Germany) has not fallen below the high figures of 10-15 percent over the past hundred years. Even after the Great Recession, as well as during the Second World War, the decline in public spending did not change the growing role of the state in the economy. In general, the 2.5-3.5-fold increase in the share of public expenditures in GDP over the past hundred years in the developed countries of the world should be considered a clear manifestation of the growing trend of the role of the state in regulating the market economy. The study of the experience of foreign countries showed that in developed countries, especially in the European Union, four areas of budget support for agriculture have been established. These include direct payments to entrepreneurs, support for rural development, structural support for agriculture (investment projects), and financing of general services in rural areas. As for the experience of foreign countries in this field, according to the US Department of Agriculture, 1/3 of the various types of business entities operating in the country's agribusiness system have benefited from state support in various ways.

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DIRECTIONS OF FORMATION OF INNOVATIVE DEVELOPMENT IN MODERN AZERBAIJAN

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ABSTRACT

Achievement of economic development through the use of innovative management practices to meet the growing needs of the population with the ecologically clean products in connection with the transition to market relations in Azerbaijan is one of the key challenges facing innovaton management. "Azerbaijan 2020: Vision of the Future" reflects the directions and composition of innovative development in Azerbaijan. Creating an innovative economy in Azerbaijan in the context of new economic relations, enhancing innovation activity and ensuring the development of innovation activities are an integral part of the economic policy pursued by the state. Innovative use of advanced technologies in production and management techniques plays an important role is in the management practices of developed countries in the modernization of the economy. In this context, modern directions of application and management of innovations in organizational and legal forms of management should form to modernize the Azerbaijan economy.
Keywords: innovation, management, product innovation, process innovation, technological innovation

1. INTRODUCTION

The application of innovative governance to economic entities for the achievement of economic development is one of the areas facing innovation management. The concept of innovation is widely used in the practice of developed countries because it represents advanced innovation in business organizations. A French expert in sociological research M.Krose notes that "Modern competition requires economic entities to be more innovative than access to resources and reserves" (8, 99-100). In the economic literature, the concept of "innovation" was first introduced to scientific studies in the nineteenth century by cultural scientists and it is said that European traditions apapt to the traditional organizational methods of Asian and African societies. At the beginning of the twentieth century, the study of the application of technical innovations to business entities was started. In 1909, for the first time, Zombart in his great article "Capitalist Entrepreneur" bases the concept of entrepreneurship as an innovator, noting that the main function of the entrepreneur is not to save technical innovations in the market for profit, but to make these innovations more widely available. (2, 13). In 1911, Y.Schumpeter brought the role of the innovation process in the economy through the theory of economic development. In this theory, it is talking about "new combination" in the development process. According to Chumpeter, "new combination" appears in a "closed circle" as a part of the production modernization process. This upgrade is a high level of simple production. He considers innovation as an economic effect of technical change, and shows that the production function reflects the change in the quantity of the product, due to changes in the factors affecting the harvest. If we change the function of a whole set of factors, then we receive innovation (3, 185).

2. RESEARCH METHOD CONTENT AND THEORETICAL FOUNDATIONS OF INNOVATION

The development of technological markets has increased the focus on innovation in many countries. In 1920s, the Soviet researcher N.D.Kondratyev investigated the so-called the "big

cycle" or "long wave" changes abroad. According to the author, the cycle and the wave come from each fundamentally new application, and it brings the impression of many new and updated applications. The researchers Utkin have called the innovation a concrete object, Nixin's outcome, Voldaysev's mastering new products, Molchanov's and Gorkberg's the use of results and Zavlina's the use of results. Authors Chumpeter, Valenta, and Voldachek considered innovation as a change. Authors Lain, Brian and Medinsky viewed innovation as a process (8). Since the 1970s of XX century, the role of innovation in the economic growth of developed industrial countries has increased and has reached a decisive position (4, 270). In Russia during the transitional economy, the term "innovation" was also used as "innovation creativity", "innovation process", "innovation decision". At the same time, Russian researchers V.Q.Medinsky and L.Q.Skamay studied the concept of innovative entrepreneurship in their research and divided it into three forms (5, 11):
1) Product innovation
2) Technological innovation
3) Social innovation

The basic classification of innovation processes has also been the subject of scientists' research. According to this classification, three major types of traditional innovation were distinguished.
1) Administrative and technological innovation;
2) Product and process innovation;
3) Radical or incremental (accused) innovation (6, 9).

It should be noted that the study of innovations began in the Western countries in the 60-70s of the 20th century, and in Azerbaijan the attention was increased in the 90s of the XX century. Different aspects of innovative activity in Azerbaijan have been studied by Shahbazov K.A., Isgandarov R.K., Tagiyev A.H., Gasimov F.H., Aliyev T.N., Najafov Z.M., Huseynova A.D. and other scientists. Authors Gasimov F.H., Aliyev T.N., Najafov Z.M studied the organization and management of the national innovation system in Azerbaijan, outlined the theoretical and practical directions of formation of regional innovation system and worked out its structure to form the concept of regional development of Azerbaijan (2, 470-475). Researcher Huseynova A.D. studied the improvement of the mechanism for managing the innovation potential in Azerbaijan. He concluded that the potential for innovation is realized through innovation activity and productivity. Innovation-based competitiveness is a complex characteristic. Generation of knowledge is an essential condition, but not enough. The national innovation potential is the operational model that enables the use of the potential for competitiveness and growth at the country level to reveal the complex nature of innovation and its relation to politics (9, 9). Azerbaijan scientist Tagiyev A.H. summarized the theoretical and methodological issues of innovation in his research, made generalizations and his own statements.

2.1. Implementation of innovation in the Azerbaijan industry by economic activities
The research approches show that the innovation process is an activity aimed at modernizing the means of production and creativity in the development of more advanced technologies for the creation of new types of technical and management tools for the comprehensive application of science and technology in management. Statistical data show that innovation products produced in Azerbaijan industry by the level of innovation and economic activity are mainly those that have undergone significant changes or are newly introduced and improved. Significant changes, or newly introduced innovative products, have been seen in the industry growth and decline in 2014, 2015, 2016 and 2017. If you look at the statistics for these years, the mining industry produced 129.6 million manats in 2016, the most significant changes and the newly introduced innovation productions accounted for the processing industry.

Azerbaijan has undergone significant changes in the processing industry, or the newly introduced innovative products are in the textile industry, the chemical industry, the metallurgical industry, the food industry, the manufacture of liquor, clothing, the manufacture of construction materials, finished metal products, except machinery and equipment, the manufacture of computer and other electronic equipment, the production of machinery and equipment. In 2018 according to the level of innovation and economic activity in Azerbaijan industry, the volume of innovation products in the volume of improved products amounted to 383.8 thousand manats, which produced 200.0 thousand manats in the processing industry and 183.8 thousand manats in the mining industry. As the analysis of statistical data shows, due to the level of innovation, the manufacturing industry is dominated mainly the production of chemicals, machinery and equipment, installation and repair materials. While focusing on the dynamics of innovation in the industry by years of innovation, it is 1117,600 manats in 2014, 589,700 manats in 2015, 540,900 manats in 2016 and 383,800 manats in 2017 has been a decline in production of innovation products. (table 1).

Factors	A product that has undregone signifcant changes and has been recently introduced				Improved products			
	2014	2015	2016	2017	2014	2015	2016	2017
Industry – Total	**12318,5**	**929,7**	**35746,9**	**14676,7**	**1117,6**	**589,7**	**540,9**	**383,8**
Mining industry	**-**	**-**	**129,6**	**-**	**-**	**-**	**-**	**183,8**
Manufacturing industry including	**12318,5**	**929,7**	**35617,3**	**14676,7**	**1117,6**	**589,7**	**540,9**	**200,0**
manufacture of food products			402,5	589,5				
beverage production	3973,0	758,0	41,5					
textile industry	3098,8		12845,1					
clothing manufacture			5212,8					
manufacture of leather and leather products footwear			48,0					
chemical industry	0,3	13,4	522,4	1705,1	565,7	127,5		
manufacture of rubber and plastic products			171,3					
production of construction materials			6586,0					
metallurgical industry			500,0	2176,0				
manufacture of finished metal products, except machinery and equipment			9112,8					
production of computers and other electronic equipment	5100,6			9990,3				
production of machines and equipment	145,8	158,3	174,9	215,8	462,9	430,0	524,8	167,1
installation and repair of machines and equipment					89,0	32,2	16,1	32,9

Table 1: Volume of innovation products by innovation level and economic activity, thousand manats (Azerbaijan State Statistical Committee, 2018, p.90)

It is worth noting that the relevance of innovation processes is explained not only by their economic content, but also by their nationwide significance. However, in a competitive environment in the classical market economy, the innovative potential of modern science and technology cannot be fully utilized without government intervention.

2.2. Directions for stimulation of innovative development in Azerbaijan industry

It should be noted that in the practice of developed countries the state intervened in various directions to apply advanced production technologies to enterprises and to finance innovation. From developed countries, Switzerland, Japan and Germany have shown that there is a great deal of funding for technology policy programs. The US Federal Government and Japan have spent more than 450 million dollars on programs to create state of the art practice and counseling centers for small and medium-sized enterprises in the manufacturing industry. All of the costs were spent on providing technical and financial assistance to enterprises that comprise a whole spectrum program, to apply new technology. In 1990, 58 million dollars were spent to help drive innovation in industrial enterprises in 30 US states. In Germany and Scandinavia, joint research was used to help businesses apply advanced technology in enterprises. Over the last decade, these countries have focused on the expansion of technology in the United Kingdom, Denmark, and France, in particular the interest in microelectronics (7, 533-534). Assessment of factors that impede innovation in Azerbaijan industry showed that the thematic situation of cooperation between enterprises and scientific organizations, as well as the elimination of many obstacles caused by economic and production factors, stimulated the application of industrial innovation and achieved technological advancement. This growth rate is also reflected in the costs of technological innovation in the industry in 2013-2017 according to the types of innovation. According to the types of innovations, the cost of technological innovation in the industry in 2013-2017 amounted to 69,888.5 thousand manats, and innovation process - 44,806,600 manats (table 2).

Years	Total expenditures	Including	
		Innovation of products	**Innovation process**
2013	13877,2	11899,5	1977,7
2014	21534,1	13510,4	8023,7
2015	35179,1	13685,2	21493,9
2016	27929,0	20313,8	7615,2
2017	16135,7	10439,6	5696,1
2013-2017 total in these years	114655,1	69848,5	44806,6

Table 2: Technology Innovation Expenditures by Industry,thousand manats according to the types of innovation (Information of Azerbaijan State Statistical Committee, 2018, p.91-92)

Let us focus on the types of activities and financial resources in the cost of technological innovation in Azerbaijan. Expenses on the enterprises' own funds in the amount of 114655,1 thousand manats, spent on industrial innovations in enterprises in 2013-2017 by technological innovations by activity and financial sources, 98652,1 thousand manats, expenses from the state budget 551,2 thousand manats, foreign investments 11844,2 thousand manats and other expenses amounted to 3607,6 thousand manats. The analysis envisages that during these years the financing was mainly at the expense of the enterprises' own funds (table 3).

Table following on the next page

Years	Total expenditure	Including			
		At the expense of enterprises	State budjet	Foreign investment	Other
2013	13877,2	12376,9	551,2	-	949,1
2014	21534,1	21133,5	-	-	400,6
2015	35179,1	34779,2	-	-	399,9
2016	27929,0	14286,5	-	11808,2	1834,3
2017	16135,7	16076,0	-	36,0	23,7
2013-2017 total in these years	114655,1	98652,1	551,2	11844,2	3607,6

Table 3: Technological innovation in industry by activity types and sources of financing, thousand manats (Azerbaijan State Statistical Committee, 2018, p.93-94)

It is important to note that in order to achieve innovative development in foreign practice, enterprises are primarily focused on the sources of financial resources in financing the innovations used. In a market economy, the financial resources of enterprises are mainly generated from the following sources:
a) founders' funds
b) incomes from realization of product (work, service)
c) bank loans
d) cash generated from the sale of securities
e) dividends earned on money held in banks
f) donations from legal entities and individuals, etc.

As it is seen from the analysis of financing of technological innovations in Azerbaijan industry, the costs of technological innovation in the country were mainly due to the following sources:
1) At the expense of enterprises
2) State budget
3) Foreign investments
4) Other

3. CONCLUSION AND DISCUSSION
In modern times, innovation management is one of the main directions of national economy modernization in Azerbaijan. In this context, the formation of innovative development is characterized by a number of areas. The most important of these is the acceleration of the formation of the institutional and legal framework to eliminate the obstacles for innovation in Azerbaijan industry. On the other hand, increase the share of state budget funds in the costs of technological innovation to create and enhance product and process innovation in existing enterprises. Another direction is to create a conciliatory environment in the country's innovation policy and, for this purpose, stimulating government support in fiscal, tax and customs policies. The mentioned trends will stimulate economic development by stimulating the development of legislative and regulatory frameworks, infrastructure and technology markets that regulate and encourage innovation activities in Azerbaijan.

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PROBLEMS OF CREATION OF AUTOMATIC WEAVING FACTORIES

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ABSTRACT
Increasing the productivity of the textile factories and improving the quality of the products requires their extensive mechanization and automation. For the production of automated knitting factories, the technological processes should be analyzed at the weaving department and the textile shop. The article outlines the main directions of the textile industry, including the mechanization and automation of weaving factories. The processes of weaving and preparation of textile fabrics were analyzed, as well as the technological and auxiliary processes necessary for mechanization and automation were determined. Here is the level of automation of technological processes and machines and equipment that performs them.
Keywords: *automation, mechanization, technological process*

1. INTRODUCTION

One of the ways to increase labor productivity in the textile industry, improve production conditions and product quality is the automation of textile factories. As a result of automation, the problem of complete elimination of manual labor at knitting factories is also solved. The textile industry is developing at a higher pace each year. Provision of such development was carried out on the basis of achievements of science and technology, with the introduction of new technologies for enterprises, improvement of technological processes and increase of labor productivity. This tradition continues today. [1]As a result of research, the main directions of the textile industry development are modernization of existing equipment, combining technological processes, creating new machines and technological flow lines, mechanization and automation of basic and auxiliary production processes. [1,3,6]. Modernization of the existing equipment implies an increase in the reliability and durability of their employees, easier adjustment and maintenance of the machines, as well as improved working conditions [1]. The simultaneous execution of several processes in a machine, such as openings, pulling the arachocan handle and the start of the fabric, are carried out simultaneously, which has resulted in the creation of multi-threaded weaving machines, which produce fabric in a continuous fashion [1,3]. The development in such areas is only in the automation of individual machines. However, the creation of automatic weaving factories requires technological lines [7]. Processes on machines and apparatus of technological lines are essentially a big process-stream line. Despite the fact that technology is very diverse, the generality of the machinery and apparatus for different lines is that the production of primary raw material is organized and operated as an uninterrupted technological flow. For textile factories, raw materials of different types and sizes of yarn come from crushing cutters. All technological processes, from the opening of the yarn in the process line to the production and storage, should be mechanized and automated [7].

Thus, for the creation of automated knitting factories, all technological processes must be automated and mechanized until the yarn is manufactured from raw material and stored in warehouses. For this purpose, a complex system of technological machines should be used to carry out technological processes in knitting and knitting shops [figure 1]. The purpose of the research is to define the level of automation of technological processes and equipment required for complex mechanization and automation at the stages of production of fabric from the potters to the weaving factories at different sizes and shapes from the potters for the production of automated knitting factories. To this end, we will analyze the technological processes of weaving preparation of various sizes and yarns, which are included in the preparatory department of textile factories, and then the modernization of complex mechanization, automation level of weaving process and equipment.

2. ANALYSIS OF TECHNOLOGICAL PROCESSES PERFORMED IN THE WEAVING PREPARATION DEPARTMENT

In many cases, twine yarns made from different fibers enter weaving mills in spinning washes. Dyed twisted yarns made of natural and artificial silk, linen and various fibers enter the textile factories in special shaped washes. Twisted washes of various sizes and shapes are not suitable for the rewinding process in textile mills. Thus, the lengths of the threads in different washes are different, and this requires the machines to be loaded at different times during the subsequent rewinding process. This increases the idle time of the rewinding machine. Defects in the bent threads are eliminated during re-winding to ensure that the loops are not broken during the weaving process. Thus, the main purpose of re-wrapping is to create a threaded wash so that the subsequent re-wrapping process is more efficient. The following requirements [2] must be met when re-threading:

1) The physical properties (elastic elongation and strength must be maintained) during re-winding of the threads must not deteriorate;
2) The structure of the winding threads in the rewinding washes should allow the threads to be easily opened during the rewinding process and this process to be carried out at high speed;
3) The thread should be wrapped as long as possible in repeated wraps;
4) The ends of the threads should be firmly connected with a properly knotted knot. Thus, during subsequent technological processes, these nodes can easily pass through the required glasses of the compared parts in the technological loading scheme;
5) The threads should be wound at a constant speed, and the tension of the threads should be constant;
6) There should be less thread crumbs (ugar) during re-wrapping;

The re-wrapping process is performed as follows.The bent threads are fixed in the drop wash table. The threads hanging from the washer cover the guide rod and enter the tension regulator. From there, the test is passed through a cleaning device, a thread carrier and washed. The tensioning device provides the required tension to the threads. The inspection cleaning device controls the thickness of the threads and cleans the threads from debris and debris. The threader moves back and forth in reverse, allowing the threads to be wound along the axis of the thread. The washing action takes the shaft. He wraps the threads around himself. If the twisted threads are re-wrapped after a special wash, they are placed in a special holder. During repeated wrapping, the wash rotates with a special holder. The threads that are unwrapped from the wash are wrapped around the guide device and passed through the control device to the washer. To create the required tension, a strap or rope is passed over the ball of the special holder and the load is hung from it. The rewinding machine has a body, transmission, rewinding mechanism, tensioning device, cleaning-control device, rewinding washer holders.

During re-winding, the threads are wound on the washer like a screw line, and the angle of rise of the screw is found from the ratio of the velocities α as follows:

$$tg\alpha = \frac{\vartheta_h}{\vartheta_0}$$

where ϑ_h is the velocity of the deflector at the point of curvature, ϑ_0 is the rotational speed of the washer.

If the angle of inclination of the screw is small, then the winding is conventionally called parallel winding, and if it is large, it is called cross-winding. The tension of the weft threads during re-winding is of great importance for the subsequent processes of weaving production. The tension of the threads must ensure the correct structure and uniform density of the wash. The tension must be within a certain range, when the tension is high the threads are stretched and as a result the breakage of the threads, which is very important for weaving, increases and the number of related knots increases, which makes it difficult for the threads to pass through the glasses. When the threads are opened at high speed from stationary washes, they are affected by centrifugal forces, as a result of which the threads separate from the washers and form a special shaped surface in space, which is also called a balloon. The handle is in the form of a curve with a double curvature in the balloon. When the threads are unwrapped, each of its elements moves intricately in the balloon, that is, the threads move along the length and rotate around the axis of the ball. The total tension of the threads when opened from the gargle is determined by the following factors:

- forces of inertia of the opening threads with the threads of the previous layers;
- the threads of the screw-wrapped threads are connected to each other and the frictional forces on the surface of the ball;
- air resistance;
- force due to the voltage device of the rewinding machine;
- frictional forces on the threads when covering the guides.

Thus, the value of the thread tension depends on many parameters, which have not yet been fully studied. Therefore, the value of the voltage calculated by the formulas obtained on the basis of existing theories is very different from the value of the actual voltage. For example, when using the formula of the central design bureau of textile engineering, the voltage at any point X of the balloon is found as follows.

$$K_x = \frac{2T}{108}\left(l + ksin^2\beta \frac{H^2}{r^2} \right)\vartheta^2$$

where T - is the thickness of the thread, k is the coefficient depending on the opening conditions of the thread, β is the angle formed by the screw line of the thread with the axis of the thread, H is the height of the balloon, r is the radius of the thread opening point, ϑ is the opening speed of the thread.

The following requirements apply to these devices used in rewinding machines to obtain and regulate the voltage required during rewinding.

- the handle must provide equal clamping and bending forces;
- must be easy to adjust to get the required voltage;
- garbage should not accumulate on it;
- the device must be reliable and stable when energized;

In all constructions of existing tensioning devices, additional tension in the threads is generated by frictional forces acting directly on the threads and in some devices on the moving blocks surrounded by the threads. In order to check the thickness of the twisted threads in the rewinding and to remove debris, the threads are passed through a control-cleaning device. The head remaining between the boards is used as a control-cleaning device. When the threads pass through the hood, the debris on the threads sticks to the wall of the board and separates from the threads. When there are thickened areas in the threads, the threads are riveted and broken in the space. Studies have shown that the width of the gap should be 2-2.5 times the diameter of the handle. The control-cleaning device has different constructions.In rewinding machines, control-cleaning devices are placed after the devices that supply voltage to the threads, and debris is collected in these devices.If this debris is not cleaned in time, the wheel will go to the winding wash and reduce the quality of the wash. In addition to mechanical control and regulation devices, modern rewinding machines use devices based on photoelectric phenomena and volume changes. In photoelectric devices, when the thickness of the passing thread changes, a signal enters the electrical relay of the devices, and special scissors are activated and cut the handle. Knoting is an operation performed by various skilled workers in the textile industry. Therefore, the quality of the rice is of great importance. A weakly untied knot is loosened as a result of subsequent operations, a knot whose ends are neatly tied does not pass on subsequent machines and causes the adjacent threads on the weaving machines to break. In all cases, the breakage increases, the quality of the product produced and labor productivity decreases. The quality of the rice plays a key role in the preparation of the access. In addition to the quality of the knot, it is important to choose the correct structure of the knot, depending on the physical properties of the yarn, especially its elasticity and stiffness in bending. A special tool - a knotter - is used to make the combined knots strong and the ends of the threads small.

3. THE CURRENT STATE AND PROBLEMS OF MECHANIZATION AND AUTOMATION OF TECHNOLOGICAL PROCESSES AND EQUIPMENT IN THE TEXTILE PREPARATION DEPARTMENT

Analysis of foreign materials and equipments at international exhibitions shows that currently there is no favorable conditions for the world of weaving and textile equipment development. Manufacturers of these equipments are mainly focusing on improving and improving the internationally-respected principles. The next improvement and development of equipments is aimed at obtaining the optimal quality product, as well as at the most advantageous ratio between the cost of equipment and its productivity. At present, any improvement requires long-term research. Therefore, present-day constructions consist of inventions based on expensive theoretical and experimental studies used in the evolutionary process. The main directions of technical development of the equipments in the world can be considered as automation of services and control, which can completely eliminate manual operations, improve productivity, improve the quality of the products produced, and provide energy savings. For weaving machines, yarns for fabric production must be of a certain shape and size. In the preparatory department of weaving, the initial process is the utilization of different sized and shaped washers of the same size and shape. Recycling is completely automated. Recycling machines have been set up in Japan, USA, Germany, Italy, Russia, the Czech Republic and other countries. In some of these machines, manual labor has been completely eliminated, for example, in Japan machine named Murata, in German AutoConverter. In other machines, operations such as finishing, loading full splits, removal of blank spaces are automated. The technological process after the recycling process is wrapping. In this process, a single number of bobbins and single-threaded yarns are wound around the wheelchair or drum. The share of this process in the textile industry is only 3%. However, the subsequent technological process is a very responsible technological process.
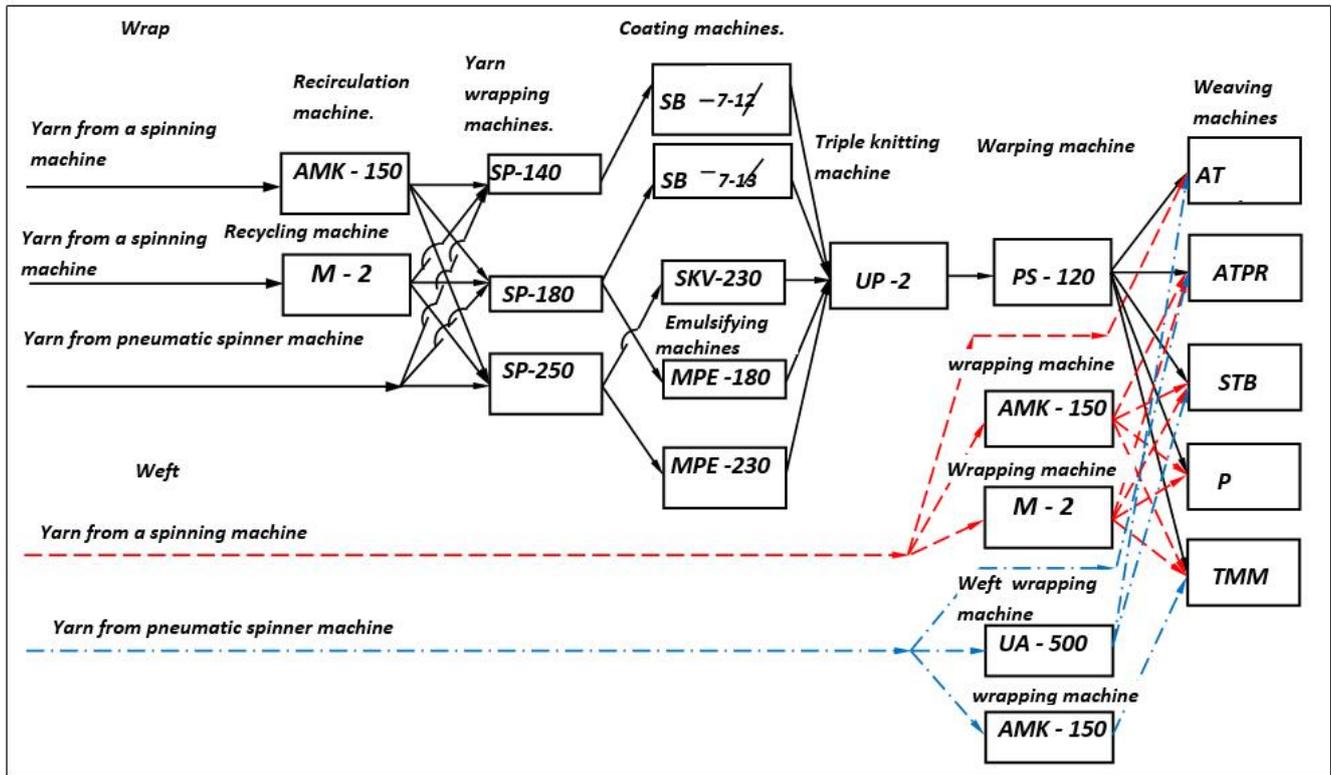
Figure 1: Structural scheme of technological machines for weaving cotton fabrics

At present, all technological processes performed in the process of wrapping are almost completely manually carried out. These operations include: carriage of bobbins to spools, placing them in bobbins holders, holding yarn control, spinning from distributor comb, bonding of yarn ends to the roller, removal of breaks, removal of full valve and loading of empty valve to machine. Mechanization of most of these operations will allow full automation of wind turbines. The next step in the preparation of yarns is coating them. It is the most responsible technological process that incorporates physical and mechanical operations. In this process, the yarns are opened from the valves under the tension and passed through the rear and passed to the steering wheel. Here, the yarns are squeezed into the adhesive slide product, squeezed between the rollers and transferred to the drying zone. The cleaned yarns are dried in the drying zone, and then the separating cubes are wrapped around the teeth and wrapped around the towel guides. Yarn rollers are brought into the molding machine and the joining of the ends of the staplers is performed manually. Mechanization and automation of the mentioned technological processes and machines should be carried out. Coating is cooked or cooked in a special cooking room. Its cooking is performed in round or oval shaped vats or autoclaves. Prepared sludge is supplied directly to pumping machines through pipe transporters. Processes of preparation, cooking and slicing machines are automated. Modern drum-locking machines are equipped with devices that automatically adjust the tension of the handle stems to the squeezing valves on the machine's areas, the yarn stretching, sticking to adjust the level, moisture, temperature of the drum's surface. In these machines, coupling, placement of thread rollers, transferring the yarn to the specified devices and removal of the finished navigating machine, and combining the ends of the machine in any work area are performed manually. Mechanization and automation of the processes for the establishment of automatic weaving factories are required. In the weaving machine, we must pass the last preparatory operations and finish spinning operations before going to the fabric production. It is understood that the ends of the wicker sticks are used in the knitting machine and the ends of the new stems of the handlebars are understood as knotting.

The dropping can be done directly on the weaving machines or in the welding unit of the weaving factories. Instead of knotting, a sieve operation is performed in the production of new varieties. Finishing of the ends of the stems is carried out on the spinning machines. For this purpose it is desirable to use knitting machines such as US-100 and US-125, UP-125 produced in Russia. It is understood that the stacking operation means that the stacking members of the weft machine can be arranged in succession from the lamella, the clamps of the clamps and the teeth. Stroke surgery is performed manually, in some cases semi-mechanical and mechanical. For this purpose, sealing machines are used. In some major factories, automatic slinging machines are used to perform all operations automatically. But because of the high cost of the machine, many factories do not accept it. It is recommended that Barler-Kolman (USA) machines be used to handle the stems. The nesting and stacking operations of the yarns are very labor-intensive. Navoy should be mechanized and mechanized and brought to the area and machines where the knotting or handle operations are carried out, installation, installation and finishing of the ends of stems. During the preparation process of the wefts, these wefts are added to the moisture and the emulsification process is carried out to prevent the formation of the wires in the handle. If the machine has mesh knitting machines, the wire bracing process is carried out to bring the spindle shaft from the spinning mill into a suitable shape. Weft wrappers can be seen as highly automated machines. So practically all operations are automated on these machines. Currently, the machine is manufactured in weft UA-300-3M weft wrappers for automatic weaving machines. If the weft thread is derived from the spinning ring machines, there is no need for welding process and weave it to the weaving without preliminary preparation. Preparation of the weaving thread for weaving knitting machines is to put them in the form of cross-cylindrical and conical bobbins.

4. CONSLUSION

1) As a result of the research, it was determined that, in order to establish automated textile factories, a complex system of technological equipment should be created for the production of concrete products(material).
2) Starting from the weaving department for the creation of automated knitting factories, all technological processes of handling machine parts on warehouses or dyeing plants should be mechanized and automated.
3) We have analyzed the level of mechanization and automation of all technological processes and equipment used in weaving and knitting weaving. Here are determined all the technological processes required for mechanization and automation.

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SPATIAL ASPECT OF KNOWLEDGE DISSEMINATION IN THE PRODUCTION SECTOR

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ABSTRACT

The article examines the problem of measuring and analyzing endogenous factors of economic growth in a knowledge-based economy. The authors discuss the key characteristics of knowledge – non-competitiveness, non-exclusivity, the ability to set a common framework for the incorporation of new experience and the development of technologies. The review of works with theoretical models of knowledge and technology influence on economic growth is being performed. The authors highlight the need to take spatial relationships in the analysis of endogenous factors of economic growth into account. The purpose of the article is to study the spatial aspect of the knowledge dissemination in the production sector of Russian regions based on the use of the cost indicator for technological innovations. Based on the spatial correlation between 2009 and 2019, it is shown that there is a technological imbalance between regions as a result of an unbalanced distribution of knowledge in the industrial sector, the regional competition in terms of costs for technological innovations, discovered the local spatial clusters of regions with high and low costs of technological innovation.
Keywords: Economic growth, Endogenous factors, Knowledge, Technological innovation costs, Spatial correlation, Moran Index

1. INTRODUCTION

Currently, the issue of endogenous growth mechanisms is one of the key issues in the growth theories development. In the modern economic literature, according to the neoclassical production function F (K,L, T), there are three main groups of economic growth resources: physical resources, labor, knowledge and technology [Barro, Sala-i-Martin, 2014]. In the 1980s, P. Romer [Romer, 1986], F. Aghion, and P. Howitt [Aghion, Howitt, 1992] presented an endogenous theory of economic growth based on the dissemination of knowledge among producers as a result of deliberate research and development. Therefore, technological progress is both an expression of the accumulation of human capital and an improvement in the quality of invested capital. The internal quality of the invested capital increases with the growth of the level of technologies created through the use of human capital. In addition to the accumulation of human capital, the deepening of capital specialization can also contribute to the deepening of the division of labor and the formation of a monopoly competitive advantage, which makes economic growth more stable and sustainable and leads to an increase in the marginal return on invested capital. Another option for improving the Solow-Swann model is the macrodynamic model of endogenous economic growth, taking into account the processes of saturation, technology change, and transfer of economic potential [Silverberg, Lehnert, 1994]. The difference between this model is the the assumption of a constant level of technology

elimination, the study of the technological aspect growth through the inclusion of nonlinear functions of scientific and technological progress in the model of economic growth. Kenneth J. Smith Arrow (1962) suggested that technological progress or productivity growth is a by-product of capital accumulation, that is, an effect caused by investment and the accumulation of human capital through training. As a result, Kenneth J. Arrow (1962) showed technological progress as an endogenous variable determined by the economic system. The researchers emphasize that if the first two resources of economic growth (physical resources, labor) are competitive, then an important distinguishing feature of knowledge is that it is a non-competitive product, since two or more producers can use the same technology at the same time. Two key characteristics of knowledge – its non-competitiveness and non-exclusiveness – lead to an important consequence of the link between technology and economic growth – the equalization of factor prices: low salaries and high rates of technological growth in developing economies, with a negative impact on high-wage economies. Another important consequence of this relationship is the convergence of economic growth rates between countries [Barro, Sala y Martin, 2014]. The main idea is that the successor countries are gradually catching up with the technological leaders, since borrowing with the associated cost of copying and further using discoveries is cheaper than innovation with the associated cost of inventing new intermediate and final goods; sometimes the adaptation of technology in the successor country is carried out by attracting foreign capital from the leader country. Examples are Hong Kong, Singapore, China, and Mexico [Young, 1989, Young, 1992, Romer, 1993]. At the point in time when a country that initially has knowledge of the technology of producing only a small amount of goods, then outstrips the leader, there is a change in the technological leader [Romer, 1992, 1993]. Another important characteristic of knowledge is its ability to set a general framework for evaluating and incorporating new experiences and information. Knowledge is the main source of value [Drucker, 1995, Grant, 1993] and sustainable competitive advantages [Nonaka, 1991] not only for a single corporation, but also for a particular type of economic activity, sector of the economy, region and country as a whole. In turn, the region, as a knowledge-creating territory, is an open system that constantly exchanges knowledge with its environment and is able to mobilize the knowledge of its competitors, partners and other participants in the external environment. Therefore, based on a theoretical review of the features of endogenous factors of economic growth, it is interesting to study the spatial aspect of the knowledge dissemination in the production sphere of Russian regions.

2. METOD

In the middle of the last century, using the example of the US economy, the economic aspects of the production and dissemination of knowledge were studied deeply, the costs and the number of employees were measured in five groups of economic activities (research and development, education, mass communication, information technology, information services) called "the sphere of production and dissemination of knowledge" [Makhloop,1966]. Empirical research on various aspects of knowledge production and dissemination is seriously hampered by the problem of measuring under-resources through available statistical indicators. Currently, official state statistics form the following indicators: the number of employees by type of economic activity; availability of information and communication technologies; investments in fixed assets; funds spent on professional development and retraining of personnel; the share of organizations that implemented technological, organizational, and marketing innovations in the reporting year; the volume of innovative goods, works, and services; the costs of technological innovations of organizations; special costs associated with environmental innovations; the number of organizations that performed research and development; the number of employees engaged in research and development; internal costs for research and development. As a measure of the knowledge dissemination in the production sector in this study, we used the

indicator of the technological innovations costs per capita of the employed population in the Russian regions according to the statistical editions caleed "Regions of Russia. Socio-economic indicators".

2.1. Spatial dependencies

The mutual influence of regions on each other can be a significant external determinant of the knowledge life cycle, increasing the convergence of the costs for technological innovations growth rates, the mobility of factors and production results. Therefore, it is interesting to measure the spatial correlation in the costs of technological innovations in the Russian regions. To account for spatial relationships in regression models, this study uses a boundary weighting matrix derived from the administrative boundary location database (GADM). To identify the spatial dependence, global Moran indices were determined [Anselin, 1995]:

$$I(X) = \frac{N}{\sum\limits_{i,j} w_{ij}} \cdot \frac{\sum\limits_{i,j} w_{ij}(X_i - \bar{X})(X_j - \bar{X})}{\sum\limits_{i}(X_i - \bar{X})^2},$$

where N – number of regions, $\bar{X}$ - average value of the indicator X - the cost of technological innovation per capita of the employed population, w_{ij} - elements of the boundary matrix of weights.

The Geary's spatial correlation indices are also calculated [LeSage, Pace, 2009]:

$$C = \frac{(n-1)\sum\limits_{i=1}^{n}\sum\limits_{j=1}^{n} w_{ij}(X_i - X_j)^2}{2W\sum\limits_{i=1}^{n}(X_i - \bar{X})^2},$$

where W means the sum of all wij, the other notation corresponds to the notation of the Moran index.

The Moran index takes values in the range of [-1; 1]. The Geary index takes values in the range of [0; 2], where values from 0 to 1 indicate the positive spatial correlation, and values from 1 to 2 indicate a negative spatial correlation. The positive spatial correlation coefficient means that a growing region contributes to the growth of its neighbors, while a negative value indicates that a growing region "pulls" the resources of its neighbors. The insignificance of the coefficient indicates that there is no link between the processes in different regions.

To identify the spatial clustering of regions, local Moran indices (LISA – Local Index Spatial Autocorrelation) were determined [Anselin, 1995]:

$$I_{Li} = N \cdot \frac{(X_i - \bar{X})\sum\limits_{i} w_{ij}(X_j - \bar{X})}{\sum\limits_{i}(X_i - \bar{X})^2}$$

If a given region is significantly different from its neighbors (outlier), then it has a negative value of the local Moran index.

A positive correlation indicates that this region is similar to neighboring territories (cluster). The greater the LISA value modulo, the greater the similarity/difference between the region and its neighbors.

3. RESULTS

As we see on Figure 1, restrictive measures in recent years have led to a decrease in the import of technologies and services. Also, in recent years, there has been a decline in another indicator of the technologies spread within the country - the share of expenditures on technological innovations in the gross regional product in basic prices (Figure 2).

Figure 1: Dynamics of technologies and services of a technical nature import in Russia
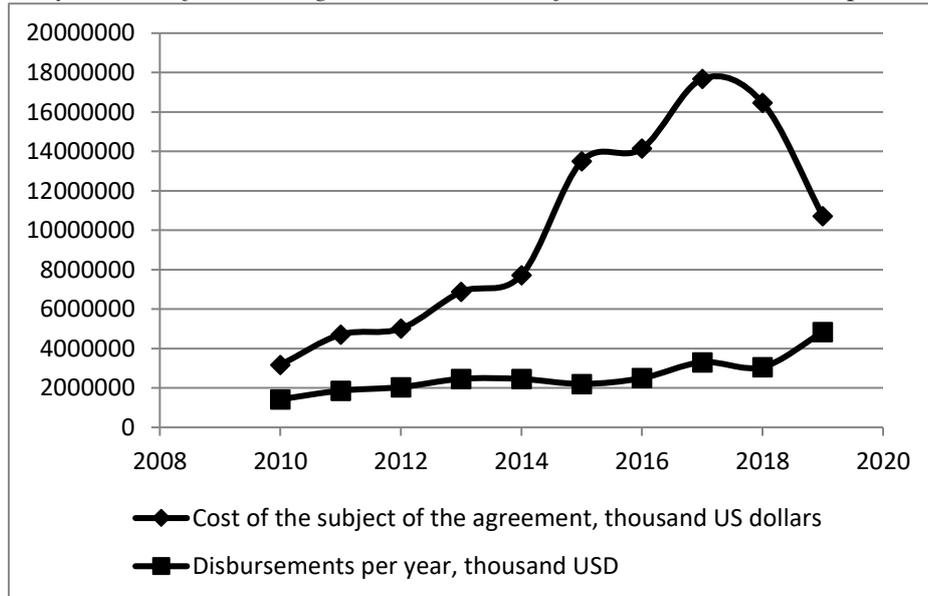
Source: obtained by the author based on the materials of the "Regions of Russia. Socio-economic indicators. 2020" edition

Figure 2: Dynamics of the expenditures on technological innovations share in the gross regional product of Russia in basic prices
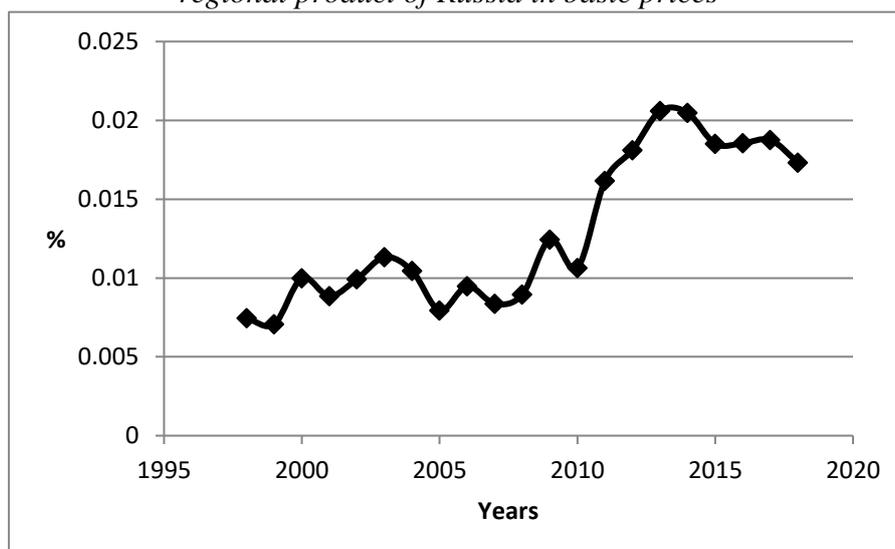
Source: obtained by the author based on the materials of the "Regions of Russia. Socio-economic indicators"

It is expected that in general, the costs of technological innovations and their growth rates in neighboring territories differ, which indicates the technological inequality of the Russian regions. Local Moran indices confirmed the local spatial clusters of regions with a higher level of spending on technological innovations in Moscow, the Ural Federal District (Yamalo-Nenets Autonomous District, Khanty-Mansi Autonomous District, Tyumen Region), the Siberian Federal District (Omsk Region, Tomsk Region), and the North-Western Federal District (Nenets Autonomous District). Most of these clusters are characterized by the economy direction to the extraction of raw materials and the presence of federal financial support for the technologies development [(Fig. 3).

Figure 3: Cartogram of technological innovations expenditures per capita of the employed population in the regions of Russia in 2019.
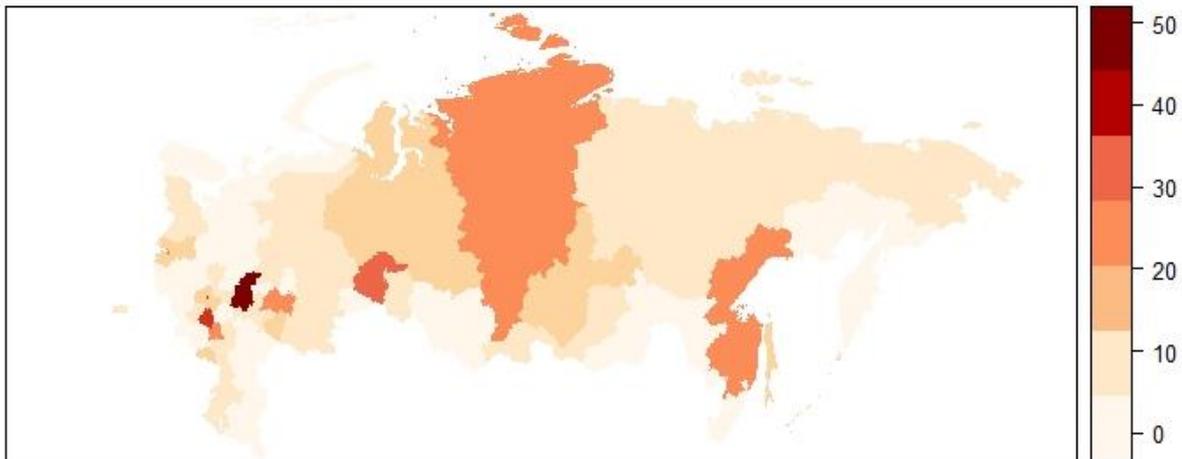
Source: obtained by the author based on the materials of the "Regions of Russia. Socio-economic indicators" edition

The global statistically significant Moran spatial correlation index (Table 1) indicated the negative spatial correlation (with the exception of 2009, 2015, 2016, 2019), when the costs of technological innovation in the neighboring territories are different, and strong regions-leaders pulling on resources with weak neighbors. In 2018, there was a positive spatial correlation, which indicates the cooperation of regions, when a growing region contributes to the growth of its neighbors.

Table 1: Global Moran Spatial Correlation Index for Technological Innovation Costs per capita of the Employed Population

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
0.013	-0.271*	-0.291*	-0.264*	-0.232*	-0.118*	0.034	0.043	-0.115*	0.068*	0.046

Note: ***, **, * – significance at 1%, 5% , and 10%, respectively
Source: obtained by the author based on the materials of the "Regions of Russia. Socio-economic indicators" edition

In the spatial Moran diagrams, most of the Russian regions are concentrated in the LH and LL quadrants (Fig. 4). This means that peripheral atypical regions with low costs of technological innovation are dominated by successful leading regions (LH quadrant with negative autocorrelation) and regions with low costs of technological innovation surrounded by the same neighbors (LL quadrant with positive autocorrelation). In the HL quadrant, there are several atypical, supporting successful lead regions with an increased concentration of technology innovation costs, surrounded by neighbors with low technology innovation costs.

These are the "cores" of technological innovations with superiority and negative autocorrelation over their neighbors. Among such regions there is the Republic of Tatarstan.

Figure 4: Spatial diagram of the technological innovations costs per capita of the employed population, mln rub, in the regions of Russia
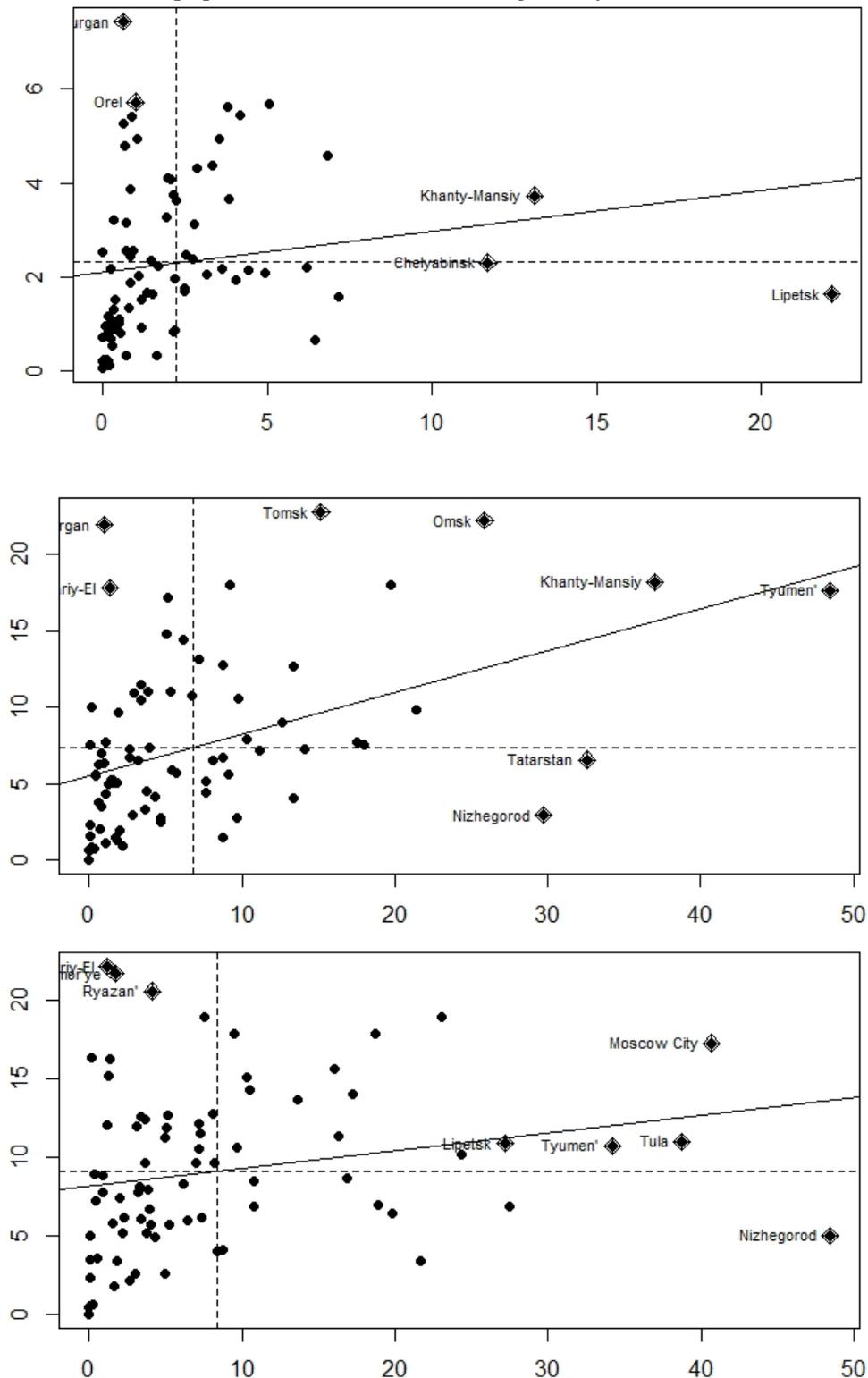
Source: obtained by the author based on the materials of the "Regions of Russia. Socio-economic indicators" edition

Previously obtained results in the short term revealed the process of β-divergence of the technological innovations characteristic growth rates of the digital economy development initial stage [Bagautdinova, Kadochnikova, 2020]. That is, if in the short term the technological inequality of the regions increases, and in the long term the levels of technology in the regions converge to an equilibrium state, then this does not contradict the theoretical judgments about the decline in the growth rate of a successful economy due to the decreasing return on factors of production [Krugman, 1979].

4. CONCLUSION

On the basis of the presented results, it is possible to formulate several general theses regarding the knowledge dissemination as an endogenous factor of economic growth. Neoclassical growth theories are limited to the assumption that technological progress is exogenous, depends only on time, and is really weakly related to the processes within the simulated system. The disadvantage of these models is that they do not provide information on growth causes, do not contain recommendations on possible ways to accelerate technological progress, and therefore the economy growth as a whole. Theories of endogenous economic growth overcome this disadvantage of neoclassical theories. The key factor of endogenous growth in the theory of Paul Romer [Romer, 1990, 1994] is a variable called "knowledge" or "information". The main idea of Romer's theory is: "there is an exchange between consumption today and knowledge that can be used to expand consumption tomorrow." He formulates this idea as a "research technology" that produces "knowledge" from past consumption. A significant negative spatial autocorrelation in the costs of technological innovations argued for the technological inequality of the regions as a result of the unbalanced dissemination of knowledge in the production sector. The predominance of costs for technological innovations is observed in the regional clusters of the Urals and Siberia, which have a raw material direction of the economy, as well as in Moscow, in the Nizhny Novgorod and Sakhalin regions. Most of the industrial regions of central Russia belong to clusters with low costs for technological innovations. Note that the calculation of spatial correlation characteristics does not explain the reasons for the formation of territorial clusters or outliers in technological innovations. The assessment of spatial interactions, taking into account explanatory variables and regional differentiation, is the subject of further research on the spatial aspect of knowledge dissemination in the production sphere. This makes it possible to assess the spatial effects of management decisions in the development of territorial production clusters, which are the growth points of the post-industrial economy.

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SOCIAL AND ENVIRONMENTAL INNOVATIONS AS FACTORS OF SUSTAINABLE DEVELOPMENT OF ECONOMIC SYSTEMS

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ABSTRACT

The active transition of the world community to an innovative economy, in which the main share of the gross domestic product is provided by the production and sale of high-tech products, leads to the emergence of interest in ensuring the sustainable development of the state and enterprises through the introduction of innovations. In the modern economy, innovations that contribute to the implementation of new ideas in specific technical and commercial achievements are one of the key factors of the competitive advantage of enterprises. This article is devoted to such tools for achieving sustainable economic development as social and environmental innovations. The article defines the essence of social and environmental innovations that ensure the sustainable development of economic systems. Attention is focused on the need to solve the problem of ensuring the sustainable development of economic systems through the implementation of their innovative activities through the introduction of basic and improving innovations. The increase in environmental problems, the economic consequences of natural and man-made disasters, the problems of the social sphere, the rapid decline of natural resources dictate the need for advanced development of certain specific areas of scientific and technological research and development ("clean" energy, biotechnology, genomic medicine, new technologies in agriculture, environmentally friendly materials, "green" innovations, etc.). The sustainable development of the state is influenced by innovative activity, and therefore it is necessary to increase the intensity of the introduction of scientific research, to create conditions conducive to the innovative activity of enterprises.
Keywords: economic development, environmental innovation, innovation, innovation activity, social innovation

1. INTRODUCTION

In the history of the development of civilization, innovation is the most important factor in the sustainable and efficient development of the economy. In addition, they form the basis of entrepreneurial activity, the impact of which on modern society is difficult to overestimate. However, in the context of a post-industrial economy and a new paradigm of economic development that is gaining strength, there is a need to revise a number of provisions of the theory and methodology of innovation in order to more fully take into account the new fundamental values. These changes are primarily caused by the transition from a raw material to an innovative economy, the development of energy-efficient, energy-saving and resource-saving technologies, a rethinking of the role of human capital and the need for additional efforts to protect the natural environment, many of whose resources are already close to exhaustion.
The concept of sustainable development, which was formed in the twentieth century, is a balanced development in economic, social and environmental aspects (Akimova T. A., 2009, p. 37). According to this concept, all economic entities can be considered as socio-ecological-economic systems, where the priority of goals changes towards the integrity of the natural complex, the environment and improving the quality of life (Alferova T. V., 2013, p.9-10). Favorable economic development, which is expressed in rapid economic growth, does not ensure sustainable development, balanced in economic, social and environmental aspects.

It is the complex interaction of the three aspects that leads to harmonious development in the long term (Tretyakova E. A., 2012, p. 195-201). The ever-increasing number of problems in the social and environmental spheres make adjustments to the traditional models of economic functioning, increasing the importance of social and environmental aspects in making managerial decisions. The concept of sustainable development is based on a combination of social, environmental and economic components, which has been widely adopted both at the micro level and at the international level over the past decades, with a particular focus on social and environmental innovations as tools for achieving sustainable economic growth. Today, a large number of business entities have switched to a sustainable development strategy and are successfully using social and environmental innovations as elements of a business strategy. This is confirmed by the example of such large companies as "Adidas Group", "Henkel", " Procter & Gamble", "HP", "Unilever", "Clorox2", "Dell", "DyeCoo ""Nike", etc. The need for the development and mass implementation of new ideas in business processes, which, on the one hand, create value for the company and its owners, and on the other hand, benefit society, is becoming more and more obvious. One way to achieve this goal is to apply social and environmental innovations.

2. FEATURES OF SOCIAL AND ENVIRONMENTAL INNOVATIONS

There is a close connection between the social, environmental and economic spheres, so it makes sense to consider not only the optimization of one sphere in an isolated form, but also the subsequent impact on other spheres. It should be noted that the existing imbalances in the distribution of opportunities, wealth and power, gender inequality, unemployment, threats to human health, depletion of natural resources, land degradation, lack of drinking water and loss of biodiversity are only small problems in the social and environmental sphere, the solution of which is currently becoming a priority for the international community. The solution of the identified problems is possible only with the introduction of social and environmental innovations at the micro, macro, and global levels. In foreign practice, it is customary to combine these types of innovations and call them "sustainable innovation" (sustainable innovation) and consider them as separate types of this type of innovation. The idea of social innovation was officially recognized in 2010. Specific proposals were included in the Europe 2020 strategy. The developed strategy provides an answer to questions about how to overcome the crisis and create conditions for sustainable and comprehensive growth and development (Arabey E., 2019, p.23). Social innovation refers to new projects, ideas and initiatives aimed at improving the life of society. At the heart of social innovation is a concept that meets all the needs of society: from working conditions and education to the development of society, and health, in order to achieve a sustainable society (Sazanov B. V., 2008, p. 14). Social innovation is associated with such concepts as public-private partnership, corporate social responsibility, social entrepreneurship, and charity. To date, the state, through funding, actively encourages and supports the partnership of entrepreneurship and educational institutions engaged in the development and implementation of social innovations. Investing in social innovation is one of the tools for achieving sustainable economic growth. Human capital, a healthy and educated nation represented by a working-age population are extremely important for economic growth. Meeting social needs is not just an investment that will pay off later, but an integral part of a successful economy, the goal of which is the well-being of the population. The allocation of public funds and charity from large corporations to the social sphere is not enough, and long-term targeted efforts of all interested parties are required. A broad view of social innovation as a way to meet the important needs of society and its systemic change for the purpose of long-term planning becomes necessary. Social innovation is a convenient way to solve the most important social problems. In practice, there is a lot of evidence that social innovations can solve the problems of vulnerable groups, improve the quality of life and contribute to important

systemic changes in society to increase its well-being. According to the OECD (Organization of Economic Cooperation and Development) terminology, "green innovation" refers to any technology that reduces the negative impact on the environment" (Green innovation, website). The emergence of the term "environmental innovation" is due to the need to solve the problems associated with the occurrence of environmental disasters in new ways and with the help of new technologies. In a more specific interpretation, eco-innovation is the creation of new products, processes and methods that meet the needs of people with the rational use of natural resources and minimal emissions of harmful substances (Reid A, 2008, p. 24). Environmental innovations contribute to improving environmental safety and include:

- technologies aimed at protecting the environment;
- organizational innovations for the environment;
- innovative products and services that benefit the environment;
- ecosystem innovations (Egorova N., 2015, p. 300).

The areas of economic activity that most actively use eco-innovations belong to the sector of so-called "clean technologies" (cleantech). Currently, the clean technology sector includes the following areas:

- renewable energy and energy-efficient technologies;
- resource and waste management, material recycling;
- nature-saving construction methods and building materials;
- alternative transport, logistics, etc.

According to Clean Edge, the total size of the "clean" energy industries (biofuels, wind and solar energy) in 2011 was 246.1 billion US dollars, in 2021 they are expected to grow to 385.8 billion US dollars. Clean technology as a whole is currently the fastest-growing venture capital investment sector in the United States. In 2011, their volume increased by 30% and reached $ 6.6 billion (almost a quarter of all venture capital investments in the United States) (Clean Energy Trends, 2012). Optimizing the consumption of resources - both non - renewable (coal, oil, natural gas) and renewable (water, wood) - will lead to the fact that over time, increasing efficiency will become the goal not only of the company implementing "green" innovations, but also of its partners-suppliers of resources and consumers of products. Companies together with their suppliers will identify and solve problems in the supply chain related to the environmental cleanliness of raw materials and components, and develop measures with consumers to reduce waste and losses. Taking into account the fact that a significant number of consumers prefer environmentally friendly products, which is why companies will be interested in developing eco-products and services. Eco-friendly products themselves become advertising, and environmental cleanliness-an indicator of the quality of the product. The result of identifying such demand will be the formation of a market for organic or environmentally friendly products.

2.1. Use of eco-innovations by large companies

As examples of the implementation of eco-innovations, we can mention the company "HP", which has brought its activities to environmental standards and requirements. Back in the 1990s, the leading specialists of "HP" realized that lead is toxic, and when it was added to the list of dangerous substances in 2006, the company already used solders made from a mixture of tin, silver and copper. Another example of resource-saving activities is "Procter&Gamble", which saved US $ 830,000 in 2015 by recycling waste at its Amiens plant in France. In addition, at its plant in Lima, the company uses waste instead of burning it to produce methane and useful biofuels. This saved more than $ 250,000 (P&G, 2016). Interesting technological solutions for environmental protection are offered by the company "DyeCoo", which uses carbon dioxide as

a dye carrier for fabrics and textiles. At a certain pressure and temperature, the dyes dissolve very easily, even more easily than in water. This technology is used by "Nike", "Adidas", "Levis" and many other light industry companies. "Nike" experts noted that compared to traditional dyeing methods, this technology reduces the dyeing time by 40%, and energy use by 60% (CO2 Dying Technology, 2017). Thus, value chains are formed around each corporation that meet the principles of the concept of sustainable development and bring certain benefits, both social (good image) and commercial (cost savings).

3. THE IMPACT OF ENVIRONMENTAL AND SOCIAL INNOVATIONS ON SUSTAINABLE DEVELOPMENT

The concept of sustainable development suggests that the classic business model based on the use of cheap energy and raw materials can and should be replaced by a new cost-effective "green" business model. This means that social and environmental innovations will become one of the main directions of the development of the modern economy in the near future. The importance of social and environmental innovation for achieving sustainable development has been justified by many scientists. The result of the justifications is that the resulting mechanism of interaction between innovative factors and the country's economy provides a disproportionate effect of innovation in the form of GDP growth in the country in comparison with the costs in the innovation sector. Together, innovation has a different impact on sustainable development. Thus, technological innovations ensure the economic efficiency of the country's economy and most often contribute to the recovery of the economy from crisis situations. Environmental innovations contribute to environmental safety and environmental protection, and social innovations contribute to the elimination of public problems. The ability to innovate is becoming a key component of the competitiveness of modern companies, as well as one of the most important factors for its sustainability. Pursuing the goals of economic efficiency, enterprises should not forget about the greening of activities, the renewal of the resource base and the performance of social functions in relation to the staff and the public. The effects of the introduction of social innovations as a factor in ensuring the sustainable development of socio-economic systems include:

- Improving the quality of life of the population;
- High level of education and development;
- Increasing the life expectancy of the country's population;
- Competitive quality of life;
- Positive image of the state.

Research shows that environmental innovation, driven by sustainable development policies, can bring tangible financial benefits. The transition of companies to the production of "green" products leads to lower costs, because in this case, less raw materials, energy and other resources are used for production, the prices of which are constantly rising. In addition, companies can earn additional income through the production of higher-quality eco-products. Eco-innovations are an integral part of the concept of sustainable development. The available data on the study of the experience of initiatives in the field of sustainable development indicate that this type of development can rightly be considered "the key driver of innovation in the XXI century" (Nidumolu R., 2009). The use of environmental innovations is aimed at preserving the natural resources of the country and has a positive effect on the environment. The presented effects are indicators of the sustainable development of socio-economic systems. The attractiveness of the introduction and use of social and environmental innovations depends on the number of effects obtained. The effect of social and environmental innovations, unlike other types of innovations, is more difficult to predict and calculate, which indicates a high degree of their riskiness.

It should be noted that there are problems that create barriers for enterprises engaged in the development, implementation and use of social and environmental innovations. These problems include:

- Imperfection of the legal framework regulating innovation activities;
- The high cost of energy-saving technologies in the implementation of environmental innovations;
- High cost of implementing innovations due to high operating costs;
- Lack of own financial resources;
- Lack of economic impact from social innovations;
- Long payback period for a number of environmental innovations;
- Lack of qualified personnel (innovative managers);
- High level of innovation risks;
- Lack of information platforms for social innovation;
- Weak innovation infrastructure.

The presented problems are a serious threat to the implementation of innovative activitis of enterprises and hinder the development of the economy as a whole. To eliminate the emerging problems, the state should take measures that will lead to an increase in the intensity of the introduction of social and environmental innovations and stimulate the innovative activity of enterprises, which will ensure the sustainable development of the socio-economic system. Such measures include:

- creating a regulatory framework for the functioning of the environmental market;
- provision of tax and other benefits to enterprises in the implementation of the latest techologies aimed at reducing the negative impact on the environment, the use of non-traditional types of energy, the use of secondary resources and waste processing;
- provision of state support in the form of subsidies for innovative activities aimed at protectig the environment;
- creation of information platforms for social innovations;
- providing financial assistance for the implementation of social innovations;
- promoting the development of social entrepreneurship.

Innovations povide a strong competitive advantage for any level of sustainable development and, as a result, a high level of state competitiveness. The increase in environmental problems, the economic consequences of natural disasters, the problems of the social sphere, and the rapid reduction of natural resources dictate the need for advanced development of certain specific areas of scientific and technological research and development ("clean" energy, biotechnology, genomic medicine, new technologies in agriculture, environmentally friendly materials, green innovations, etc.). It is worth noting that at the moment, almost all developed countries are outperforming GDP growth rates over the rate of resource consumption due to the introduction of advanced technologies.

4. CONCLUSION

The need to introduce social and environmental innovations arises from the need to solve problems in the social and environmental spheres, the main of which is the deterioration of the biosphere. The main goal of environmental and social innovation is to achieve sustainable economic development. They are able to reduce costs, improve product quality, increase profits, create an image and increase the competitiveness of the enterprise. Thus, social and environmental innovations become a new criterion for sustainable economic development for enterprises.

To transition enterprises to a sustainable development strategy, it is necessary to go through the following stages:
1) bringing the company's activities to environmental standards and requirements based on regulatory legal acts;
2) creating a sustainable value chain by reducing resource consumption and reducing waste;
3) development of environmentally friendly products that are an indicator of the quality of the product;
4) implementation of new business models that prevent negative environmental impacts and provide financial benefits.

Each stage is characterized by its own problems, the solution of which is necessary for the further development of the enterprise, and the opportunities that allow the enterprise to take a leading position in the market. Experts predict that the next decade will be years of rapid growth in global production of products and technologies related to the environment and alternative energy.

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THE APPLICATION MODEL OF ORGANIZATIONAL AND PRODUCTION INNOVATIONS TO IMPROVE THE EFFICIENCY OF AN ADVERTISING AGENCY

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ABSTRACT

*It is known that in modern times, it is difficult to manage the activities of an advertising agency because of the dynamic variability of some parameters of business processes. Frequent changes in these parameters reduce the likelihood of achieving the set goals. Therefore, there is a need for the application of organizational and production innovations. The article describes the mechanism of operation of the advertising agency and for this purpose uses the concept of "state of the system" in accordance with the term base of the theory system. As is commonly known, 3 types of approaches (process approach, systematic approach, situational approach) are used more in management. The most widely used of these is the process approach. A process approach to the design and implementation of organizational and production innovations requires "engineering" skills. Therefore, the "engineering" ability is of utmost importance in building an application model to increase the efficiency of the advertising agency. At the same time, the design of the process of application of organizational and production innovations means the procedures applied consistently. These procedures allow you to create a system of purposeful actions that increase the quantity, speed and quality of direct advertising services provided to clients. Each of these procedures is a step towards achieving a specific goal. In other words, the main task in planning the process of application of organizational and production innovations is to find an answer to the following question: "What should an advertising agency that produces competitive advertising products and services look like?".....
In order to increase the efficiency of the advertising agency, the article considers the process components of the activity before moving on to the process of building a specific model for the implementation of organizational and production innovations, and then develops recommendations for the formation of an innovative activity management model to maintain the required level of competition, taking into account the positioning conditions. With the aim of enhancing the efficiency of the advertising agency, I proposed a special model for the application of organizational and production innovations. Another important issue is that the advertising company faces the negative effects of the external environment when implementing organizational and production innovations. These issues need to be considered separately. To prevent such side effects, the company should use PR, advertising, lobbying and other methods of sales promotion. For this purpose, the article describes in detail the negative impact of the advertising agency on the parameters of the external environment in the application of organizational and production innovations. In the end, some advantages of the organizational and production innovations application model to be used to increase the efficiency of the advertising agency were noted and analyzed in detail.*
Keywords: *advertising agency, organizational and production innovations, model, efficiency, competitive advertising*

1. INTRODUCTION

Referring to the theoretical and practical basis of managing innovative activities in advertising, we can say that each advertising agency is created by groups interested in this work (created by

the owners of the advertising agency to serve customers) and is a tool to achieve economic, social and political goals. . This definition is important and has nothing to do with the legal form of any advertising agency. The purpose of establishing an advertising agency is to obtain material and financial benefits. In other words, it serves to make money from the sale of advertising products and services. To achieve this goal, every advertising agency must work profitably [6]. Therefore, it needs to use innovation. From this viewpoint, the organizational and production innovations has a very important role to play in increasing the efficiency of the advertising agency.

2. MECHANISMS OF ADVERTISING AGENCY

To describe the activities of an advertising agency, we will use the term "state of the system" in accordance with the term base of system theory. Using this concept, it is possible to identify areas of application of organizational and production innovations in order to increase the quantity, speed and quality of direct advertising services provided to customers. The state of the system means a set of parameters (internal and external) that determine the course of processes occurring in the system. So, the indicators of the system parameters for a certain period of time form the "state of the system." The operation of an advertising agency that provides (ie operates) advertising products and services is characterized as a change in the state of the system in a particular space. In other words, the operation of an advertising agency is understood as the transition (change) of the system from one state to another [8]. The state of the system is a very versatile concept. Therefore, using this concept makes it possible to accurately determine the conditions for building a specific model for the application of organizational and production innovations. For example, a competitive strategy can be viewed as an innovation project. Because this strategy involves changing the position of the advertising agency in a particular space. It is common knowledge that a modern advertising agency must interact with a large number of customers in order to maintain a competitive position. From this viewpoint, any advertising agency can be viewed as a complex system. In particular, the theory and practice of innovation management uses the generalized term "business process" to describe these processes. So, the "advertising business process" is a set of different types of activities. Different types of resources are used at the "start" of such business process. As a result of the activity, an advertising product is created at the "end" of the process, which is valuable for the consumer. You can also consider the work of any advertising agency as a process of combining activities at the highest level. The implementation of an advertising business process always leads to the creation of added value [2]. It is known that 3 types of approaches are used in management. The most widely used of these is the process approach. A process approach to the design and implementation of organizational and production innovations requires "engineering" skills. Thus, the "engineering" ability is very important in building an application model to increase the efficiency of the advertising agency [1]. At the same time, the design of the process of application of organizational-production innovations means the procedures applied consistently. These procedures allow you to create a system of purposeful action that increases the number, speed and quality of direct advertising services provided to customers. Each of these procedures is a step towards achieving a specific goal.

3. PLANNING THE APPLICATION OF ORGANIZATIONAL AND PRODUCTION INNOVATIONS

At the heart of the planning process for the application of organizational and production innovation is the development of a formal logical model that will enhance the effectiveness of the advertising agency. In the logistics paradigm (planning) corresponding to advertising business processes, individual operations, corresponding resources and performers are indicated.

The implementation of the advertising business process is characterized by events (situations). The implementation of an advertising business process is understood as a reaction to changes in the parameters of the external or internal environment (for example, changes in tax rates or prices for advertising products, dismissal of employees, introduction of new equipment in a warehouse, conclusion of contracts, etc.). In some cases, the term "service response logistics" (SRL) is used [7]. This concept is perceived as a process of coordination of logistics operations, which is important in the implementation of more effective advertising services in terms of costs and meeting the needs of consumers. Thus, in the process of producing advertising products and services, the advertising agency can be approached as a system that provides a multi-level service. In particular, we can interpret the management of innovation activities in an advertising agency (related to the application of organizational and production innovations) as the regulation of the parameters of logistics operations or advertising business processes. Such an approach forms the basis of accepted modeling standards (eg, 1DEF methodology), structural analysis methodology (Structured Analysis and Design Technique, SADT), and functional-value analysis (Activity Based Costing, ABC) and is implemented through a number of sophisticated programs (ARIS, IDEF / Design, Rational Rose, SAP R / 3, "Galaxy", "Parus", "Etalon", etc.) [4]. An advertising agency is an open-ended system that builds its activities in relation to the external environment. Based on this, we can say that one of the main tasks of managing innovation activities (application of organizational and production innovations) in an advertising agency is to take a certain position in the external environment. It is also about finding the optimal option in the network of resource flows to increase the speed, quality and number of direct advertising services provided to customers. This is due to the formation of some parameters of the advertising business process (for example, sales volume of advertising products and services, tax rates, energy tariffs, market prices, exchange rates, etc.) in the external environment of the advertising agency. It is these parameters that often manifest themselves as factors limiting further development. Moreover, it is worth to note that the nature of these factors will not be so important for the agency (only their dynamics should be considered) if all advertising business processes are clearly defined and the correct parametric model has been created for the application of organizational and production innovations to increase the effectiveness of the advertising agency. It must be borne in mind that the division of parameters into "external" and "internal" is conditional and is determined by the goals of modeling. As a result of the dynamic variability of some parameters of the advertising business process, it is difficult to manage the activities of the advertising agency. Frequent changes in these parameters reduce the likelihood of achieving the set goals. Therefore, there is a need for the application of organizational and production innovations. Several positioning tools are currently known: SWOT-matrix, PEST-matrix, SNW-matrix, model BCG, GE / McKinsey, ADL-LC, SPACE, etc. Most of these tools are based on the results of the Delphi approach or qualitative analysis. Therefore, there are challenges with numerous inconsistencies in the formation of specific models. Also, no clear criteria have been established for these tools to classify external and internal environmental factors. Therefore, the practical significance of using these tools for managing innovation in advertising is very limited [9]. In our opinion, it is important to determine the optimal position of the advertising agency in the overall economic system with the aim of developing and implementing organizational and production innovations. This requires a constant search. The position of the advertising agency should be defined in such a way as to increase the speed, quality and quantity of direct advertising services provided to customers. Determining such a position of an advertising agency is more rigid and difficult than existing approaches. Nevertheless, the problem is solved with great mathematical difficulty. Rather, it requires the creation of a classical form of optimal management of an abstract object. That's a very difficult question.

4. APPLICATION PROCESS OF ORGANIZATIONAL AND PRODUCTION INNOVATIONS

The process of application of organizational and production innovations can be approached from two perspectives:

1) Application of organizational and production innovations as modeling of the future situation;
2) Application of organizational and production innovations as a management process. [7].

Let's focus on the second point. In the classical theory of optimal regulation, the concept of "situation" is defined as a certain characteristic of the system. This concept not only reflects the current position of the organization, but also affects its future. Despite the ambiguity of this definition, an important point is made here. This point is that in order to increase the efficiency of the advertising agency, the process of implementing organizational and production innovations is often perceived as a means of managing the "future" situation. In view of all the above, we would recommend that the application process of organizational and production innovations be considered as a tool that affects the actual state of the agency's innovation environment. In other words, the process of applying organizational and industrial innovations should be aimed at achieving a given situation envisaged to enhance the speed, quality and quantity of advertising services provided by the agency. Another important point is that the advertising company encounters the negative effects of the external environment when implementing organizational and production innovations. These points need to be considered separately. To prevent such side effects, the company should use PR, advertising, lobbying and other methods of sales promotion (Figure 1).
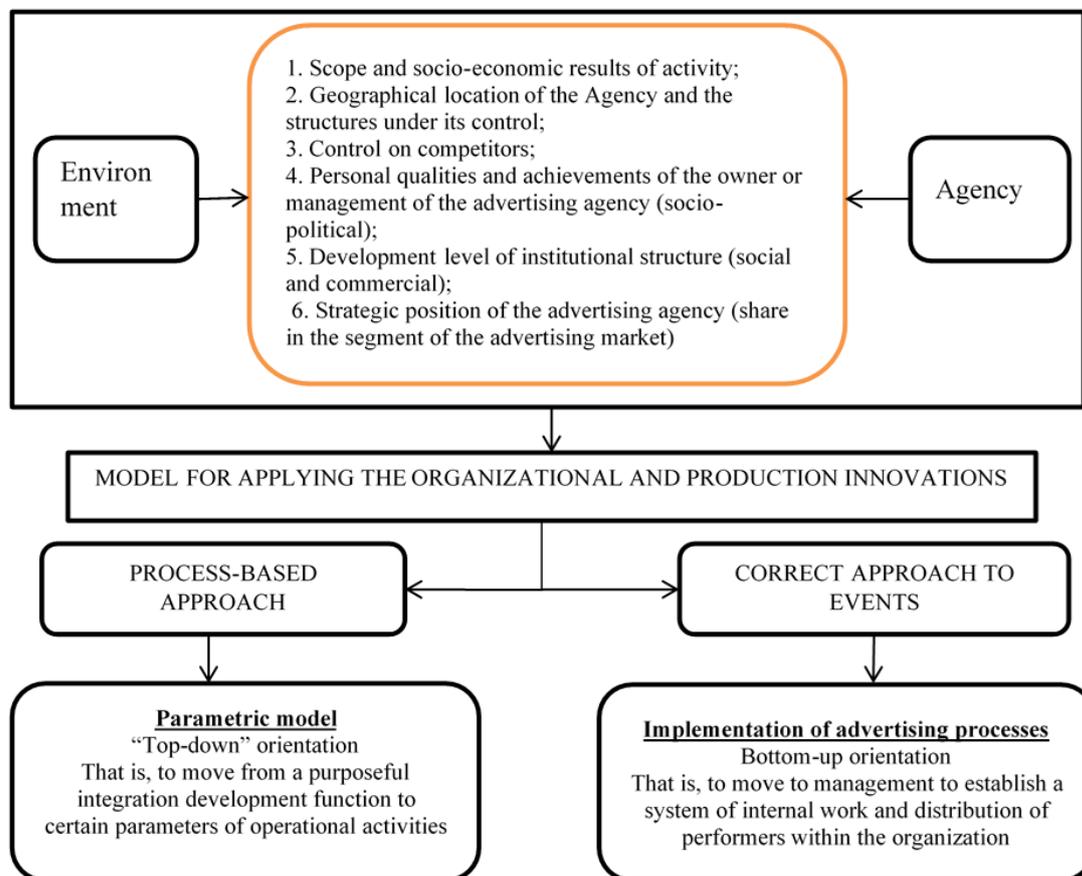
Figure 1: Adverse effects of advertising agency on the parameters of the external environment in the application of organizational and production innovations

5. MODEL FOR APPLYING THE ORGANIZATIONAL AND PRODUCTION INNOVATIONS

Due to the diversity and practical importance of cybernetic algorithms, we can say that the model of application of organizational and production innovations is superior to other models that reflect different aspects of the activities of the advertising agency (financial, industrial, organizational). Through this model, the application of organizational and production innovations regulates existing resource flows. Therefore, as an activity breakdown of the management system, it is necessary to form a serious accounting policy, collect marketing information, control the external and internal environment. Summarizing all of the above on the formation of a model for the application of organizational and production innovations to increase the effectiveness of an advertising agency, we can conclude that the operation of an advertising agency in modern economic conditions is a unique, unpredictable (stochastic) and purposeful process. During this activity, the advertising agency moves from one situation to another ("changing the situation in space"). The main problem of innovation management in an advertising agency is to study the impact of various internal and external events on the parameters of advertising business processes and to correctly regulate these parameters to achieve an efficient production system. Regulation (management) is carried out through the adoption and implementation of management decisions [10]. In addition to all the above, when formulating a specific model for the application of organizational and production innovations, it should be borne in mind that statistics on innovation in Azerbaijan began in 1994 in connection with the transition to a market economy. The main reason why most advertising agencies are not ready for the realities of the current economic situation in the early stages of the transition to a market economy is related to the planned distribution system of economic relations (administrative command system). Thus, the conditions of the external environment were not decisive in this system. There were no advertising agencies in the administrative command system at all. The first advertising agencies began to appear in the first period of transition to a market economy. Therefore, agencies were required to adapt to a new dynamic environment in which all conditions were dictated by the market. In other words, advertising agencies had to react to the external environment, predict future changes, that is, develop mechanisms for managing innovative activities. The development of a model for the application of organizational and production innovations was also included in this mechanism. In a view to increase the efficiency of the advertising agency, I proposed a special model for the implementation of organizational and production innovations (Figure 2).

Figure following on the next page
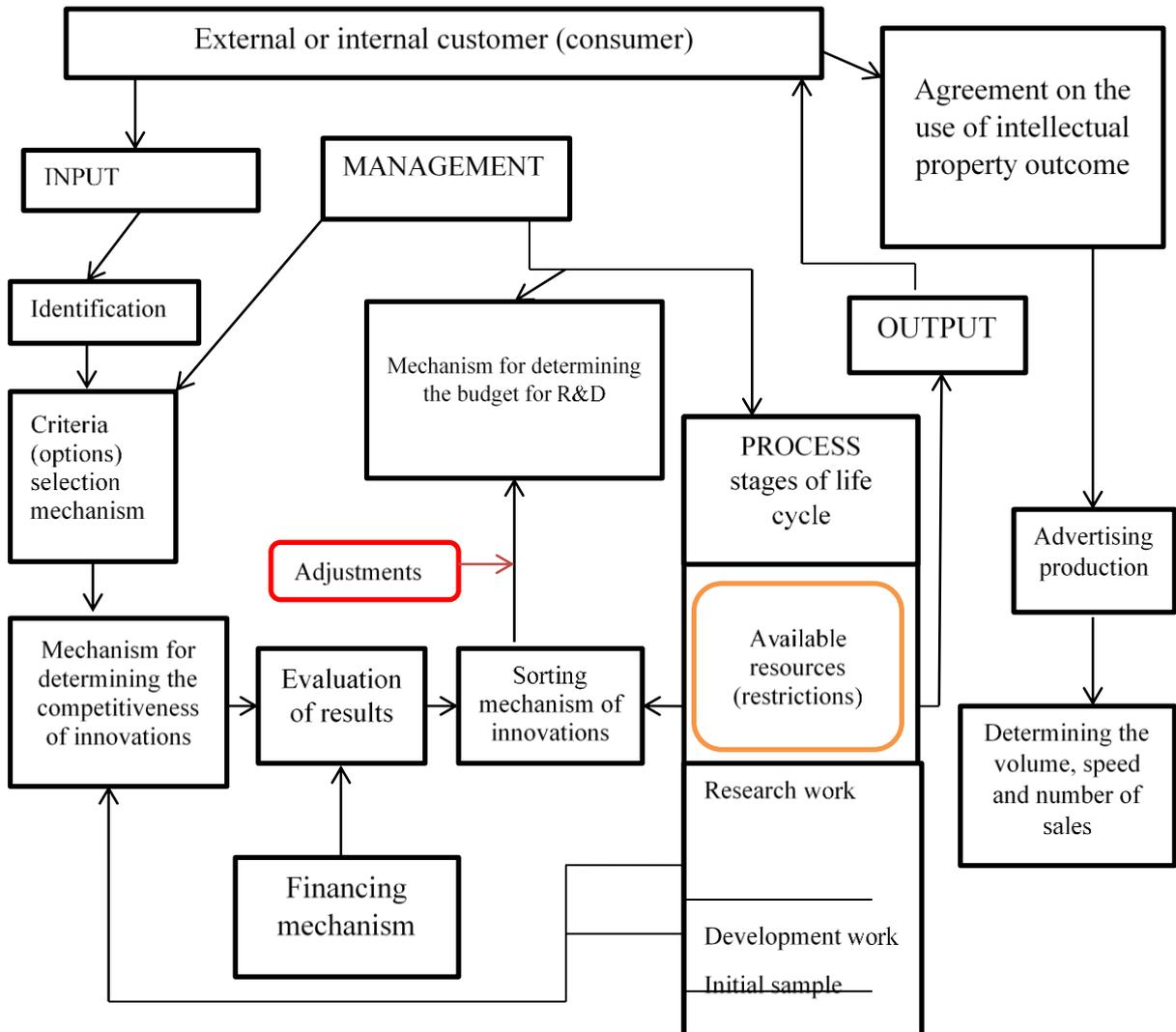
Figure 2: Model of application of organizational and production innovations to increase the efficiency of the advertising agency

This model requires consideration of the following aspects in accordance with the theory and practice of organizing innovative activities:

1) The process of introducing innovations at different stages of the life cycle of an advertising agency should be divided into stages taking into account the limited resources;
2) A criteria mechanism should be developed that includes evaluation criteria for scales. This mechanism should be based on a unified approach to the assessment of qualitative and quantitative parameters of innovation;
3) The future development of the advertising market must be forecasted. In this case, the future market share should be determined by modeling the specific competitive advantages of the agency in comparison with competitors in the existing market segment.

The way to implement the organizational and production innovation model developed by us is as follows:
- Before innovations are implemented, their suitability is determined by the level of production technology, the degree of complexity and the state of design. In other words, innovations are subject to preliminary examination in accordance with the forecasts of the future economic activity of the advertising agency.

- The importance of evaluation criteria in the criteria mechanism is determined based on the priority areas of the advertising agency's innovative activities (therefore, this section is variable). That is, the assessment of organizational and production innovations is carried out on a scale in accordance with the priorities of the competitive strategy of the advertising agency. The market distribution of new advertising products and services is assessed by determining the competitiveness of these products and services. In this case, it is important to predict the possible share of the advertising market segment and sales revenue.
- Afterwards, investment indicators are determined with respect to the application of organizational and production innovations. It is specified by the production and sales budget of advertising products and services.
- So, the application of innovations goes through several stages of "filtering". The methods of innovation management presented here act as a filter. The ranking of innovations in the introduction is carried out taking into account the investment indicators of their financing, the competitiveness of new advertising products and services in the market, the degree of compliance of innovations with the competitive strategy of the advertising agency and other indicators.
- Subject to the hierarchical sequence, innovation actions are identified at the next stage in accordance with the existing production resources (production capacity, people, capital, the budget of the advertising agency).

6. CONCLUSION

Today, the process of implementing organizational and production innovations in an advertising agency has become an important element in the value chain of the advertising business. From this point of view, the main priority of the innovative activity of each advertising agency in a market economy is to focus on the customer and production and to purchase high quality and competitive equipment. In this context, there is a need to revise guidelines for the evaluation of research and development, as well as to develop new approaches, tools and mechanisms for the management and evaluation of innovative activities in the advertising agency. There are some advantages of the organizational and production innovation model developed by us in order to increase the efficiency of the advertising agency. These advantages include:

1) Permanent monitoring of the advertising market is possible in order to assess the competitiveness of new advertising products and services.
2) It is possible to determine the compliance of the applied innovations with the development strategy of the advertising agency.
3) A unified approach is used to assess the economic and quality parameters of innovative activities.

Summarizing all of the above, we can conclude that any advertising agency using the model we have developed can always assess the competitive advantages of the equipment purchased and the advertising products and services produced in modern market conditions.

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PROBLEMS OF RECOGNITION AND METHODOLOGY OF ACCOUNTING FOR CAPITALIZATION OF INVESTMENT COSTS IN LONG-TERM ASSETS

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ABSTRACT

It is known that investing in the acquisition and creation of long-term tangible and intangible assets is risky because the value of such assets is recovered over a long period and their liquidity is not very high. Therefore, when making investment decisions in this area, different information is always used, generated from different sources, among which the financial statements play an important role. However, to the question - whether the financial statements contain useful information for making effective investment decisions - there is no unequivocal and comprehensive answer. The paper proves that the quantity and quality of such information largely depends on what principles, criteria and rules are the basis of the methodology for accounting of its formation. The analysis and evaluation of current formal and informal prescriptions, judgements and methods of capitalising the costs of creating certain types of long-term tangible and intangible assets are given. This paper drives the conclusion that the information developed on the basis of the currently applied normative does not allow the formation and application of a unified system of indicators for the objective assessment and analysis of the economic and social consequences of investments in the considered assets.
Keywords: assets, costs, investment, capitalisation

1. INTRODUCTION

The COVID-19 pandemic has led to a multi-component crisis in the world. The most difficult situation has developed in the economic sphere: there has been a decline in production, the volume of goods and services produced has significantly decreased, and unemployment has risen. The close economic interconnections and high economic interdependence between the countries that existed before the pandemic were noticeably weakened or completely interrupted, which also led to large losses. It is obvious that the restoration of the previous volume and pace of economic development will require a lot of investments, the bulk of which will have to be directed to industries and spheres producing goods and services that can significantly reduce unemployment, significantly reduce the burden of governments to pay unemployment benefits, improve the provision of medical and other vital important services to the population. Meanwhile, as observations show, companies are more inclined to expand investment activities in the financial sphere than in the material one. The need for more accelerated development of the material sphere was once insisted by J.M. Keynes, who warned that "Society as a whole

cannot create conditions for future consumption with the help of financial transactions alone, it can only do this by expanding the physical volume of current production "(1, p. 167). But society is called upon to create conditions that would allow companies to more profitably invest in production activities. In the presented work, accounting for investments in long-term tangible and intangible assets is chosen as the object of research, and the issues of determining the essence, function and classification of investments as well as recognition, assessment and accounting of investment costs are selected as the subject of research. The approaches of scientists-economists regarding the essence and functions of investments are critically generalized, the applied criteria for capitalization and recognition, the current methodology for accounting for investment costs in long-term tangible and intangible assets are considered. This research also presents individual vision of the essence and functions of investments, which were substantiated and formulated, criteria that could be used as the basis for the recognition and accounting of capitalization of investment costs were proposed, an accounting scheme for reflecting information on capitalized and not capitalized investment costs in the financial statements of organizations was proposed.

2. ESSENCE AND FUNCTIONS OF INVESTMENTS

All economists - scientists acknowledge that the concept of "investment" is considered one of the most widely used categories in the economic sciences. However, as proved by the study, the theory of these sciences has not yet developed a unified definition that would contribute to an unambiguous understanding of the essence and functions of investments, and would make it possible to form the most accessible and useful information about investment operations and processes. A truthful definition of the essence and economic content of the concept of "investment" is of particular importance for the development of theory and methodology for accounting for investment costs for the acquisition and creation of assets. We can say that the usefulness of accounting information used to analyze and evaluate investment situations and decisions in companies is based precisely on the semantics and pragmatics of the studied concept. However, with regret we have to admit that in the theory of accounting, the concept of "investment" remains almost unexplored. But in economic theory, financial management and some other sciences there are numerous and diverse interpretations of the essence and functions of investments. The word "investment" comes from lat. *Investire*, and literally means to dress. In the Cambridge Explanatory Dictionary, the concept of "investment" means an investment or act of investing money, effort, time to buy new stocks, cars and other property, as well as the act of buying stocks, bonds, in order to make a profit (2). The Oxford Explanatory Dictionary gives a slightly different interpretation of investment. It characterizes "investment" in two ways: **first**, it is defined as the acquisition of means of production, such as machinery and equipment for an enterprise in order to produce goods for future consumption. Such an acquisition is called *capital investment*; **secondly**, as the acquisition of assets, for example, securities, works of art, deposits in banks or building societies, etc., primarily in order to obtain financial returns in the form of profit or capital increase. This type of investment is called *financial investment* (3). A. Smith interpreted *investment* as investing capital to improve land, to purchase useful machinery, tools and stocks that generate income or profit. In his opinion, fixed capital can bring income or profit only in the process of use, and working capital - in the process of circulation (4, p. 100). Unlike A. Smith, J.M. Keynes construed investment as investing the capital not only to generate income or profits, but also to create effective aggregate demand, contributing to the development of production and reducing unemployment (1, p. 102, 167). Thus, JM Keynes, as it were, "legalized" two functions for investments. In modern economic literature, as Paul A. Samuelson and William D. Nordhaus emphasize, most macroeconomists use the term "investment" to denote an increase in the stock of productive assets - capital goods: machinery and equipment, buildings and structures, inventories.

They accept such investments as capital investments. They also refer to investments as the cost of purchasing securities and call them financial or portfolio investments. According to Paul A. Samuelson and V. D. Nordhaus, investments at the macro level, on the one hand, affect output through aggregate demand, and on the other, lead to an increase in output through capital accumulation. They also note that the main goal of an enterprise making an investment is to make a profit (5, p. 472-473). J. Friedman and N. Ordway define investment as - investing funds to generate income or profit (6, p. 441). According to other economists, investment is an asset or item that is acquired for the purpose of generating income or increasing value (7, 8). There are other formulations of the essence of investment (9,10,11). In the post-Soviet space, most authors also understand investment or capital investment as investing in real or financial objects in order to generate income, profit, interest, etc. (12, p. 53, 13, p. 319, p. 322, 14, p. 26, 15, p. 17-18). According to many representatives of economic theory, investments mainly perform the following functions: regulatory, distributive and stimulating (16). In another source (12), three investment functions are also distinguished: regulatory, distributive and indicative. In our opinion, the regulation function and the distribution function can hardly reveal the essence of investment, since investments, or funds allocated for investment at all levels, are themselves objects of regulation and distribution, as for the stimulating function, it can be argued that the stimulus are not investments, but their final results, that is, economic and social benefits from investments. By the indicative function of investment, the authors mean a regulation or control mechanism to ensure an equilibrium state of the economic system. The processes of social development cannot be regulated with the help of investment activity alone, they are largely regulated by accumulation, demand, supply and other factors. Igor A. Blank in his book entitled "Investment Management" before defining investment, gives ten characteristics: 1. Investment as an object of economic management; 2. Investments as the most active form of involving accumulated capital in the economic process; 3. Investments as an opportunity to use accumulated capital in all its alternative forms; 4. Investments as an alternative opportunity to invest capital in any objects of economic activity; 5. Investments as a source of generating the effect of entrepreneurial activity; 6. Investments as an object of market relations; 7. Investments as an object of ownership and disposal; 8. Investments as an object of temporary preference; 9. Investments as a carrier of a risk factor; 10. Capital as a carrier of the liquidity factor (15, p. 10-16). I. A. Blank describes in detail the content of each of these characteristics. In his opinion, the essence of investment is determined by these characteristics. It is possible to formulate some general objections to the characteristics given by I. A. Blank. So, investments as such cannot act in the form of real property, investment - is the process of investing funds in the form of cash and other resources for the acquisition or creation of assets. Therefore, direct objects of management, and therefore, objects of accounting are cash and other assets. As F. Fabozzi correctly emphasizes, investment management is a process of money management (17, p. 1). It is not investments that generate the effect, but specific tangible, intangible and financial assets. The carrier of the risk factor is not investments as such, but assets created or acquired through investments. Finally, the very definition that I. A. Blank formulated regarding the essence of investment also confirms the correctness of our general conclusion that the characteristics he listed cannot reveal the essence of the category of "investment". Let us give his definition in full: "Investments of an enterprise represent the investment of capital in all its forms in various objects (instruments) of its economic activity with the aim of making a profit, as well as achieving other economic or non-economic effect, the implementation of which is based on market principles and is associated with factors of time, risk and liquidity"(18, pp. 17-18). We believe that it is not the characteristics consisting of ten points that explain the essence of the concept of "investment", but the content of the very definition of "investment", where I. A. Blank reveals the essence and functions of investments quite well. The acceptability of I.A. Blank's definition is explained by the fact that he considers investments as an investment not

only for making a profit, but also as an investment for achieving a different economic or non-economic effect, while not revealing the essence of a different economic and non-economic effect. But still he is one of the few authors who takes the definition of "investment" out of a narrow semantic framework. The essence of investments, like all other economic categories, is determined by the functions that they perform or are called upon to perform. As many representatives of economic theory rightly emphasize, the ultimate goal of all production is the satisfaction of needs, which inevitably involves investment. Without investment, no society can coexist, even if these investments do not bring profit to the entrepreneur or company for some time. Therefore, the production of goods and services is the first natural function of any investment, and therefore of the resources allocated to achieve this goal. At the same time, making an investment in the production process, an entrepreneur (both a manufacturer and an investor) cannot function without the assumption of obtaining a certain income from the sale of goods and services. The revenue or the price of products that the consumer or society must pay for should just contain the income or profits of the entrepreneur or company. Providing income or profits is the second natural function of investment. These functions inherent in investments have always been and will be present regardless of space and time, socio-political structure and ideology of society. They express public and private / corporate interests, are interrelated and complementary. It is possible to change the volume, types, forms, directions, composition, sources of investment financing, elements of its regulation, distribution and stimulus, but these changes will not in any way affect its functions. Based on the abovementioned, the essence of investment has been formulated by us as follows: *investment stands by investing monetary and other resources in order to meet the needs of society in goods and services, as well as in order to generate income and profit for individual and institutional investors.*

3. PROBLEMS OF CAPITALIZATION AND RECOGNITION OF INVESTMENT COSTS IN THE COST ACCOUNTING AND REPORTING SYSTEM

In general economic and accounting literature, investments are classified according to numerous features, most of which are purely theoretical, or completely abstract in nature, and therefore they do not find application in the financial accounting and reporting system, information is not generated on them. Accounting and reporting of investment costs is carried out in three classification groups: a) for tangible assets; c) for intangible assets; c) for financial assets. The definition and classification by themselves do not form a specific value or information on investments, the main methodological element that generates information is the assessment of investment costs. Valuation methods and rules are usually prescribed by the relevant national and international accounting standards. However, not all assessed costs are recognized, that is, capitalized and recognized as part of the initial cost of the created and acquired long-term assets. The problem of capitalization and the recognition of certain investment costs is widely discussed in the accounting literature of Western countries. As the study shows, these discussions are mainly about borrowing costs and overheads. However, specific requirements and criteria for the recognition and capitalization of these and other costs are always set in a regulatory manner. Companies maintaining accounting and reporting in accordance with IFRS (International Financial Reporting Standards) assess and recognize the capitalization of investment costs associated with the creation and acquisition of long-term tangible and intangible assets in accordance with the requirements of the Conceptual Framework for the Presentation of Financial Statements, IAS 16, IAS 38 , IAS 40, IAS 41, IAS 23, IFRS 3, etc. Conceptual frameworks define general rules and criteria for recognition, and standards establish a specific list of cost items subject to and not subject to capitalization, that is, recognition. In this case, capitalization or recognition is a reflection of the investment costs incurred as the initial or historical cost of a long-term asset. The main criterion for recognition is the compliance of such costs with the definition of an asset.

In other words, costs are allowed to be capitalized and, therefore, recognized as a specific asset only if: (a) it is probable that the future economic benefits associated with them will flow to the entity; (c) such costs can be reliably measured. This shows that the main purpose of capitalization of costs is to obtain economic benefits in the future. This is a purely microeconomic approach to the essence of investment, which means that when investing, acquiring and creating long-term assets in companies, preference is given to only the second investment function. With all this, in our opinion, the probability of obtaining economic benefits cannot be used as the basis for capitalization and cost recognition, because, firstly, the recognized value always reflects a specific amount, while in the recognition process, "probability" is not expressed by any value, that is, it is an abstract concept, and secondly, the creation of economic benefits is one of the two natural functions of assets, therefore it is unnecessary and inappropriate to put the obvious thing in the basis of recognition. Since capitalization or recognition occurs on the basis of actual investment costs, it is sufficient that the recognition criterion is only the value of these costs. This implies another circumstance, that the recognition cannot be directly conditioned by the quality or usefulness of information, for the reason that the quality or usefulness of accounting information is also not amenable to value measurement. Despite this, the Conceptual Framework explicitly emphasizes that assets and other elements of financial statements should be recognized only if their recognition provides users with information that is useful, that is, relevant and truthful (18, p. 49). Neither relevance nor truthfulness has a specific value or limited cost boundaries. If the information was not used or did not have a significant impact on the investment and other decisions taken, this does not mean that it should not be recognized in the reporting. Moreover, if the recognized information is formed exclusively according to the prescriptions of specific standards, then how it may turn out to be inappropriate and untruthfully presented. The degree of relevance and truthfulness of the information, except for cases when it is intentionally or unintentionally distorted by the preparers of the statements, entirely depends on the very information-generating requirements of a particular standard. Thus, when capitalizing and recognizing investment costs as the initial cost of an asset, it is advisable to use a single general criterion - the reliability of cost estimates. However, the capitalized and recognized value depends not so much on the reliability of the estimate, but on the choice of the composition of cost items subject to and not subject to capitalization. This issue has been and is the subject of extensive discussion in the accounting literature. Given the limited scope of this work, as well as the fact that the composition of such articles is determined not as a result of discussions, but in a formalized manner, we will try to state our position in comparison with the prescriptions of certain standards. Almost all standards divide investment costs: (a) directly attributable to initial cost; c) not included in the initial cost, that is, respectively, for capitalized and non-capitalized costs. At the same time, in relation to certain costs, different approaches are used. So, for example, in accordance with IAS 16, the initial cost of fixed assets can be recognized or capitalized only for the amount of direct costs, which include: costs of employee benefits arising directly from the construction or acquisition of an item of fixed assets; site preparation costs; initial costs for delivery and handling; installation and assembly costs; the cost of verifying the proper functioning of the asset, after deducting the net proceeds from the sale of items produced by bringing the asset to its intended location and bringing it to the desired condition; and the remuneration for professional services rendered [(IAS) 16 paragraph 17]. The standard recognizes these costs as the cost of an asset when the asset is brought to a location and condition suitable for use in accordance with the intentions of management. This requirement of the standard is conventionally referred to as the degree of readiness of an asset for use. If we proceed from this requirement, then it turns out that all those costs that do not directly meet this requirement should not be capitalized. The standard includes a fairly large number of articles [(IAS) 16, paragraphs 19, 20 and 23] to such costs.

Of course, most of the costs provided in these points, not only directly, but also indirectly, are not related to the creation of the asset and therefore it is legitimate that they should not be capitalized. However, in relation to some costs, it is advisable to revise the current approaches. These costs primarily include borrowing costs that arise in connection with the acquisition, construction or production of long-term assets. Considering that, for the overwhelming majority of companies, borrowed funds are an important and sometimes the main source of investment financing, the issue of capitalizing borrowing costs becomes especially relevant. As you know, the procedure for capitalization, suspension and termination of capitalization of such costs is governed by International Standard (IAS) 23. According to paragraph 20 of this standard, an entity is required to suspend capitalization of borrowing costs if the active development of a qualifying asset is interrupted for extended periods, and paragraph 21 requires the termination of capitalization borrowing costs, if practically all work required to prepare the qualifying asset for its intended use has been completed. It follows that all borrowing costs outside the scope of these items are not capitalized, and are not recognized as an initial part of the assets created or acquired, and therefore should be written off to the profit or loss of the organization. These requirements of the standard also apply to intangible assets, investment property. In accordance with the requirements of IAS 16, IAS 38, IAS 40 such costs as administrative and general overhead costs, interest amounts arising as the difference between the price equivalent on the condition of immediate payment in cash and the total amount of the payment, as well as excess material losses, payment costs labor and other resources incurred to build the asset by personal means are also not capitalized and are not recognized as part of the cost of the assets. IAS 38 also does not permit the capitalization and recognition of costs arising from the research phase of creating an intangible asset under an internal project. In order to assess which costs of self-generated intangible assets can be capitalized and recognized, and which cannot, IAS 38 requires an organization to subdivide the process of creating an asset into two stages, that is, the research stage and the development stage. Further, the standard clearly and unambiguously states that no object, which is the result of research or the implementation of the research stage in the framework of an internal project, shall not be recognized as an intangible asset. All costs of this stage are to be recognized as an expense when incurred [(IAS) 38, paragraph 54]. In accordance with IAS 38, an entity may recognize an item as an intangible asset if: (a) the item is the result of the development stage; (c) the entity can demonstrate a willingness to meet the conditions prescribed in paragraph 57 of the standard; (c) in some cases, an entity may demonstrate at the development stage that the asset will generate probable future economic benefits. We have already discussed why the probability of generating future economic benefits cannot be taken as a criterion for capitalization and asset recognition. The conditions written in paragraph 57 of the standard that an entity must fulfill when it recognizes an item as an intangible asset are reasonable and unobjectionable. As for the requirement that an object can be recognized as an intangible asset, if it is the result of the development stage, then the following question arises: *is it possible to create an intangible asset within the framework of an internal project without costs at the research stage?* There can be two answers: 1. No, an intangible asset cannot be created; 2. Yes, an intangible asset can be created. There is no doubt that the probability of the first answer being correct is one hundred percent, while the probability of the second being correct is zero percent. Based on these considerations, we can say the following: if the costs at the research stage did not allow the transition to the development stage of an intangible asset, then writing off all costs associated with the research stage to expenses is indisputable and inevitable; if the costs at the research stage made it possible to move to the development stage and the development stage costs give the organization the basis to demonstrate the possibility of creating an intangible object, then the research costs should be capitalized and recognized as part of the initial cost of this asset. In our opinion, borrowing costs, whether the asset is qualifying or not , regardless the degree of

its readiness for use, administrative and general overhead costs, interest amounts arising as the difference between the price equivalent subject to immediate payment in cash and the total amount of the payment, as well as excess losses of materials, labor costs and other resources incurred when creating an asset by own efforts (if these losses were not caused and directly related to the activities or inactivity of the organization itself) should also be capitalized. For the validity of such a conclusion, it is enough to answer such a question - if the assets were not acquired and / or created, would such costs arise? There is only one answer to this question - no. Therefore, any such costs, in our opinion, should be capitalized and recognized as part of the initial cost of the acquired or created through investment asset. In favor of this idea, it is possible to give an argument that the current accounting methodology, according to which all these costs are attributed to the expenses of the period, according to the authors, distorts the real content of investment situations, investment activities of companies, negatively affects the current financial position and current results of activities. So, non-capitalization and non-recognition of the costs in question, and as a consequence of this, writing them off to the expenses of the period, firstly, leads to the fact that the value of long-term assets created or acquired through investments becomes underreported, and secondly, it increases losses or reduces the amount of gross profit from general activities and reduces the amount of income tax, thirdly - reduces the responsibility of the personnel directly involved in managing the investment activities of the company; fourthly, leading to a decrease in the amount of total capital, it worsens the ratio between the capital and the liability of the company, etc. Currently, no financial report contains absolutely complete information on the amount and movement of investment costs, including capitalized and non-capitalized costs. IAS 7 establishes the procedure according to which only those costs that entail the recognition of an asset in the statement of financial position can be classified as an investing activity. The same standard only requires disclosure of cash payments associated with capitalized costs of acquiring fixed assets, intangible assets and other long-term assets, and cash receipts from the sale of such assets. In our opinion, these indicators cannot give a complete picture of the investment activities of organizations. In our opinion, there should be a separate line item in the statement of financial position that reflects the amount of capitalized costs in progress, and in the statement of profit or loss and other comprehensive income - an item showing the amount of uncapitalized costs that are to be written off to the profit or loss of the organization. To generate such information, it is necessary for organizations to use an appropriate synthetic account for each type of long-term assets, for example, under the name "Investment costs for intangible assets". On such accounts, it is advisable to keep separate records of capitalized and non-capitalized costs. At the end of each reporting period, information on costs capitalized and recognized as part of the initial cost of the related non-current asset, as well as information on unfinished capitalized costs, should be transferred from such accounts to the statement of financial position; to the statement of profit or loss and other comprehensive income - information about not capitalized costs. The information generated under this accounting scheme will make it possible to separately analyze and evaluate the investment activities of companies.

4. CONCLUSION

The overwhelming majority of authors disclose the essence of investment from a micro-level position, they define investment as an investment of capital or funds in order to generate income, profit. Other authors also consider investments at the macro level and note that investments at this level provide the current output of goods and services, and their growth through capital accumulation. There are economists who characterize investments both at the micro and at the macro level. In their opinion, investments are made in order to generate income and profits through the production of goods and services. However, the economists who adhere to this position are not many.

Some economists interpret investment as an asset or income-generating item. For a more complete disclosure of the essence and functions, investments are associated with numerous characteristics that are incompatible with the actual semantics and practical function of the reviewed concept. We believe that the concept of "Investment" should be understood as the process of investing money and other resources in order to meet the needs of society in goods and services, as well as to generate income and profit for investors. Investment creates potential opportunities for combining public and corporate interests. Specific information about the amount of investment is formed not by defining and classifying investments, but by the main methodological element, that is, the assessment of investment costs. Valuation methods and rules are prescribed by the relevant national and international accounting standards. Not all estimated costs are capitalized and recognized as part of the initial cost of the non-current assets created and acquired. International standards divide investment costs into capitalized, that is, directly recognized at initial cost, and not capitalized, that is, not recognized at initial cost. In general, for such a division of costs, the following general and particular criteria are established:
- the probability of receiving economic benefits in the future from the investment object;
- the reliability of the assessment of the value of the asset;
- the degree of readiness of the asset for use;
- the stage of implementation of costs, etc.

The probability of obtaining economic benefits cannot serve as a criterion for capitalization and recognition of investment costs. Since in the process of recognition, the "probable economic benefit" is not expressed in any quantity, that is, it is an abstract concept. Capitalization or recognition is always expressed in actual costs, therefore it is sufficient that the recognition criterion is only the value of such costs. The study and logical judgment allows us to talk about the need and feasibility of capitalization and recognition of the initial cost, along with directly related costs and the following costs: borrowing costs, whether the asset is qualifying or not , regardless the degree of its readiness for use, administrative and general overhead costs, interest amounts arising as the difference between the price equivalent subject to immediate payment in cash and the total amount of the payment, as well as excess losses of materials, labor costs and other resources incurred when creating an asset by own efforts (if these losses were not caused and directly related to the activities or inactivity of the organization itself); costs at the research stage, provided that the costs of this stage allow you to move to the development stage, and the costs of the development stage give the organization a reason to demonstrate the possibility of creating an intangible object.

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THE ECONOMIC IMPACT OF THE COVID-19 PANDEMIC ON EUROPE AND ACTION STEPS OF EUROPE

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ABSTRACT

Covid-19 (Coronavirus), founded in China in 2019 and continues to challenge the world, soon became the world's principal enemy. The epidemic has caused the worst global recession since the "Great Depression" of the 1930s. The closure of trade routes, economic shutdown, reduction of production, closure of many jobs has contributed to a remarkable slowdown in the economy. Economists do not rule out that the process of self-recovery may take a long time. However, in our opinion, economic recovery will happen quickly. We believe that after the pandemic subsides, the European economy will recover and soon return to the pre-pandemic economic situation. The recession did not go unnoticed by Europe. What areas did the European life slow down, what did it do to prevent the economic downturn, and when did the vaccination process begin? We will report on such topics.
Keywords: *covid-19, economic influence, European Union, economic predictions, SME, vaccination*

1. INTRODUCTION

The Covid-19 pandemic, a significant economic problem in recent years, continues to spread around the world. Mutated forms are also common in the world. European leaders are troubled to succeed in an agreement on a way to manage the coronavirus pandemic. The latest disagreements have weakened European Union-level responses and made regional solutions challenging to implement. We must not forget that member states are accountable to an outsized extent for their public health policies. There are solely a few EU-level structures that play a significant role during this pandemic. These include medical and foreign standards, shared medical and disease agencies. However whereas every member state has naturally chosen its COVID-19 reactions, there remains a wide range of opportunities to develop cross-border cooperation. Unfortunately, leaders are controversy over financial mechanisms that are being shared at the worst of times. Until Italy frighteningly became the center of Europe by the coronavirus, EU countries were virtually exclusively national. As the situation became tense, Germany and France began cooperating on the main border and sent protective masks to Italy. Later Germany expanded regional ties by buying patients from Italy and France as a sign of EU cooperation. European Union studied the pandemic's impact on the economy, as in many areas, on all aspects of the economy.

According to these researches, various economic forecasts have been made. Economic recovery is expected to begin in 2021-2022, and it is assumed that it will return to its pre-pandemic.

Europe: There are 30,000,000+ infections, and after November, increases observed in the number of cases.

2. SMALL AND MEDIUM-SIZE INTERPRISES

According to the survey, 70% said their incomes had been reduced and had severe effects due to the pandemic. One in five felt they would not pay their debts and were forced to cut their workforce; 28% had to cancel their growth projects. Overall, more than half thought their businesses could not live for more than 12 months, although 20% of those who participated in the survey were helped by a government (various tax discounts, employee payments.) The results of the query can show:

- *Lover revenue and a bleak outlook* - We can take Spain and Italy from the most affected countries, whose incomes have fallen by 33% and 30%. In Germany, it was 23%.
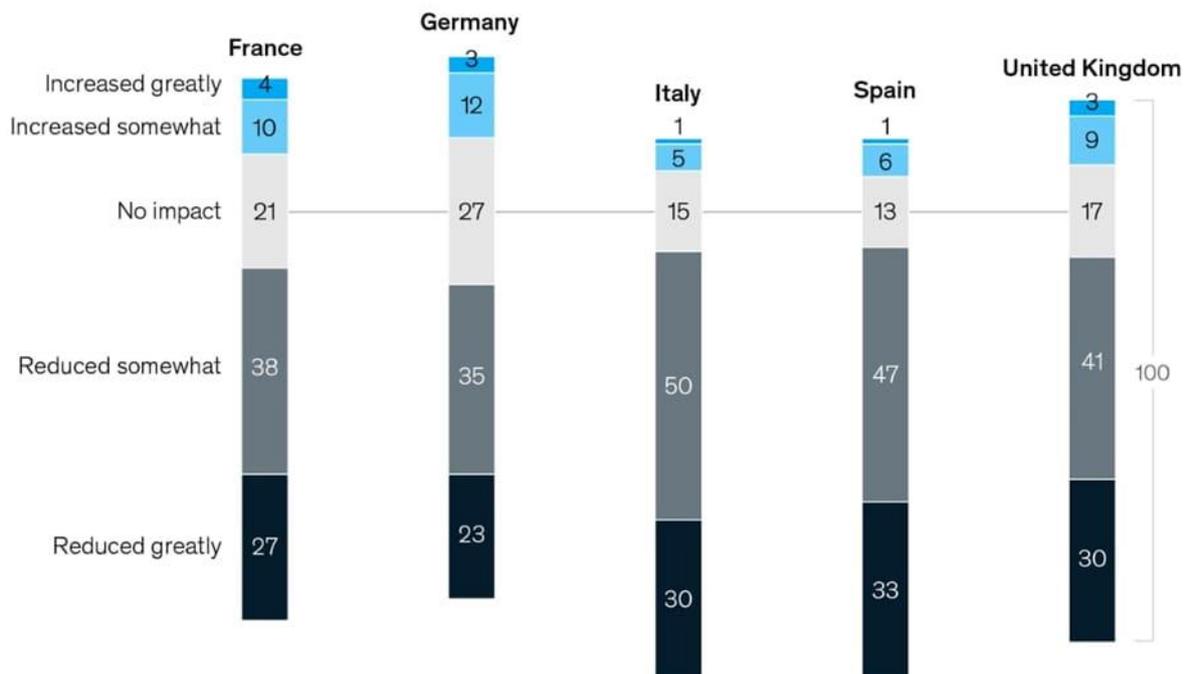
Figure 1: Revenues have fallen for the vast majority small and medium- interprises in Europe since the onset of COVID-19 crises
(Source: McKinsey&Company)

Totally 80% of the economy went through a period of pandemics, somewhat weak and extremely weak. But here we also see financial changes between countries. In Germany, for example, 39% of SMEs were intense and relatively firm, but in Italy, the figure is 10 percent. There were different ideas among countries about the extent of the pandemic impact on SMEs' financial situation and challenged employees' ability to pay loans or leases.

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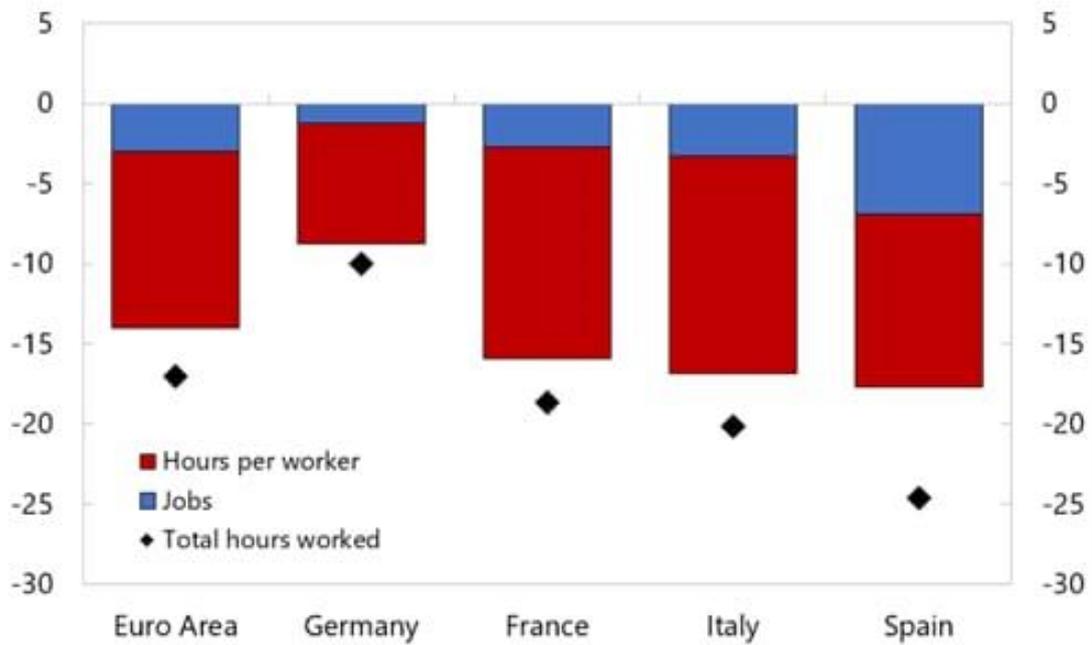
Figure 2: Savings jobs: many countries expanded short-time work programs to prevent an unemployment surge.(percent,year-over-year,2020Q2)
(Sources: Euorstat and IMF staff calculations)

For example, when Spanish SMEs were having trouble repaying 30% of loans, 14% of their SMEs in Germany faced the trend. Similarly, Spanish SMEs could not retain 38% of their workforce, compared with only 16% in Germany and France. Overall, 14% of SMEs in Europe said they were struggling to maintain their staff because many people were on sick leave or stayed in quarantine.

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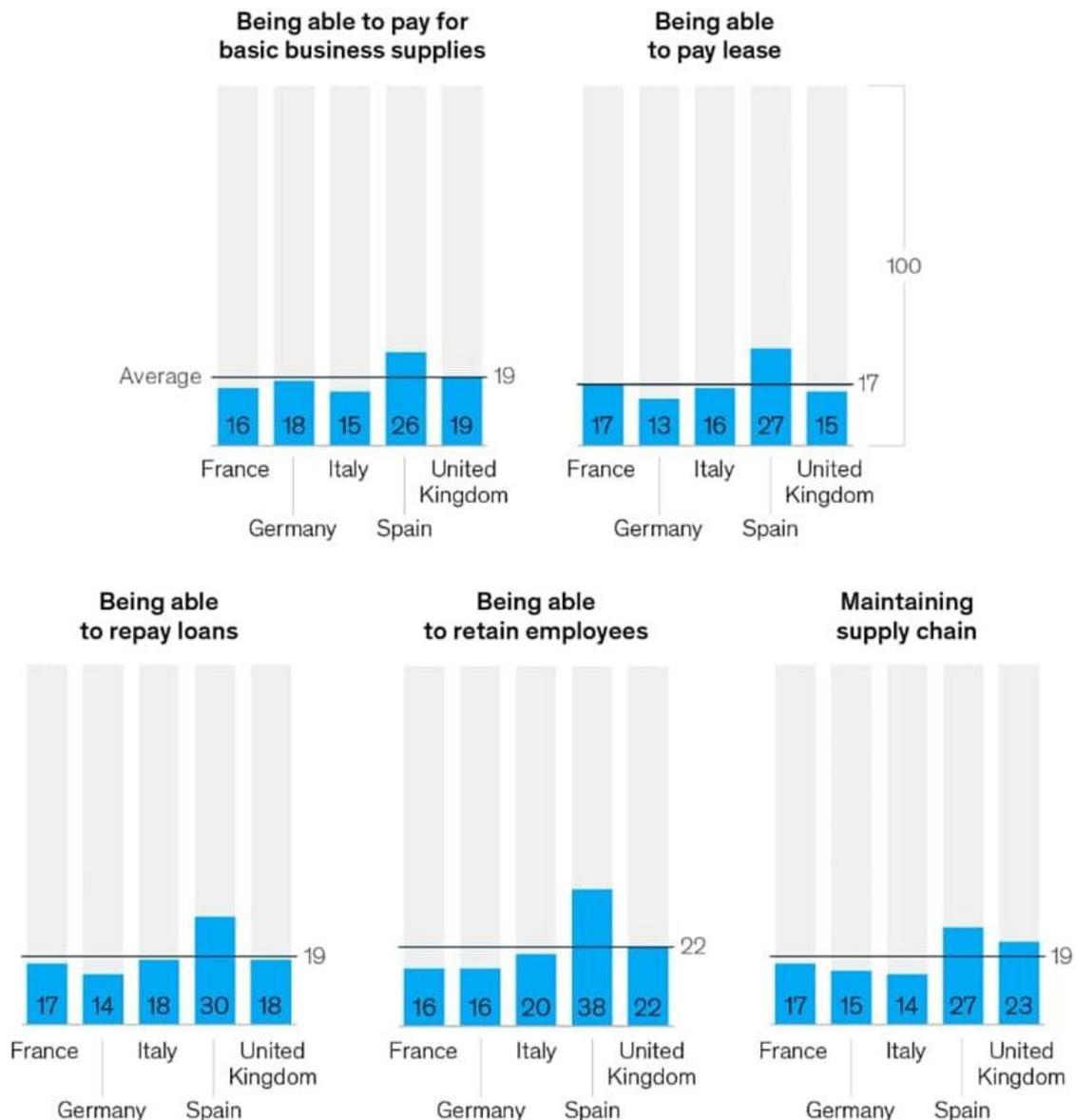
Figure 3: Approximately 1 in 5 small and medium-size enterprises in Europe are concerned about meeting payment obligations and reatining employees
(Source: McKinsey&Company)

Growth projects are also at risk. Altogether, 28% of respondents thought they had to postpone them, while the indicator increased by 37% of Spanish and 30% of English SMEs. It was observed that the worst hit would be on the residential, food services, entertainment, arts, and recreation sectors. The chart above shows SME's concerns about survival because of countries, sectors, and companies. In total, 11% said they would apply for bankruptcy within six months. The situation was highest among Italy and France's most prominent companies (with 50 to 249 employees), where 21% are expected to declare bankruptcy in the near six months. By comparison, single merchants in Spain were most concerned, 19% were expecting default in a period, and only 6% of companies with 50 to249 employees were expecting bankruptcy. Logistics among industrial sectors are expected to have the highest level of bankruptcy: 22%. Agriculture, housing, food services, retail sales, and sales are very low, but 13 to 15 percent follow this. As a result, the number of SMEs that cannot live will depend on a large extent, the uncertain future course of the pandemic, and the damage to the company's revenues.

For this reason, we asked survey participants to think about how their jobs were going under three different scenarios: where their incomes were stable, declining, or rising. They reported the following:

1) If revenues remain stable, 55% of SMEs are worried that they could be closed by September 2021.
2) If the situation worsens and revenues decrease by 10-30%, then 77% of SMEs said they could resign by September 2021.
3) If the situation improved and revenues increased between 10-30%, then 39% of SMEs said they could nonetheless resign by September 2021.

These scenarios may be affected by the duration of receiving government support for SMEs. Governments within the EU had previously introduced measures to give SMEs immediate anti-crisis liquidity, but now the Organization for Economic Co-operation and Development (OECD) said policies started to shift from policies to helping SMEs survive. But survey data shows that a large proportion of SMEs plans to apply for liquidity support measures still on offer. The addition shows that nearly 20% of SMEs already used state aid; 30% also plan to do so.
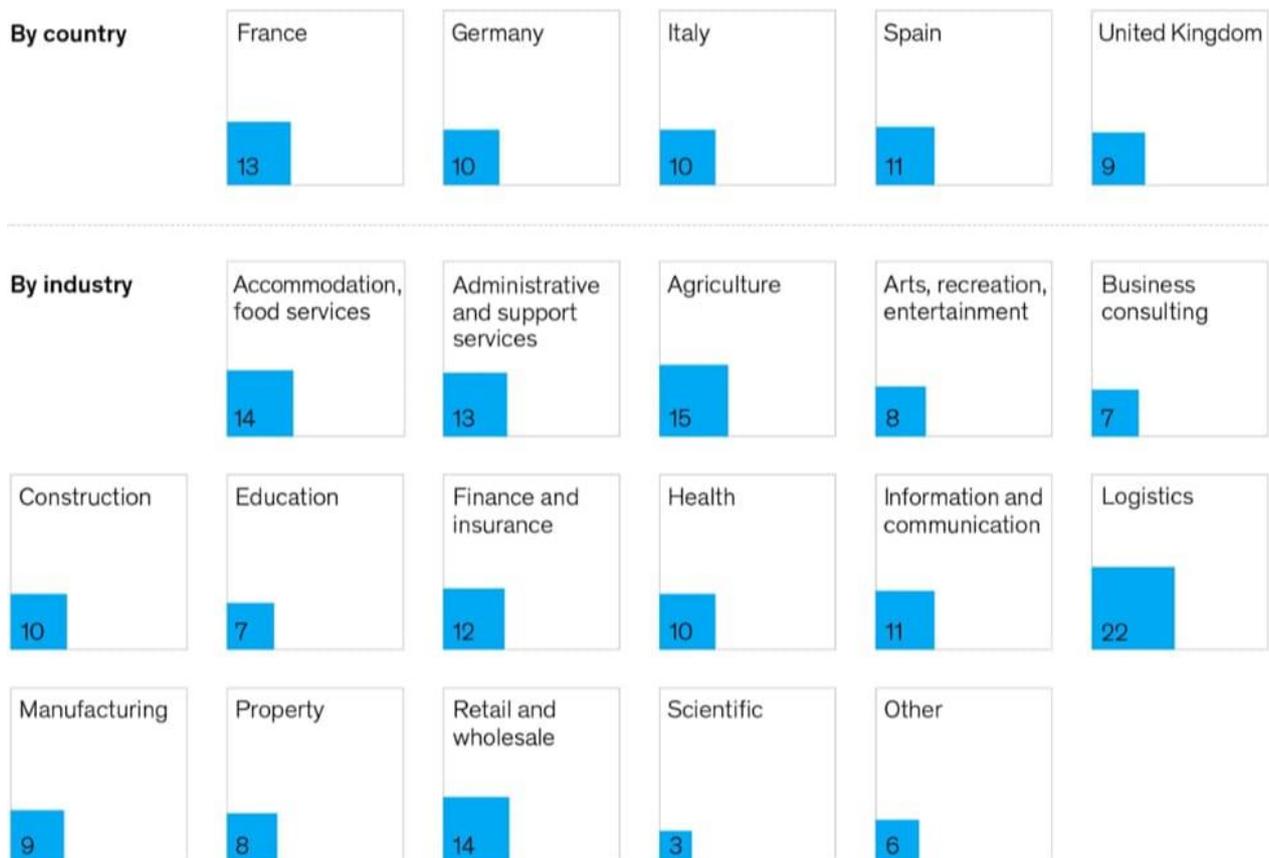
Figure 4: At current trajectory, about 1 in 10 small and medium enterprises in Europe could be expected to file for bankruptcy within six months
(Source: McKinsey&Company)

Again, there are financial differences between the big EU economies: More than 35% in France and Italy were still planning to apply, while in the UK and Germany the figures were 20- 25% in line.
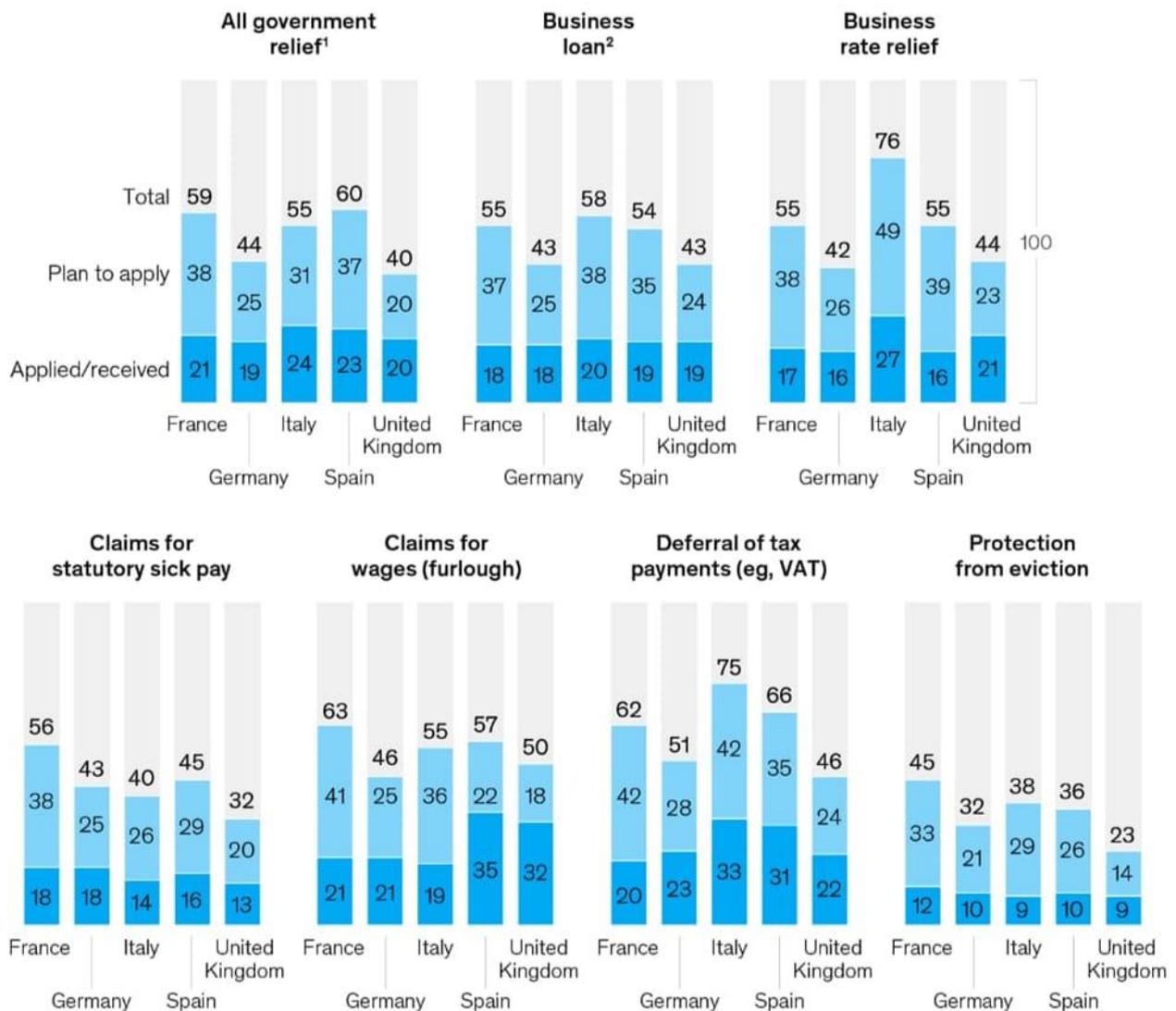
Figure 5: One-fifth of small and medium-size enterprises in Europe have already applied for government support, with another one-third intending to apply.
(Source: McKinsey&Company)

Coronavirus also temporarily modified the geography of the ECB. The outer borders of the Schengen zone are currently closed. Priority entrance barriers at internal borders make it easier for heavy trucks carrying medical supplies, food imports, and general exports to pass.

2.1. Financial responses

However more is required outside the squad and borders, and the first fiscal move may be the toughest: simply agreeing to share the debt the continent has accumulated in the fight against COVID-19. Here emerged some positive signals. The EU, beside the G20, works along as a collective investor by allocating large amounts of money to vaccine research. Various EU-level financial structures have also been modified to cause this. State aid rules were made easier so member states could subsidize institutions hit by the crisis. Eurozone rules on the total size of government debt have been quickly suspended, and costs have been allowed to exceed the usual allowable threshold. But the EU has moved to take the next step towards transforming the European Stability Mechanism (a post-eurozone crisis tool) into a new "coronavirus crisis emergency bank" funded by "corona bonds" temporarily.

A fierce debate has emerged about both the size of the fund and the terms of its debt. It was met with ridicule given the "whatever is necessary" approach adopted to protect the euro. Italian Prime Minister Giuseppe Conte accused EU partners of a delayed and reluctant response. In addition to France, Spain, and the seven other euro area currencies, Conte's preferred method is to raise funds by dishing out "common European debt." It will write EU member states against the expected slowdown while allowing healthcare and public finances to increase spending further. EU leaders working with a video conference on a large scale cannot argue and postpone. Rescue packages need to be agreed upon swiftly and collectively. Finance ministers are due to report two weeks after the last session with new ideas on backing an emergency coronation – it's a disappointing delay. For struggling countries such as Spain and Italy (and many others to come), the outcome is particularly bitter and likely to help the EU's mood. French President Emmanuel Macron publicly indicated that failure to agree on a single response "could spell the end of the EU." European Commission President Ursula von der Leyen defended the need of the EU for an "intelligent strategy" that at the same time "protects the health of our citizens, keeps our economy on its feet, moves our goods and border workers." While there was little chance that he would get worker movement until the quarantines were removed, Von der Leyen reached an agreement in several key areas. There is finance for protection against a wide range of foreign investment proposals for Europe's "strategic beings" and vaccine researchers. The latter responds to Germany's rejection of an offer by US President Donald Trump to purchase wholesale a German pharmaceutical company investigating a possible COVID-19 vaccine. The ECB problem is how to support member states in their chosen national responses while ensuring that the shared financial package is distributed equally and rapidly. This is for preventing regular debate on 'debt allocation.' The issue is with the prosperous northern EU countries rescuing their impoverished southern neighbors and obtaining both institutional leadership from the Commission and financial advances from the European Central Bank to work together and fast. Failure to do so would threaten the macroeconomic and micro-social connections that form the core of the Union. Schism is also a ready invitation at one price to other provinces and regions that want to offer assistance. Several European nations have already started to move beyond EU borders to fight the crisis. Italy saw the arrival of Chinese medical teams and equipment in mid-March. This newly formed "Health Silk Road" is now delivering a large portion of Chinese medical supplies to trucks loaded with the slogan "The Road to Friendship Does Not Recognize Borders." The question is, how much confidence does this assistance in the future have in Italy's support for China's ambitious Belt and Road initiative? If Italy has anything to go by, the EU could be backed by many new international allies, including Russia and the US, to counter COVID-19. At home, the EU still needs to agree with the response that its members share. And quickly.

3. EUROPEAN UNION ACTION
3.1. Support for EU recovery
To help the EU escape the pandemic's economic and social effects, EU leaders agreed on an emergency 750billion euro recovery fund called the New Generation EU. The recovery package will prioritize investing in digital and green switches. Besides, the July European Council adopted a long-term EU budget for 2021-2027 to boost growth and support citizens, jobs, and our economy in the years to come. The total multi-year budget and recovery fund are no less than 1,824 billion euros. Simultaneously, the fund also proposed a 540 billion euro support package for the EU, workers, institutions, and member states. The European Central Bank provides an additional 1,350 billion euros under a bond procurement program to help governments during the crisis.

3.2. Linking travel arrangements

EU countries formed a common framework for travel arrangements to protect freedom of movement in the EU during the COVID-19 pandemic. When the measures and general definition of risk zones were reviewed, they agreed on the standard criteria to be considered. A color-coded map of the EU based on member countries' data is released every Thursday by the European Centre for Disease Prevention and Control. The map helps EU countries decide on travel arrangements based on the epidemiological situation for regions. EU countries agreed to release information on new travel arrangements 24 hours before they were to be implemented. The EU launched a Re-EU website available in all 24 languages to help travelers plan their journeys by staying safe and finding the reliable and latest information on travel arrangements.

3.3. Slowing the spread of the virus

Eu countries temporarily restricted non-essential travel to the EU to curb the spread of the virus in Europe and abroad. The travel list is reviewed regularly and can be updated when necessary. The criteria for determining third countries where travel restrictions can be removed involves economic and social reasoning, including epidemiological conditions and physical distances.

3.4. Push for COVID-19 vaccination

Three COVID-19 vaccines have already been allowed in the EU, and the vaccination began on December 27, 2020, within the Union. The EU has coordinated joint efforts with vaccine manufacturers to ensure adequate safe, and effective COVID-19 vaccine production in the EU through pre-purchase agreements. Six agreements were signed with the vaccine producers to provide a strong vaccination portfolio for EU countries. Altogether, 2.3 billion doses of vaccines were supplied.

3.5. Support for EU health systems

The EU established a continuing link between member states and EU institutions to ensure crisis management and coordination throughout the COVID-19 pandemic. At the same time, the EU brought medical equipment to a ready state by developing a standard individual protective equipment and ventilation facility under the rescue unit's auspices. It also regulated joint government purchases and key equipment exports to ensure sustainable supply within the EU. The EU proposed a new, strengthened EU4 Health program that would improve support for member states' health systems. The EU's main aim of suggesting this program is to help Europe cope with future public health threats because EU4Health has been developed to make a significant contribution to the post-COVID-19 recovery by focusing on making health systems more flexible and promoting innovation in the health sector.

3.6. Protecting jobs

The EU has created a temporary support tool to reduce unemployment risks in an emergency (SURE) to help workers continue their jobs during the crisis. The scheme provides up to €100bn in loans on favorable terms to help member states meet national short-term employment schemes' costs. In the fall of 2020, the first taxis were given to EU countries. Since February 2021, 15 member states have received 53.5 billion euros with the support of SURE.

3.7. Help of EU countries to fund COVID-19 response

The EU is backing its funding against crises through the Coronavirus Response Investment Initiative by diverting roughly 37 billion euros to member states from EU structural funds to EU countries. It also applies the complete flexibility of EU financial rules to help EU countries support their health systems and institutions to keep people in jobs during times of crisis.

EU government aid rules have also been softened to ensure governments save jobs and support citizens and companies by providing liquidity to the economy.

3.8. Increasing European cooperation

The EU makes deploying doctors' teams through the EU Medical Corps easier for ensuring the coming of teams from various member countries to support health systems most affected by the crisis. In a spirit of solidarity, EU countries helped each other. For instance: The rehabilitation departments of Austria, Germany, and Luxembourg were presented to patients in Belgium, Holland, France, and Italy in critical condition. Poland, Romania, and Germany sent teams of doctors to help treatment of patients in Italian hospitals. Hungary and the Netherlands sent ventilators to the Czech Republic. The EU also approved new rules allowing member countries to seek financial assistance from the EU Co-operative Fund to cover emergencies in their health situation. With the recent expansion of the fund, member countries will use up to €800million this year to combat the coronavirus pandemic.

3.9. Support for the most damaged economic sectors

The EU approved emergency measures to protect our food supply chain, prevent food shortages, and support the pandemic's agricultural and fishing sector. The measures include direct backing for farmers and fishers, growing comfort in EU funding. The EU set up 'green stripes' to allow food flow in Europe and recognized seasonal workers as' critical workers. ' The EU also introduced exclusive market measures to support wine, fruit, and vegetable producers.

3.10. Collaboration to support our partners in the world

The COVID-19 crisis is a global problem that requires global solutions. The EU and member states help fight the virus by providing financial support to eliminate the emergency health crisis and humanitarian needs. Team Europe's total effort is 38.5 billion euros. The EU also activated the EU Humanitarian Air Bridge to deliver humanitarian aid to countries in need.

4. EUROPEAN ECONOMY EXPECTATIONS FOR 2021-2022

The forecasts are made based on assumptions. To predict in which direction Europe's economy will grow in the coming years, what risks it faces, you need to speculate where the pace of the current pandemic will increase and when it will weaken. The recovery and growth of Europe's economy in the following years depends on steps to prevent the pandemic and trade relations between countries, especially between the European Union and Britain. On November 5, 2020, the European Commission presented the "Economic Prediction Projects Fall 2020". Here are some of the most critical issues that arise from the forecasts:

1) The pandemic caused the most profound decline in AI history, which overwhelmed the Great Recession. Economic activity in Europe was severely shocked in the first half of the year, and there was a strong recovery after restrictive measures were gradually eliminated in the third round.

2) The revival of the Covid-19 pandemic has led to a tightening of restrictive measures. The economic self-determination (rebound) stopped. Economic growth would stop in round 4, but it is expected to grow again in 2021. Altogether, EU countries' GDP is expected to increase by 4.1 percent in 2021 and 3 percent in 2022. However, for the eurozone, these figures are expected to increase by 4.2% for 2021 and 3% for 2022.

3) Policy measures within the European Union framework and at the national level continue to soften the impact of the Covid-19 crisis on households and firms. Therefore a mutual use of fiscal and monetary policy is required.

4) Considering the existing uncertain situation, two assumptions can be made. Firstly, it is evident that tightening measures will still be kept for some time.

This is a clear indication that economic recovery will go at a slow pace. Simultaneously, significant tightening measures in the final round of 2020 are projected to be partially and gradually eliminated in 2021. Second, the EU-Britain's new relationship, which began on January 1, 2021, is thought to be moving forward in the desired direction.

5) Negative risks are enormous, but it doesn't mean there are no positive risks. Adverse risks: The pandemic can become more pronounced and last for a long time. This will not only keep economic growth stable but can also accelerate its growth towards negativity, increase unemployment, and deteriorate restriction rules dramatically from now on.
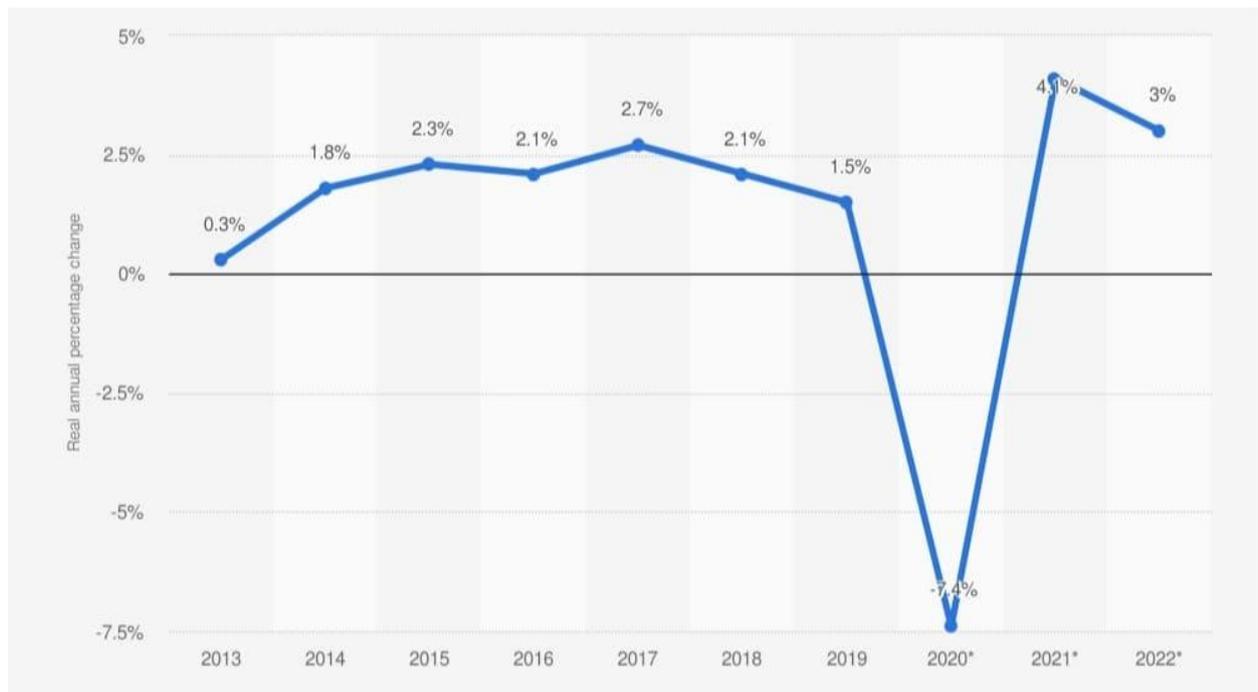
Figure 6: Average growth rate of gross domestic product (GDP) in the European Union(EU) from 2013 to 2022
(Sources: European Commission Statista 2020)

As for the positive risks, medical advances are predicted to accelerate in specific ways, and the economy will also accelerate the recovery process as certain countries begin the vaccination process. As one of the critical issues, the EU-UK trade agreement is that serious steps will be taken to establish expected ties between both sides, which predicts that the region's economy will lead to significant growth in 2021, which has already begun. Thanks to ambitious policy measures across all member states, Job losses were more restrained in the first half of this year than economic activity declines, but it was unprecedented. It also piled up a significant labor market gap that reflects the decline in workers and workers leaving the workforce since March. The eurozone's unemployment rate is forecast to rise from 7.5% in 2019 to 8.3% in 2020 and 9.4% in 2021, down from 8.9% in 2022. In the European Union, the unemployment rate is forecast to rise from 6.7 percent in 2019 to 7.7 percent in 2020 and 8.6 percent in 2021, down from 8.0 percent in 2022. The recent negative of inflation mainly drove the significant drop in energy prices due to a decline in service prices for tourism. The stabilization of the oil price is forecast to have a positive impact on overall inflation in 2021. Prices will grow because of low pressures, weak demand, labor market slack, and a strong euro. Overall, inflation in the European Union was expected to reach 0.6 percent, and by 2021, it was forecast to be 1.3 percent. After a slowdown in 2020, EU economies are expected to grow in 2021 and 2022.
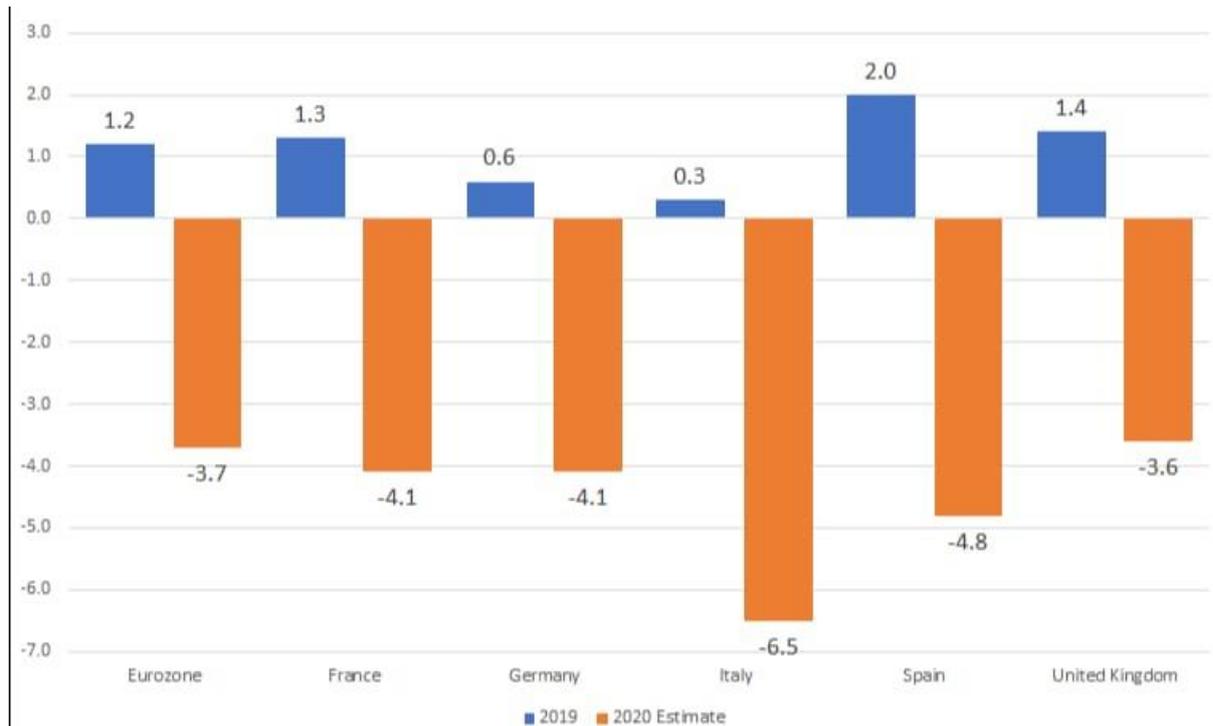
Figure 7: The 2020 GDP Forecast for Europe are Bleak(%y/y)
(Sources: FactSet Economic Estimates,Various country statistical agencies)

Looking at these forecasts in certain countries, *the* revival in manufacturing, industry, and exports in Germany during 2021-2022 will lead to economic growth. But the second wave of the pandemic has extended the timing of the process a little slightly. In France, economic growth declined by 9.4 percent in 2020. In 2021, it is expected to increase by 5.8%. *Italy's* real GDP *i*s forecasted to decline by 9.9% this year, grow by 4.1% and 2.8% respectively in 2021 and 2022, similar to the eurozone average. *Spain* is one of the most influenced countries in the pandemic. By 2020, GDP was forecast to decrease by 12.4%. By 2021, it was forecast to grow by 5.4t% and 4.8% in 2022. The short-term employment schemes have limited job losses, but unemployment is still predicted to rise this year, only fall in 2022.
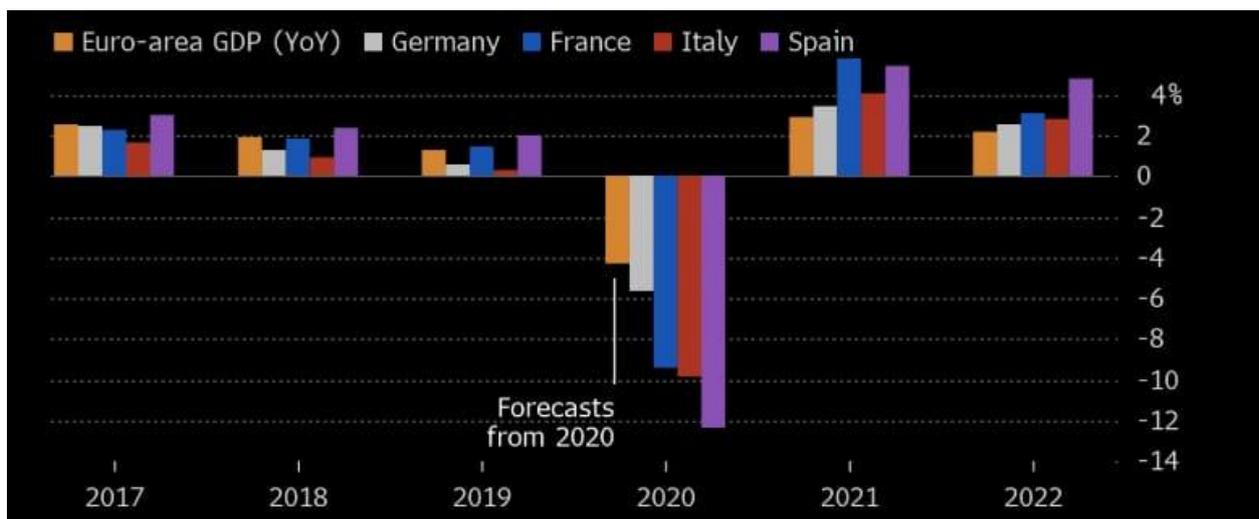
Figure 8: Forecasts about european countries and Euro-area
(Sources: European Commission)

The European Union had predicted recently that economic growth in the form of "V" was not expected. But the emergence of a new wave of pandemics has left one forecast every day under uncertainty. Altogether, Europe deals with several significant problems from 2021 to 2022. There is a high probability that most countries will return to the pre-pandemic situation (2019) starting in late 2022.

5. VACCINATION

On December 8, 2020, the United Kingdom became the first country to begin implementing tested and tested vaccines for citizens. The European Union started the vaccination process on December 27, the leaders within the bloc call that day "V-Day." The EU targeted the vaccination of 450 million people among 27 member states during 2021. Contracts were signed with pharmaceutical manufacturers Moderna and AstraZeneca. Tobias Kurth (epidemiologist and director of the Institute of Public Health at Berlin's Charite Hospital) said that mass vaccination would start in March and possibly even April. He hopes that after the mass vaccination process in humans, immunity will be developed to protect against the virus, and life will return to its former state after long-term limitations. Kurth had said it was vital that vaccination be safe and very effective. For the interaction of people with each other as they did before the pandemic, approximately 70% of the population has to go through the vaccination process. Europe and the world need to return to their former way of life; therefore, massage vaccination, revive the economy, and vaccinate at least 70% of the population, are essential as we mentioned before.

6. CONCLUSION

We still see the comprehensive impact of the pandemic on the world. The economic decline also continues in Europe and all over the world. Covid-19 has profoundly affected the international trade, tourism, SMEs, agriculture, job closures, and other areas since it began to spread rapidly and worldwide. The economic shutdown has led to an increase in the unemployment rate. Although the pandemic covers virtually every country globally, the economic impact on each country is not the same. It changes depending on the policies these countries are applying to get out of the influence of the pandemic and the country's economic power. But separately, it is not an easy issue for European countries to overcome the virus. Therefore, governments began to work together and to search for ways to rebuild themselves. European countries have started to support each other and create aid funds to combat pandemics. Various economic forecasts have been made that, over time, the pandemic has caused most of these predictions to go wrong. The vaccination process, which first began in Britain on December 8, 2020, is now on its way to massage worldwide. It is important to remember that at least 3/4 of the population needs to be vaccinated to restore the economy and return to its pre-pandemic. The rapid growth of the economy is a key objective when the pandemic is over. If the long-standing European economy can weaken the pandemic's impact, the economy will recover rapidly and even can pass through the pre-pandemic economic situation. We think that the European economy will grow by 10-15% if the vaccination process is realized in the expected form. Products produced during 2018-2019 have already been sold and used. Production volumes of new products have been significantly weakened as many jobs and factories have closed because of the pandemic's impact. The aggregate supply on the market has declined. Increased demand has led to rising prices and increased inflation. But when the pandemic loses its impact, all jobs will be reopened, and factories will completely restore production power. Domestic and international markets will accelerate the production process to provide the demands of consumers. As we noted, this is one factor that will play an essential role in the economy's growth by 10 to 15%.

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TRANSFORMATION AND MODERNIZATION PROCESSES IN AZERBAIJAN IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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ABSTRACT

The article studies the main directions of the processes of transformation and modernization in Azerbaijan in the context of basic principles of the concept of sustainable development. It is noted that, one of the most relevant issues today is the integration of the planetraies process of conciousness widespread in XXI century into the dialogue of local national cultures, exploring the new foundations of globalization based on narional self-awareness and moral values, the objective, impartial study of the mutual benefit of the social and spiritual heritage of peoples. The establishment of the information society at the beginning of the new millennium, the deepening of globalization and integration increase the importance of building sustainable development on the principles of economic growth, social progress and environmental protection. The contradictions that arise in modern times as a result of aggravation of global problems and the comlication of transformation processess require the creation of new models of interaction between civilizations based on dialogue and cooperation. The need for full-fledged and more comprehensive participation in the diversified global market conditions the intensive intellectualization of production, the transition to a "knowledge economy", the modern norms of integratve development of politics, morality and economy; forms a new cultuer of thinking that embraces the political and economic processes, lifestyles and the system of values. In the line with the goals of the concept of sustainable development, it is changing in the direction of creating values beyond the narrow pragmatic economic goals, utilitarian markets and the economy. İn order to ensure the sustainable socio-economic development, it is high-priority task to minimize the damage to social ecology and natural ecosystems, and to rationalize the moral and political goals in order to overcome planetary threats. From this point of view, the study of social, politial and ideological influences on universal progress, determinig the role and place of philosophical and social approaches in this direction, which allow us to overcome the challenges and threats of modern times, is one of the factors that actualizes our research.

Keywords: *information society, sustainable development, globalization, universal progress, economic growth, social progress*

1. INTRODUCTION

At the beginning of the XXI century, in the context of the integration and transformation of cultures, the unity of different regions, the East and the West, on the same issues and challenges must be valued as universal humanism and positive democratization in the context of modern principles of sustainable development. The ideas and challenges of the concept of sustainable development of particular importance contribute to the emergence of a new historical stage and the world order, characterized by significant changes in the global space and socio-cultural life. Understanding the realities of modern life and creating a constructive theoretical model of socio-economic processes in the world is a difficult task. The complexity of this in the context of Azerbaijan was also related to the existence of the Karabakh conflict in the region, which began with the groundless land claim of the Republic of Armenia.

This conflict poses an economic and environmental threat not only to Azerbaijan, but also to the entire Caucasus region, impeding the development of political, economic, cultural and social processes and undermining economic growth, social progress and environmental protection, which are the fundamental principles of sustainable development and have slowed down the process of modernization.

2. CHARACTERISTICS OF TRANSFORMATION PROCESSES IN AZERBAIJAN

The integration of Azerbaijan into the world political, economic and cultural processes is important, but in this case, it is necessary to identify parallels between global processes and the national and regional aspects, as well as the features of the transformation of values of the new world order in the local environment and conditions should be identified. Because, despite the processes of globalization, the presence of socio-cultural differences in a single information space is an undeniable fact. This approach shows that the processes of transformation and modernization and sustainable development are no less important in terms of values and axiology. Transformation processes in Azerbaijan took place gradually and step by step in the context of national identity. Getting rid of the deep-rooted traditions of the Soviet empire in the public consciousness, the deviation from outdated stereotypes and misconceptions in public life and mental consciousness, the transition from the administrative-command system to a market economy is a long and complex process of evolution. In a country that lived for many years under a centralized economy and where market relations do not dominate, market relations and democratization present a complex and contradictory path through the periods of crisis, economic reform and stability, overcoming moral, psychological and the ideological barriers. At the same time, in the post-Soviet period, the transition from a closed society to an open civil society was accompanied by the strengthening of independent statehood and integration into interstate relations on an equal basis. The transformation processes require the modernization of social psychology, moral attitudes, and the formation of new social ideals and goals. Because the transition from one socio-political system to another, the confrontation of old, traditional stereotypes with new ideas leads to ideological-collective chaos, which leads to a loss of balance in the social behavior. The processes of modernization and transformation of society are deepening against the background of a variety of social stratification, socio-economic, ethical and moral, spiritual, socio-psychological changes and the construction of civil society. One of the important features of the transformation process of Azerbaijani society is associated with a complex and gradual change and modernization of forms of social consciousness (science, education, religion, morality, law, politics, economics, ecology, etc.).

3. MODERNIZATION AS A VALUE OPTION

Sustainable development and modernization are not an option for humanity, but a global generated by the necessity. As a result of globalization of global integration processes, social consciousness and social way of life are becoming more and more planetary, and the modern standards and the etiquettes of life are emerging. The new systems and stipulations of international relations exclude the conservative tendencies. The universalization of ethnic communities while preserving the freedom and identity of existing world civilization makes the modernization a necessary factor in our existence and life. Any modernization project involves explaining the contours of the modern way of life, determining the necessary ways to modernize the state and society. Modernization also accelerates the integration of national cultures into the new world order. The role of ethical issues and values in international law, and the choice of values and interpretations, norms and rights based on them, is high when the whole world participates in the establishment of a new order. T. Montbrial rightly believes that the formation of a world order will involve an empirical search for a fair model of governance, an expansion

of global civil society, etc.[1] It is clear that modernization is not an easy process, unambiguously accepted by national cultures. The success of modernization depends on the readiness of society to change, the ability of the population to realize the national idea, which will create spiritual unity through the right choice and use of moral, economic resources and assets in the process of transformation. The problems of modernization depend, above all, on the approach to the individual as the greatest capital of the state and the value relationships of the people themselves, their conscious participation in the social processes. The President of the Republic of Azerbaijan has repeatedly stated in his official speeches that we must turn the oil capital into the human capital. This thesis is completely consistent with the transition from a resource-based economy to a "knowledge economy" and modernization efforts to turn the "black gold" of oil revenues into the "gold of human capital". The road to modernity also involves reforms in the educational system. The implementation of modernization in society is determined by the potential and capabilities of citizens as carriers of intellectual, professional "capital". The education helps a person to realize his or her contribution to society. The transformation and modernization are also conditioned by improvements in scientific knowledge, education, and culture, as well as the important role of intellectuals in the social structure of society. The transformation and modernization in Azerbaijan also depend on the rate of social and economic reforms and the construction of civil society. Currently, the development of Azerbaijan as a secular and democratic republic creates a favorable environment for implementing reforms in all spheres of public life, restoring our territorial integrity, and implementing the principles of sustainable development.

4. ON NATIONAL PRIORITIES OF SOCIO-ECONOMIC DEVELOPMENT

In the context of the concept of sustainable development, this requires the integration of Azerbaijan into the new world order as a sovereign state with a new national agenda in global and regional politics. The geopolitical potential of Azerbaijan to become a regional leader is broad. Its rich natural resources, cultural and intellectual development, and its location at the intersection of Russia, Iran, Turkey, and Central Asia coordinates its geopolitical balancing function. The President of the Republic of Azerbaijan Ilham Aliyev signed a document defining "Azerbaijan 2030 : national priorities of socio-economic development" by his decree of February 2, 2021. The document provides for the implementation of the following five National Priorities for the socio-economic development of the country over the next decade, which are of particular importance for the fulfillment of the obligations deriving from the United Nations "Transforming Our World: An Agenda for Sustainable Development. Development to 2030":

1) A steadily growing competitive economy;
2) A society based on dynamic, inclusive and social justice;
3) A competitive human capital and space for modern innovation;
4) A great return to liberated territories;
5) A clean environment and green growth country.

The document emphasizes that the country has chosen to develop a society with a high level of social welfare, based on the modern standards of living and a socially oriented market economy, as well as the strengthening of successful relations between society, business and the state for the long-term sustainable and rapid development of the country. The national priorities justify the effective and efficient management of the state's role in the economy through market reforms, strengthening the private property institutions, business-friendly governance, and further liberalization of trade regimes to increase access to the local products in foreign markets as key drivers of economic growth. At the same time, the development of private initiatives on a creative and innovative basis, focusing economic resources on the areas that create higher

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[1] Monberial Thierry De Le monde au tournent du siecle. Ramses 2000. Lentree dans le XXI –e siecle. p. 2000. p. 13-17.

added value, is one of the key factors that ensure sustainable development in the country. The document states that in order to realize the above-mentioned goals, it is necessary to form an effective macroeconomic policy framework that serves sustainable macroeconomic stability, reinforcing the medium- and long-term "drivers" of the economic development - the modernization of human capital, the expansion of the digital economy and full economic sovereignty. The national priorities are a new development paradigm, which includes the goals of the modern world order, as well as the ability to meet the needs and prospects of future generations, reflecting the ideals of universal - rational economic, ecological and social development.

5. CONCLUSION
In the context of contemporary multiculturalism and the globalization of cultures, the deepening of the processes of transformation and modernization, reflecting the unity of nationality and humanity, diversity and homogeneity, is a logical requirement and objective legitimacy of the process of spiritual and cultural development. The global community of sustainable development issues in the context of inadequate appreciation of national and local cultures and approaching different regional cultures with different standards at a time when cross-cutting trends intersect. Because in order to achieve a rationally balanced social and economic development of mankind, we must minimize unequal opportunities, national, religious, sexual, racial discrimination, double standards, and put an end to such outdated and negative thinking.

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WAYS OF EXPANDING THE LOGISTICS SYSTEM OF PRODUCTION DIVERSIFICATION

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ABSTRACT
It was noted that the strategic road map on logistics and trade development in the Republic of Azerbaijan would allow the creation of a refining center for petroleum products and the creation of a supply base for general use in the new port of Baku for oil and gas processing and other purposes in the region. At the same time if we look at world experience, the creation of the "Alat chemical and petrochemical" logistics center with high potential and strong infrastructure at the Baku port could have been a great success to our Republic, including chemical and petrochemical enterprises. Thus, the logistics center has the potential to supply a wide range of chemical and petrochemical products, especially major chemical products from Iran and other gulf countries, as well as South-East Asia. In other words, this logistics center could provide a strong stimulus for the formation of processing networks, the creation of chemical and petrochemical enterprises by bringing large volumes of chemical and petrochemical products to our country. On other hand, the processing or re-packing of chemical and petrochemical semi-finished products would increase the export potential and so on. It should be noted that there is serious state support for the development of the logistics system in our Republic, and attention to the development of this area is growing. Thus, in December 6, 2016 by the decree of the president of the Republic of Azerbaijan, the strategic road map on the development of logistics and trade in the Republic of Azerbaijan was approved. In this important document, short, medium and long-term directions of economic development in the field of logistics for the period to 2020, to 2025 and after 2025 for the subsequent period have been determined. In the near future, taking into account the development trends of the logistics system, its strategic targets, the maximum optimal and efficient solutions of the economic and organizational problems of the logistics system in enterprises will be further actualized in our country and in the world. Based on the real challenges of modern era and trends in the development of this sector, enterprises in the creation and operation of an improved logistics system will have a significant role etc.
Keywords: Enterprise, Logistics System Organization and management, non-oil sector, innovation, material flows

1. INTRODUCTION
In order to increase the export potential of the non-oil sector, the article explains first of all, the processes of diversification and modernization of the national economy itself must be completed and the issues of acceleration of innovation. In addition, the issues of ways and directions of expansion and logistics system of production diversification in enterprises in modern conditions are also investigated.

2. THE PROCESS OF INCREASING THE EXPORT POTENTIAL OF THE NON-OIL SECTOR
Over the past 15 years, the Azerbaijani economy has developed at a record rates worldwide, the gross domestic product has increased 3,3 times. I want to say again that this is a record indicator on a global scale. The non-oil sector grew 2,8 times, industrial production 2,6 times, agriculture

1,7 times. Our exports increased 4,7 times and our currency reserves rose 24 times and today it is 43 billion dollars. In other words, this means that despite the great contribution in the development of Baku in the regions of Azerbaijan and at the same time to the oil and gas sector, our currency reserves have increased 24 times. The strategic road map envisages improving the competitiveness of the economy and social welfare of the population on the basis of sustainable economic development in Azerbaijan (1). In response to global challenges, as a result of attracting investments, a free competitive environment, market access and Human Development, Azerbaijan's position in the world economy will be strengthened and our republic will join the group of high-income countries. Many of such events are currently undergoing implementation. A number of state support mechanisms for the development of the non-oil sector has been developed and implemented. In particular, large infrastructure projects were implemented in order to develop regions and support agricultural producers, technical support was organized through leasing, fertilizer supply system was created, warehouses were put into use, roads were built, modern enterprises were put into operation, preferential loans were allocated for business projects and stimulating measures have been taken. Despite all this, the non-oil sector has not yet managed to achieve a steady and high growth rate, has not provided a significant reduction in the country's oil dependence and has not been able to solve the existing problems in terms of competitiveness. One of the most important and strategic tasks of Azerbaijan on the international scale is the diversification of foreign trade turnover. The limited range of competitive export products remains a serious problem in the structure of the country's economy. From the export potential of many traditional industries (chemical, oil and petrochemical machinery, metallurgy, etc.) poorly use is continued. A small part of the number of agricultural export potential and agro-processing products with strong export potential and international comparative advantage components in this area is in circulation (fresh vegetables and fruits, grape wine, vegetable oils, etc.). There is a significant difference between the general position of the export potential of the country's non-oil sector and its current potential. Despite the acceleration of the development of this sphere, export regulation, stimulation measures and state support mechanisms, the effectiveness of this work is low etc. First of all, to increase the export potential of the non-oil sector, the processes of diversification and modernization of the national economy itself should be completed, innovation should be accelerated. In addition, it is very important that the non-oil sector is deeply researched and assessed objectively its potential, taking into account the country's natural resources and economic factors. The correct organization of the logistics system in the country plays an important role in this work. The economic essence of the logistics system is to provide uninterrupted operation of farms and commercial enterprises, to organize efficient flow of goods and products in the period from the production process to the consumer cycle, to plan the production, to forecast the demand for goods and products, to ensure the efficiency of their movement, to provide maximum continuous and productive organization of processes. Enough resources are in motion in these processes, a large number of main processes of balancing and distribution of raw materials are carried out, the demand for raw materials and various goods is met for efficient production and commercial activity in the whole economy, at the same time uninterrupted access of finished products and goods to consumers is ensured. Prominent representatives of classical economic theories attached great importance to the maximum efficient use of national resources, development of multiplicative productive spheres, productive use of resource potential in the modeling of entrepreneurship-business development. A. Smith wrote that the roads, canals and river vessels are among the strongest factors for business development (2). M. Porter emphasized the development of assistive areas as one of the four important conditions in achieving international success in terms of the nation's development, technology and productivity and the importance of logistics (3). Thus, the scientific approaches, ideas and judgments about the logistics system are directly related to the formation and development of

the term "logistics", the development of logistics itself as an area of activity and, finally, the formation of logistics as a science with certain principles, methods and characteristics. Logistics from an economic point of view, it analyzes, studies, determines the principles and methods of the flow of raw materials to the production facilities, the transfer of raw materials to processing pallets in the production processes, the management of the flow of finished products and the delivery to consumers, as well as the flow of raw materials. All this allows the management of processes related to the planning, control, transportation and warehousing of goods and materials, raw materials flows (4).

3. WAYS TO EXPAND THE LOGISTICS SYSTEM TO DIVERSIFY PRODUCTION
Logistics is an area of activity consisting of approaches and systems that provide the rhythmic movement, control of production systems and the required flow of raw materials in relation to the organization of production. Elements of logistics include logistics operations, logistics chains, logistics system, logistics functions, material flows, logistics costs. Logistics areas include military logistics, business logistics, supply and distribution logistics, sales and warehouse logistics, transport and customs logistics, and logistics of stocks. It is necessary to show that the problems related to logistics, approaches to the organization of logistics activities, the essence of the logistics system, its efficiency, the importance in the economic development processes, the role of logistics in the effective functioning of enterprises, in this regard, the contributions to the successful operation of the enterprise remain the focus of attention of world economist scientists and researchers. In the last 50-70 years, the processes taking place in the world economy have been active, mainly due to the trend of transformation, improvement or completely modernize the traditional economic and business mechanisms. In an intensified implementation of strategic road maps in Azerbaijan, the study and identification of ways of expanding the logistics system of enterprises and diversification of production has become an important issue (5). In this direction, there is a concrete strategic roadmap, targets are set, strategic objectives for the nearest and long-term scope of activities in this area and practical mechanisms of action are mainly defined. The correct organization of logistics system in chemical enterprise is one of the main priorities of the non – oil sector. It is important to address the logistics of material resources provision of chemical enterprises in Azerbaijan should be based on objective reality, practical opportunities and existing potentials. The areas and entities proposed to form, create and develop logistics centers or terminals in our republic are in fact centers of traditional development processes of chemical and petrochemical industry and currently the potentials in this area are collected in these areas. In addition, if we look at the context of the creation of a large port in the Alat settlement, it is not difficult to justify the reasons for the establishment of a logistics center in petrochemical enterprises, and it is necessary to benefit from world experience in the field of efficient operation of such logistics centers or terminals in the world experience. The following can be explained the essence and content of each of the proposed logistics center models and the justification of factors, which stipulate their organization. The transport complex of "Azerkimya" PU, which is a large state-owned enterprise and subordinated to the State Oil Company of the Republic of Azerbaijan, is based on certain mechanisms, and this service area actually performs the function of supply and transportation, as well as customs documentation, its maneuverability and dimensions are limited, its activity on defined functions and tasks is built. Speaking of great potential in this area, it is absolutely necessary to create a strong and autonomous logistics center within "Azerkimya" PU. Although this union is a structural unit of the State Oil Company and the company is the only oil and gas producer-monopolist in the country, it cannot fully supply its own chemical and petrochemical complex with the necessary raw materials. Of course, such an approach may be controversial, but the reality is that the EP-300, which is the strongest and most productive not only in Azerkimya PU, but also in the region, has been installed at the level

of 30-40 % of the project capacity. This indicator was 25-30 % from 1990 to 2015. Only in recent years, the attention has been paid to the provision of this unique device with basic materials, which is not related to the development of the logistics system or the expansion of logistics operations in this enterprise, but simply the administration of the company considers necessary to allocate additional resources to its plant, and the problem has been solved. Thus, existing problems should be considered within the market economy approaches and more effective decisions should be made. In other words, with the organization and world experience of the autonomous logistics center within Azerkimya PU, the creation of the logistics operations, infrastructure, provision of machinery and equipment, vehicles, warehousing adequacy for the expansion of logistics operations could create strong conditions for the provision of the Union's main chemical and petrochemical facilities with continuous flow of raw materials. This would raise the current production level at least 40-50%. This, in turn, would mean that chemical products were mainly exported, the additional foreign currency would be included in the country and would improve access to raw resources for small and medium-sized businesses in the chemical and petrochemical industries. In addition, a network of processing enterprises would be created in the country, the number of jobs would be increased, and in general, the additional contributions would be made to the development of our national economy (6). It is no coincidence that the next large logistics center is offered in Sumgayit industrial center again, as this industrial center is considered not only in Azerbaijan, but also as one of the major industrial centers in the region, as well as strong chemical and petrochemical centers. At present, the development of chemical and petrochemical industry in our republic has passed into an intensive phase, and large chemical giants have been put into use soon. An example of this can be the urea plant and the "Socar Polymer" plant in Sumgayit. There is a great interest in the development of private chemical and petrochemical enterprises, there is a lot of demand and real potential, including raw materials and personnel potential in Sumgayit and surrounding areas of Baku. It should be taken into account that in the recent past, many chemical enterprises were operating in Baku (tire plant, rubber and technical products plant, iodine plant, etc.). It should be noted that in the recent past, Sumgayit produced a wide range of chemical and petrochemical products (synthetic rubbers, household chemicals, polyesters, resins, caustic soda, etc.) and the demand for these products remains constantly high in the country and the region, as well as in the world markets. Currently, the monopoly factor in chemistry and oil chemistry complex, a wide network of private companies and manufacturing enterprises has not yet been fully formed. International experience shows that the number of such enterprises in our republic is limited despite the fact that some chemical and petrochemical enterprises in the foreign countries are tens of thousands. From this point of view, the establishment of competitive and export-oriented chemical and petrochemical enterprises is of great importance in our Republic. It is planned to create a logistics center under the "Sumgayit chemical industry park" and this process is continuing. However, it should be noted that taking into account the profile and destination of the park, measures should be taken and an adequate technical base and infrastructure should be created. Among the residents registered until the present time, this chemical industrial park also includes non-chemical-profile enterprises and companies. Thus, a strong base of raw materials and resources, i.e. a chemical logistics center, should be created here, which can form a serious potential for solving the problems of providing investors with raw materials and resources who want to come to this park. One of the important factors contributing to the creation of the "Mingachevir chemical and petrochemical products" logistics center is the demand for various chemical and petrochemical products of this region, as well as the activity of chemical and petrochemical enterprises in the city of Mingachevir. There is a serious need to create a network of processing enterprises in the Industrial City of Mingachevir, as well as in the nearby Ganja and other districts of these regions, which is directly related to the increase in the need to create industrial

enterprises in the regions, the importance of creating new jobs and value, the priority of enterprises to put into operation. Thus, thanks to the creation and development of a network of chemical and petrochemical processing enterprises producing the consumer goods in Mingachevir, Ganja and other areas, it is possible to export chemical and petrochemical products to Georgia, to other foreign countries via the ports of this country, to reaize the export of these products Turkey via the Baku-Tbilisi-Kars railway, and to ensure receipt of foreign currency in the non – oil sector. It was noted that the strategic road map on logistics and trade development in the Republic of Azerbaijan would allow the creation of a refining center for petroleum products and the creation of a supply base for general use in the new port of Baku for oil and gas processing and other purposes in the region. At the same time if we look at world experience, the creation of the "Alat chemical and petrochemical" logistics center with high potential and strong infrastructure at the Baku port could have been a great success to our Republic, including chemical and petrochemical enterprises. Thus, the logistics center has the potential to supply a wide range of chemical and petrochemical products, especially major chemical products from Iran and other gulf countries, as well as South-East Asia. In other words, this logistics center could provide a strong stimulus for the formation of processing networks, the creation of chemical and petrochemical enterprises by bringing large volumes of chemical and petrochemical products to our country. On other hand, the processing or re-packing of chemical and petrochemical semi-finished products would increase the export potential and so on. It should be noted that there is serious state support for the development of the logistics system in our Republic, and attention to the development of this area is growing. Thus, in December 6, 2016 by the decree of the president of the Republic of Azerbaijan, the strategic road map on the development of logistics and trade in the Republic of Azerbaijan was approved. In this important document, short, medium and long-term directions of economic development in the field of logistics for the period to 2020, to 2025 and after 2025 for the subsequent period have been determined. In the near future, taking into account the development trends of the logistics system, its strategic targets, the maximum optimal and efficient solutions of the economic and organizational problems of the logistics system in enterprises will be further actualized in our country and in the world. Based on the real challenges of modern era and trends in the development of this sector, enterprises in the creation and operation of an improved logistics system will have a significant role etc. Efficiency evaluation of the organization of logistics system in enterprises and solution modeling of provision problems of enterprises with basic materials are directly related to each other. Thus, enterprises should establish and strengthen close farm-cooperation and cooperation with their main producers-enterprises. However, this is also not enough, so that the main activities of logistics systems and subsystems logistics mechanismes in enterprises should be optimally defined and efficiently organized (7). Realization of basic functions of the logistics system in enterprises should be considered complex and systematic.To achieve all this, the assessment of the economic efficiency of the logistics system in enterprises the developed criteria by the author in the work are reviewed as the important measures.

4. CONCLUSION
Taking these into account, the problems of application of more advanced logistics systems in the uninterrupted provision of enterprises with raw materials and resources should be solved in our Republic. It is important to identify and solve the existing problems on effective organization of the logistic support system of enterprises with raw materials and resources in Azerbaijan. To this end, it is very important to consider a number of tasks and implement measures related to the creation of logistics centers.

1) The legislative framework for the regulation of logistics activities in the Republic must necessarily be strengthened. To this end, it is important to develop and adopt the law of the country "on logistic activity" proceeding from modern realities and circumstances in Azerbaijan.
2) The possibilities of using different models of progressive logistics system, which allows uninterrupted provision of raw materials and resources of enterprises, should be assessed realistically and their application is desirable.
3) It is important to solve the problems of consistent and efficient implementation of the proposed measures to expand the logistics system of diversification of production in enterprises during the implementation of strategic road maps in Azerbaijan.
4) In the context of modeling the logistics of chemical enterprises in Azerbaijan, the issues of establishment of five important logistics centers (terminals) on the basis of modern technologies and progressive logistics systems should be considered at the strategic level and it is desirable to be solved them in the near future.

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THE DIRECTIONS FOR IMPROVEMENT OF COMMODITY STRUCTURE OF AGRICULTURAL EXPORT IN AZERBAIJAN

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ABSTRACT

The sustainability of the socio-economic development of Azerbaijan is determined to a large extent by the establishment of effective foreign economic relations which serve to its integration into the international economic system, the expansion of favorable trade and economic relations with foreign states and international economic organizations in accordance with the national interests of the country. At present, our country establishes mutual economic relations with about two hundred states of the world. But, the majority of these relations, especially export relations are related to oil and gas products. Therefore, today the necessity for profound study, objective assessment and adequate measures of export potential of Azerbaijan's non-oil sector seems very actual. The fact that Azerbaijan is on the list of low-soil countries in the world indicates that the country produces less product in terms of production capacity. Moreover, remaining of about 20 percent of the territory of the republic under occupation for about thirty years decreased sowing and pasture areas considerably, as a result, the volume of agrarian food production did not pass unnoticed. Also, it is impossible to use enough of innovated technologies in agrarian field, therefore the import capacity of foodstuffs still remains high. The point is that, there is enough wide potential in Azerbaijan for production and processing of the majority of the imported products. It is also due to the characteristics of agriculture. So, agricultural products can be put up for sale both naturally and by processing. It also should be noted that, the processed products obtained naturally from exported products return to internal market at high prices. The commodity structure of agricultural export shall be considered periodically for elimination of these contradictions. The exports of products that do not require large investments in processing should be reduced in the near future. The measures shall be taken in the direction of promotion of export of competitive products made of their processing on the basis of high technologies. It can be resulted in increase of employment, improvement of the people's welfare and decrease of currency expenses for food import on the account of processing sector. Therefore, the opportunities for transition from natural raw materials to the finished products shall be investigated in agricultural export of the country and the existing opportunities shall be used maximally.
Keywords: product, export, import, investment, competition

1. INTRODUCTION

The development of agriculture depends directly on correct organization of its regulation mechanisms. Various impact levers of the state regulation mechanism are used widely in the process of achieving strategic goals made in this direction. Successively, the successful results of strengthening export potential are related to these impact levers. The results obtained in this field indicate the position of the country in international market and competition ability of domestic manufactured products. But, besides the value of export in any field, its commodity structure is also one of the important indicators. It should not be denied that, the countries, where the export of commodities is preferred as raw material, can't remove the group of developing countries. It should be noted too that, the economic safety of the country, as a whole, food safety which is one of the important components of national security depends on the level of development of the market of agricultural products.

From this point of view, the learning and analysis of conceptual issues of strengthening of export potential of the market of agricultural products has great scientific and practical importance.

2. THE NECESSITY FOR DEVELOPMENT OF THE MARKET OF AGRICULTURAL PRODUCTS AND STRENGTHENING OF EXPORT POTENTIAL

Possessing of the final result of agricultural production to risky nature by depending on the influence of natural and climatic factors much more, non-coincidence of the working period with the production period, exclusion of agriculture from investments and loans due to several natural factors and its being less attractive, as a rule, being the level of profitability and profitableness in agriculture lower than the average indicator of the economy makes it necessary to eliminate the existence of disparity between prices of agricultural products and prices of industrial products. One of the important factors making necessary the development of agriculture is that it is not only a material production sector that provides food for the population and industry with raw materials, but also an area where a large part of the economically active population works and provides employment. In accordance with official statistic information, 39 percent of economically active population in Azerbaijan works in agriculture, hunting and forestry. Hereby, we can conclude that, the special attention and care of the state to agriculture, where a large part of the country's population works has very important significance for development of the market of agricultural products. Today, the minority of social infrastructure objects (education, health, catering) in rural areas and sometimes their absence in general causes to migration of rural population (especially, skilled workers) from village to city and from village to the capital. We must recall that, they took part directly in solution of social problems of the village in the years of existence of public economies. The enterprises which engaged in construction of residential buildings for rural population, provision of people with fuel and water, the services of kindergartens, public caterings, transportation and conveyance, took part closely in solution of social problems by the help of collective-farms and state farms at that period. The solution of the said issues require funds in a large sum, therefore there is a serious need for government intervention. It is very important to prepare and implement large state programs in the Republic of Azerbaijan for solution of existing problems in regard to social infrastructure objects of the village. We think that, the sustainable development of the agricultural sector, improvement of the life level of rural population and increase of employment level in the village will be possible with execution of this program. Basing on thoughts said in regard to the necessity for development of the market of agricultural products and strengthening of export potential, we would like to notify that, the priority fields of agriculture shall be determined prior to starting to the measures in this direction and the significant measures shall be executed just in those fields.

The followings can be attributed to the key priorities of this field in regard to the purposes for development of the market of agricultural products and strengthening of export potential:
- development of the market of agricultural products;
- achieving the transition to the stage of strengthening of export potential;
- provision of food safety;
- support of agricultural production and implementation of effective protectionist policy;
- development of infrastructure in rural territories;
- approximation of the income level of workers working in agriculture to the average indicator on the republic;
- acceleration of scientific-research works in agriculture and strengthening of state care in this field;
- environmenral protection;

- raising the level of knowledge of workers working in agriculture;
- environmentally pure food policy, etc.

3. THE MAIN PURPOSES AND DUTIES OF THE STATE IN THE FIELD OF INCREASE OF EXPORT POTENTIAL OF AGRICULTURE

As it seems from key priorities mentioned before, the development of the market of agricultural products and provision of increase of export potential considers the achieving to national goals and therefore, the support of state is especially important in this work. This importance is reflected in the goals set. The main goals of the state can be grouped, first of all, as economic, social and ecological goals in the field of development of the market of agricultural products and increase of export potential. In this regard, the followings can be attributed to economic goals:

- creation of condition for economic development and economic increase;
- preservation of high and stable level of economic increase and employment;
- formation of the market of agricultural products and provision of its stable activity;
- provision of the transition to efficient use of resources;
- prevention of unfair competition and monopolies;
- provision of production of competitive product;
- protection of foreign economic activity of local manufacturers from negative impacts;
- stimulation of professional activity in real sector;
- solution of financing, also crediting and insurance problem of agro-industrial production sphere.

Successively, the followings can be attributed to the social purposes of the state in the field of development of agriculture and increase of its export potential:

- raising of living standards of the population and reducing of poverty;
- obtaining of social progress considering the better meeting everyone's needs;
- decrease or minimization of social inequality (differentiation) among people;
- ensuring the access of the population to social services and development of social infrastructure.

The role of commercial and investment banks is irreplaceable in crediting of the projects of development of agriculture and increase of export potential. Especially, implementation of large-scale agro-investment projects such as financing of establishment of agroholdings and reestablishment of infrastructure is possible only with activity of investment banks. But, considering the agriculture as one of the priority areas of the country's development makes necessary the crediting with special procedures. This difference is reflected in the fact that, the production process is mostly seasonal and the relative length of the production cycle. It is possible to finance the next production cycle on the account of incomes obtained in previous production cycle. But, "long-term farmer problem", i.e. return of farmers' incomes out of incomes obtained from other fields of economy doesn't allow it" [1]. The practice of developed countries shows that, the role of agrarian development banks has been increasing in recent times among financial organization taking part in the process of financing of agricultural area. These banks engage in fulfillment of functions oriented to development of agricultural area and almost, are establishing by state in all cases or on the account of its active financial assistance. The provision of sustainable development considers directly the state support and active government assistances, therefore the establishment of agrarian development banks shall be directly under patronage of the state [2]. The role of credit unions and microcredit organizations can also be noted especially in financing of production subjects engaging in agriculture in the

direction of development of the market of agricultural products and increase of export potential. They are distinguished by the participation of members in the management, the orientation of the obtained incomes for entrepreneurial activity, the existence of mutual trust and common interests. One of the factors of economic security of the development of agriculture and increase of export potential is fiscal policy. Here, more subsidies, other purposeful state funds and allowances are used widely within state budget. The state benefits to the field of agriculture are conducting on different criterions. The practice shows that, the decrease or complete cancellation of government subsidies stems from the fact that subsidies ultimately run counter to the goals of a sustainable economy. So, subsidies strengthen the excessive use of resources and decrease the social welfare of people. The price subsidies for the final product are considered particularly harmful. Thus, in addition to creating corruption, subsidies create a contradiction between the sectors receiving subsidy and those who do not [3]. The mechanism of state regulation of prices in this field should also be working for increase of export potential of agriculture. These prices usually are applied within the terms determined by the state and define different discounts for manufacturers. The purposeful prices provide the keeping of price parity of industrial and agricultural products, payment of taxes and making of other payments, payment of service costs for credits and increase of incomes of agrarian subjects. In general, the price mechanism is the unified system in agriculture, target prices must act as its basic element and other elements of price system shall be formed on their basis [5]. In order to prevent the decrease of production in field of agriculture and to increase the export potential, it is necessary to protect the level of prices of agricultural products from inflation and increase of prices of industrial products. In other words, prices shall be regulated by state in such manner that, it will create stimulus for manufacturers and finally it will increase the export potential of agriculture. One of the important economic provisions in the field of measures conducted in the direction of increase of export potential of agriculture is state financing and subsidies. While preparation of programs and other documents which consider state financing, the regulatory role of the state must be brought to the fore. But, in this case, the principles of sustainable economic development, that is to say, economic effectiveness and social solidarity and ecological responsibility shall be taken into consideration. One of the important economic terms of the development of agriculture and increase of export potential is existence of developed infrastructure. Though infrastructure doesn't take part directly in production process, it has a great influence in the last product, its efficiency and profitability. The insurance of agricultural production is also one of the objects of economic influence of the state in the direction of development of agriculture and increase of export potential. The agriculture includes in the category of comparatively risky fields, therefore the state is obliged to undertake the function of compensation and insurance of risk level of production units with different means. The foreign economic relations take large place in the rank of security factors in the direction of increase of export potential of agriculture. The protection of food market from external interference is considered one of the important terms of establishment and development of sustainable agriculture. The food market shall be protected from negative influences, the use of economic potential of the country as widely and effectively as possible, the creation of abundance of national products and services in the domestic market shall be achieved [6]. Because of this, optimal balance shall be found among import structures providing domestic market with qualitative food products and production areas which export potential is great. In a word, provision of sustainable development stipulates not only the increase of export, but also the import of products, which nominal value is higher than average accepted production norms, and which requires large capital investment and technological innovations. The protection of internal market is the duty of the state and because the struggle for the market has become more intense in modern times, there is a need for well thought systems and economic mechanisms.

The determination of principal directions of stimulation of national economy is necessary under the rule of legislation [7]. We must note that, the government intervention of foreign economic relations in the field of agriculture creates a stimulus for export of products of domestic manufacturers, soft bank credits are giving to the persons who engage in export, the import control is strengthening for protection of interests of domestic manufacturers and other measures are taking on the other hand. One of the important means for provision of the development of agriculture and increase of export potential is application of achievements of scientific and technical progress to production in a short time. The function of delivery of innovations to agricultural subjects shall be fulfilled by information and consultation centres. For this purpose, the establishment of the unified information infrastructure is considered necessary.

4. CURRENT STATE AND CHANGING TRENDS OF AGRICULTURAL EXPORTS IN AZERBAIJAN

The increase of Azerbaijan's export potential from year to year and especially the role of agricultural products in exports play an important role in the economically sustainable development of the country, along with the development of exporting farms. In recent years, the country's agricultural production has increased and is exported to various countries around the world. Wheat, barley, tomato, cucumber and other vegetables, pomegranate, hazelnut and other fruits and berries, along with traditional vine-growing, cotton-growing, silkworm breeding, tobacco and fruit-growing fields are also included in the country's agriculture. The statistical information shows that the production of the main types of agricultural products between 2001 and 2018 has increased. This has also affected their exports.

Table 1: Changes in the export value of agricultural products and their processed products, mln. USD

Products / Years	2001	2018	Increase for 18 years, time
Fresh fruit	11 884.6	325 571.8	27,0
Fresh vegetable	829.4	202 794.4	244,0
Potato	21.2	29 627.5	1397,0
Cotton fibre	14 890.9	79 529.9	5,0
Cotton yarn	212.3	23 667.8	111,0
Fruit and vegetable juices	1046.5	9672.8	9,0
Fruit and vegetable preserves	1076.2	7753.6	7,0

Source: "Export Review" of the Center for Analysis of Economic Reforms and Communication

As can be seen from the table, the export of agricultural products has increased rapidly during 18 years. The reasons for this increase mainly include the expansion of state support for agriculture and the increase of exports of other products, along with traditional exports. Greenhouse tomatoes, apples, strawberries, cherries, hazelnuts, pomegranates, and dates may be cited as an example to them. In modern times, previously seemingly remote export markets have also become accessible. Thus, in addition to the CIS countries, which are traditional export markets, Azerbaijani agricultural products are already exported to European countries, China, Japan, East Asia and the Gulf countries. Despite the fact that products exported from Azerbaijan are weak in terms of marketing and packaging, buyers prefer them more because of their taste. Also, due to climatic conditions, when the export of products in many countries ends, Azerbaijan's agricultural products grow and are ready for export.

However, along with logistical difficulties, poor marketing and lack of packaging also negatively affect the commodity appearance of our products and reduce their competitiveness in foreign markets. Elimination of the existing shortcomings in the near future can help increase the competitiveness of Azerbaijan's agricultural products in export markets. Therefore, measures are being taken to expand the geography of export markets and strengthen their position in traditional export markets, promote the "Made in Azerbaijan" brand and ensure international standards. If we look at the ranking of non-state and state exporting subjects related to the export compiled for the non-sector and realized by the "Export Review" of the Center for Analysis of Economic Reforms and Communication in 2019, we can see that "Nine Climate" LLC, "Global Export Fruits" LLC, "Sun Food" LLC, "Natural Fruit" LLC, "Azerbaijan Sugar Production Association" LLC, "P-Agro" LLC are among the non-state exporting subjects, and the companies of agricultural and food products such as "Azerpambig Agrarian Industrial Complex" LLC, "CTS-Agro" LLC, "Azertutun Agrarian Industrial Complex" LLC are among the companies belonging to the state participating in export operations for the non-oil sector. "Azersun Holding", "Gilan Holding", "Aznar", "Az-Granata" LLC and "Agro procurement and supply" OJSC are among the companies that can withstand competition in the export markets of crop products. The products processed by these companies are distinguished by their competitiveness. For example, it is important that the annual production capacity of wine, strong drinks, cognac, juice and nectar, compote, whiskey and others produced by "Az-Granata" LLC is 100 million packages. This company's products are exported to 20 countries, including the United States of America and Germany. Along with increasing the number of modern processing enterprises in the near future, the processing of potatoes, tomatoes and other products in the country should be kept in the spotlight. Given the expected abundance of products in the conditions of free competition environment formed in Azerbaijan, the increase of sales volume was observed in the Russian markets being from the traditional markets. This sometimes allows the other side to abuse the situation. The fact that large quantities of tomatoes and apples were stored at Russia's customs borders for weeks in the autumn of 2020 has caused serious losses to local entrepreneurs. In the current situation, the government has, as an alternative, held talks with the Kazakh government. In this regard, the main goal now is to minimize dependence on the Russian market and achieve greater advantage in alternative markets. The results obtained in a short period of time are a clear example of this. For example, cherries and pomegranates were exported to Nigeria, and pears, cherries and eggs were exported to Dubai city. In the current situation, relations are being established with the Gulf countries, Africa, Central and Eastern Europe, Singapore, China, India and other states. For example, jams, rice, peas, dried fruits and jam were sent to countries such as South Korea and Pakistan. As a result of negotiations, the first steps have been taken and export operations are expected to take place in the near future. The issue is that the work to be done does not end with the expansion of the geography of agricultural products' export. The correct answers to the questions such as What to export here? and When to export? should also be sought.

Table 2: Changes in the commodity structure of agricultural exports in Azerbaijan, mln. USD

	Product groups	2017	2018	2019
	Total	**15 319 977,1**	**19 489 068,2**	**19 635 580,4**
1	Live animals and products of animal origin	12 606,8	12 090,0	23 231,3
2	Products of plant origin	518 273,9	584 702,4	625 904,0
3	Finished food products, alcoholic and non-alcoholic beverages, tobacco	110 982,8	90 707,7	104 616,8

Source: www.stat.gov.az

If we refer to the data in the previous table, we can say that the export value of fresh fruits and vegetables was 6.0 times higher than the export value of fruit and vegetable juices and preserves in 2001, and 30.3 times higher in 2018. It is also clear from the data of the last table that in the last three years, the value and specific weight of finished food products in the commodity structure of export have decreased with some hesitation. In 2018, the minimum amount of this indicator was recorded. It can be concluded that the commodity structure of agricultural products' export is still dominated by natural products. The efficiency of production and foreign relations is achieved through the export of processed products. Because this process is accompanied by the creation of value added, increase of employment and rising living standards of population. As a result of works done to meet the needs of the republican population mainly through domestic production and ensure food security, as well as measures taken to promote the export of non-oil products, enterprises based on the high technologies in the agrarian sector and produced the competitive products were opened and the export potential has begun to strengthen in a number of areas along with meeting the local demand. It is clear from the conducted analysis and research that the main purchasing country of Azerbaijani agricultural products was Russia in 2020 and Turkey and Switzerland follows it. Last year, the main part of the country's non-oil export was tomato (201,4 million USD) and cotton (131,9 million USD). In general, in 2020, the country's fruit and vegetable export was 607,7 mln.USD, cotton yarn export was 19 mln.USD, alcoholic and non-alcoholic beverages export was 12 mln.USD, sugar export was 26,9 mln.USD and tea export was 9,5 mln.USD. Thus, the non-oil export of Azerbaijan in 2020 was 1,9 billion USD and compared to 2019, it was 5,2% (102 mln.USD) less. This can be mainly connected with the distrust of close import partners, the risk of losses from their unpredictable actions and the weakening of mutual relations due to the pandemic.

5. CONCLUSION

It is necessary for the country to have diversified foreign trade relations in order to be recognized in the world community and take a worthy place in the international market. In order to maximally benefit from these relations, each country tries to make efficient use of its natural and economic resources. If the country is observed a technological backwardness and a shortage of qualified personnel, then it leads to losses in foreign economic relations. Thus, the natural export of a product without processing means a significant loss of added value and income. This is a characteristic situation for developing countries, including Azerbaijan. This is more clearly reflected in the example of agricultural products. It is a real fact that the specific weight of fresh fruit and vegetable in Azerbaijan's agricultural export has increased, while the share of their processed products has decreased year by year. Despite the increase of cotton, tobacco, cocoon, hazelnut and date export in recent years, the production and export of processed products from them and other products (grape, tomato, apple, etc.) is decreasing. This can be connected with the small number of processing enterprises, their low production capacity, the investment capacity for the establishment of new enterprises, as well as the lack of marketing experience of existing enterprises. For this reason, subjects that avoid from the strong pressure of competitors in foreign market satisfy with the export of natural agricultural products. For the purpose of preventing from it, consistent measures should be taken to invest in the establishment of large agro-processing enterprises in the country, to provide them with tax and credit benefits, as well as to promote and stimulate the export of agro-processed products in the near future. At present, Azerbaijan is the most successful country in the region in terms of favorable natural conditions, geographical location, developed infrastructure and financial opportunities for taking of these measures. Moreover, the quality (ingredients, taste) of the agricultural products in Azerbaijan prefers from foreign analogues.

In this regard, it can be thought that there will be a great demand for processed products obtained from them in foreign markets. Therefore, using the existing opportunities, it is possible to change the structure of Azerbaijan's agricultural exports in favor of agro-processing products, and its implementation is a requirement of the present time.

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PROBLEMS OF DIGITAL ENTREPRENEURSHIP DEVELOPMENT IN AZERBAIJAN

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ABSTRACT
Digital entrepreneurship is an essential field for future innovation. The Azerbaijani government has taken a number of important steps in this direction, however, the weakness of the country's innovation ecosystem, as well as the lack of a historically formed open innovation culture that constantly supports entrepreneurs and encourages them to take risks, has led to relative stagnation. In the last years, there has been a relative slowdown in venture investment, and there has been a gradual decline in the number of successful companies entering the market. Therefore, there is a need to improve coordination between the different policy instruments used by the state, accelerate digital transformation and stimulate state-owned enterprises to create the need for innovation, and ensure a predictable business environment and internationalization of the national startup ecosystem. All this characterize the urgency of the research topic. The purpose of the research is to identify the existing problems in the policy of the state in the field of digitalization of entrepreneurship and to develop specific proposals and recommendations to address them. The research used a number of general methods of economics, including a systematic and logical approach, comparative analysis, as well as methods of analysis and synthesis. The article analyzes the theoretical and practical approaches to defining the goals and directions of the state policy in the field of digitalization of entrepreneurship, as well as to identify and eliminate the main problems. The authors advice on the impact of the policy of digitalization of entrepreneurship on the socio-economic processes in the country, substantiate the role and importance of measures taken by the state in solving the problems of socio-economic development of the country. The scientific novelty of the research is a comparative analysis of the policy of Azerbaijan and a number of developed countries in the field of digitalization of entrepreneurship, the development of priorities for improving socio-economic policy based on the interaction between the digitalization of entrepreneurship and socio-economic development.
Keywords: *digital entrepreneurship, innovation ecosystem, government innovation policy, government support tools*

1. INTRODUCTION
The problem of effective of small and medium-sized enterprises development is becoming increasingly important for the Republic of Azerbaijan. Today, small and medium-sized enterprises development is the most important element of a market economy. The experience of foreign countries shows that sustainable development of the state and sustainable economic development is impossible without the institution of entrepreneurship, because it determines the rate of economic growth, the structure and quality of the country's gross domestic product. A small enterprise responds quickly to changes in the external environment, effectively replenishes unused market space, restricts market monopolies, and creates additional jobs, which are especially important in crisis. Entrepreneur provides most of the goods and services to the population and it is an important taxpayer for the state.

Business advantages (independence, risk-taking, organizational mobility, sensitivity to innovation, management and technological agility) allow the entrepreneur to successfully respond to changing market conditions, sell the necessary goods and services, primarily with its own capital and favorable welfare. In the mode of digital transformation, the existing institutional system changes, other coordinates of the institutional balance appear, a more complex and contradictory institutional environment emerges, and institutional changes occur [1, p. 37]. The transition to the digital economy could not touch upon the business sector. From this point of view, the issue of digital enterprise formation is especially relevant today in Azerbaijan. The urgency of digital economy development and the application of technology is actively discussed, because a single theoretical and methodological base for research in this area is still being formed and not fully developed and it stimulates its deeper analysis and search.

2. DIGITALIZATION OF THE ECONOMY - AS A FACTOR OF ENTREPRENEURSHIP DEVELOPMENT

Changes in the economy related to the development and application of digital technologies have a significant impact on already established business models. New materials, expanded reality, admixture technologies, UAV, advanced robotics, cloud computing and data storage, biometric and implantable technologies, large-scale technologies, big data and machine learning, a huge layer of financial technology, etc. events use from information technology efficiently. In general, the digital economy can be defined as a set of social, economic and cultural connections realized within the digital space, involving the widespread use of information and communication technologies and big data. "State Program on Expansion of Digital Payments in the Republic of Azerbaijan in 2018-2020" markets and economy sectors in which the digital economy interacts with competing entities; platforms and technologies for the development of markets and industries; defines as a set of institutional environment (normative regulation, information infrastructure, personnel, information security) [2]. As noted by the Rector of UNEC, Professor A.Muradov, "… a large number of digital platforms have emerged worldwide through the use of information-based business models and the digitization of existing sectors. Today, 7 of the world's 8 largest companies by market capitalization (Amazon, Alibaba, Facebook, eBay, Uber, Didi Chuxing, Airbnb) use digital platform-based business models. The presence of firms can be considered a key indicator of the strength of these platforms "[3, p. 8]. The digital economy has already passed through several stages of development:
1) 1990-2005. Introduction stage. E-business and e-commerce development;
2) 2005 - 2010. Growth stage. Explosive growth of new products and e-services;
3) 2010 - 2019. Maturity stage. Mass placement of online channels and digital influence to traditional enterprises;
4) From 2020, systemic transformation and fundamental digitalization are forecasted based on a systematic approach.

According to the European Commission, in general, it can be observed strengthening digitalization, widespread use of information technology and intellectual capital around the world [4, 5]. The evolution of EU member states in the field of digital competition can be tracked by the International Digital Economy and Society Index (DESI), which is a summary indicator and covers five indicators characterized by more than 30 indicators. This includes the following indicators:
- Connectivity measures the location of broadband infrastructure and its quality, access to fast and ultra-fast broadband services, it is a necessary condition for competitiveness;
- Human Capital and Digital Skills measure the skills required to use ICT effectively;

- Use of Internet Services takes into account various online activities such as online content consumption, video calls, as well as online purchase and banking operations;
- Integration of Digital Technology evaluates the activity of enterprises from the point of view of ICT application, i.e., whether the company uses electronic invoices, cloud services, whether they carry out electronic sales, etc.;
- Digital Public Services assess the level of e-government and e-health services development.

Business is the area where digitalization processes are most active. The use of information resources to increase the level of competitiveness of business structures is associated with the optimization of business processes and their transfer to digital platforms. Digital platforms are hybrid structures aimed at creating value by providing direct interactions and transactions between large groups of third side users [6, p, 22-36]. The undoubted advantages of business digitalization are the automation of business processes, new ways of attracting customers, reducing decision-making time and reducing costs. The difficulties in the transition to the digital economy are the lack of skilled personnel who understand business transformation, the limited time frame for transformation and conservatism. Possible aspects of business growth through the use of digital technologies are the development of customer service and the use of communication channels (analytical tools, assessment, variability, adaptation, forecasting) to attract and retain customers, to form a positive image; strengthening partnerships in business using non-standard solutions; data enrichment and application of innovative technologies, modeling of consumer behavior and processes, search for new fields of business development by making forecasts based on Big Data [7, p. 78-84]. Information technology is included in all spheres of socio-economic life of society, it has a significant impact on the development of individual sectors of the economy. According to the information on the dissemination of information technology in the business sector and science-technology field, in general, the business sector is far ahead of the scientific-technical sector in terms of the use of the Internet in shopping, the use of CRM, ERP, SCM for sale. This lead in the use of RFID technology is almost 58% (14 times). Modern technologies are firmly integrated in the economic processes of economic entities and define their business processes. The share of digitalization of financial settlements in electronic form and the solution of organizational, economic and management tasks is particularly high (52-56%). Thus, the application of modern digital technologies for SMEs is not only a factor, but also a tool for development. According to experts, the digital revolution has already begun in small and medium enterprises in the country. Many small business owners are already using online technology to grow their business. The readiness of SMEs in Baku and other regions of Azerbaijan (Business Digitalization Index (BDI)) for the digital business model is assessed by the Business Digitalization Index (BRI).

This index is calculated primarily on the basis of the following special indicators:
- data transmission and storage channels: this indicator indicate whether the company uses various digital channels (cloud technology, corporate mail, instant messaging, automation systems, etc.) for data transmission and storage;
- integration of digital technologies: the parameter measures the level of technologies application at work - artificial intelligence, Internet of Things, 3B printing, use of online documents, etc .;
- Internet use in sales: the indicator takes into account the various activities used by enterprises on Internet channels (availability of a website, pages on social networks, use of promotional channels, etc.);
- information security: it measures the readiness of entrepreneurs to face potential digital threats;

- digital training: the indicator demonstrates the level of training of the company's management in the field of digital technology training and the experience of conducting such course and trainings.

3. TARGETS AND PRIORITIES OF THE PUBLIC POLICY OF AZERBAIJAN IN THE FIELD OF ENTREPRENEURSHIP DIGITALIZATION

The use of ICT by businesses in the Republic of Azerbaijan is low, especially among SMEs. In 2015, only 30-50 percent of SMEs used the Internet, due to their limited skills and awareness, as well as their preference for traditional practices. According to the State Statistics Committee, in 2019, only 9.8 percent of companies had a website [8]. The territory of the High Technology Park, established in 2012 by the President Order, covers 50 hectares areas on Pirallahi Island, a district of Baku. Its mission is to strengthen the high-tech economy by providing a business-friendly environment with modern facilities, economic incentives and business services. Today, however, it is accepted more than an industrial park and the number of computer service companies located here is small. However, there is a using incubator for various startups. In 2015, a resident company in Mingachevir High Technology Park began production of computers, tablets and other electronic devices too. Another indicator of the limited software sector in the country is reflected in trade statistics. Azerbaijan faces a significant balance of payments deficit in the field of computer and information services, which suggests that there are shortcomings in the realization of the country's potential in the development of IT applications. Some universities in Azerbaijan, which have incubators for social entrepreneurs, provide aid to the field of technology startups. Some telecom operators also have startups that aim to develop mobile applications for entrepreneurs [9]. Besides, there are a number of startup events organized by international organizers (Seedstars) [10] and universities that provide mentorship (Massachusetts Institute of Technology) [11]. In addition, Azerbaijan's Annual International Exhibition and Conference on Telecommunications, Innovation and High Technologies, known as Bakutel, provides an opportunity for startups to present their ideas to an international audience [12]. In November 2018, the "Innoland" Incubation and Innovation Center was started, which includes a fabrication laboratory, collaboration work area, incubator, research, development center and technology academy. Although there are a number of government initiatives to assist SMEs in mastering ICT, none of them have yet had a significant impact on the development of SMEs in the ICT sector. The Easy Support for Family Business (ABAD) initiative is implemented by "ASAN" Service and helps to be SMEs more productive in agriculture and handicrafts fields through an incubation mechanism. Similarly, the new Small and Medium Business Development Agency (SMBDA), launched in June 2018, aims to facilitate SME business procedures through some digital initiatives, including ICT training and the creation of a G2B (state-business) electronic registry portal. The government also aims to support startups that engage in innovative activities through tax stimulus [13]. One of the other serious challenges facing SMEs and startups in Azerbaijan are access to credit; according to World Bank surveys in 2013, access to finance was noted as the biggest hurdle facing Azerbaijani enterprises. [14] Banks in Azerbaijan are reluctant to credit to high-risk enterprises. Through the State Fund for Information Technology Development, startups are provided with capital (mainly for seed financing). Besides, SME Funds under SMBD leadership will provide guarantees for SMEs in order to support their financial accessibility. SMEs usually need more flexible financing options in terms of volume and type of funding, depending on the stage of development. Financing of high-growth startups in the world is usually achieved through angel investment and venture capital, but this type of financing is almost non-existent in Azerbaijan. E-commerce is not developed enough in the country. In recent years, only 5-6 percent of the population has made online shopping, the figure is very low compared to the corresponding world average of 24 percent.

Despite the fact that retail e-commerce almost doubled between 2016- 2017 and increased from 25.6 million manat ($ 15 million) to 46 million manat ($ 27 million) in 2017, this is only 04 percentof GDP, which is lower than the corresponding average for the world and neighboring countries [15]. Azerbaijan is ranked 68th among 144 countries in the UNCTAD B2C E-Commerce Index due to poor penetration of electronic payments, including credit and debit cards, lack of local online stores, underdeveloped logistics, lack of trust between buyers and sellers, poor digital literacy among people in general [16]. Another problem is the high transaction fees associated with foreign credit card payment networks. In order to solve the problem, the government envisages the development of e-commerce as one of the priorities of the State Program on Expansion of Digital Payments in 2018-2020 [17].

4. CONCLUSION

We can say with fully confidence that entrepreneurship has already begun to digitalize in Azerbaijan. However, most enterprises remain largely traditional in their activities, use only a few digital technologies in their businesses and they do not reuse the entire business structure. It is very expensive for some people, some persons are afraid of cybercrime and others do not find the right technology for their work. In order to stimulate companies, we believe that the government needs targeted measures for information security, investment in scientific research and digital entrepreneurship. Thus, the importance of digital technologies for the modern economy is undeniable. All over the world, in every field and in every company, people are digitizing what they are doing. Every day new digital assets are created: new applications, functions, ideas are developed - all this makes us faster and more efficient, our lives are safer, new innovations are opened for society. Together, these small digital steps have a profound effect on the economy as a whole. To avoid uncertainty in the future, it is necessary to actively cooperate with international organizations in theoretical and practical areas. It is important to explore the potential of technology to contribute to economic development and innovation, both at the industry level and at the national level. We believe that for the digital economy growth and digital entrepreneurship development, it is necessary to develop the national IT sector, stimulate the creation of innovative technologies and cooperate for their development at the international level. It is necessary to create a solid fundamental knowledge and skills base that provides highly qualified training of young professionals. It is important to further streamline the conditions for the development and improvement of young talented specialists within the Republic of Azerbaijan. It is necessary to stimulate investment and entrepreneurship in this field, to apply new technologies for business development. It is important to provide support for beginners, contribute to the development of new innovative enterprises that will be focused on international markets and viable in the face of global digital competition, mobilize knowledge through key production and economic relations, as well as exchange and create new jobs in high technology field. Business leaders need to develop good business strategies based on the use of IT, rely on digital technologies to interact with customers, business operations must consist of digital connections between themselves and process participants and business structures must respond to change. IT is a business environment and can be used to increase competitiveness. The transition to new technologies in modern times is the key to successful entrepreneurship. Modern information and communication technologies are a much-needed product for the organization and promotion of a well-functioning business, effective entrepreneurship gives it a competitive advantage in the business environment. It is important to integrate modern technologies into daily work and business processes, change its format, start a business in the same way as new digital services and systematically train staff to work with new technologies. The development of digital public services and the integration of digital technologies into entrepreneurship is particularly important.

In order to move on the trajectory of recovery and development in the liberated lands, our country needs the interaction of society, business and the state, that is, the penetration of digital relations at all levels of interaction. Digitalization is a tool that can make the economy of our country and its different regions modern and competitive.

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THE MAIN CAUSES AND CONSEQUENCES OF MIGRATION AND EMIGRATION OF LABOR RESOURCES AND METHODS OF THEIR REGULATION

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ABSTRACT

Since the second half of the twentieth century, migration processes have acquired truly global proportions, covering all continents of the planet, social strata, and groups of society, various spheres of public life. Quite rightly, the past century is called the "era of migration". International migration in modern society is a fairly significant phenomenon in terms of its scale, as well as its socio-economic and political consequences for countries and regions. The process of internationalization of production, which is actively taking place all over the world, is accompanied by the internationalization of the labor force. Labor migration has become a part of international economic relations. Despite giving rise to certain problems, labor migration provides undoubted advantages to countries that receive and supply labor. The intensification of migration processes observed in recent decades is expressed both in quantitative and qualitative indicators: the forms and directions of movement of labor flows are changing. Cross-country migration of the population and labor resources occurs when there is a significant contrast in the levels of economic and social development and the rate of natural demographic growth of countries receiving and giving away labor force. The world community, which until recently did not directly feel the size, characteristics, and consequences of migration processes at the international level, faced the need to coordinate the efforts of many countries to resolve acute situations and collectively regulate migration flows. The purpose of this work is to consider the concept of migration, to identify the main causes and consequences of migration and emigration of labor resources, and ways to regulate them. To achieve this goal, the following issues will be addressed in this paper:
- *revealing the concept and types of international labor migration;*
- *showing the scale and direction of international labor migration;*
- *considering the socio-economic impact of labor migration;*
- *considering the state regulation of external labor migration;*

Keywords: *international labor migration, labor resources, migration processes, migration regulation policies*

1. INTRODUCTION

An important part of world economic relations is international labor migration - the movement of workers looking for work to other countries. International labor migration is the interstate movement of labor resources with a change of permanent residence. It includes two counter phenomena: emigration and immigration. Emigration is the departure of the population of a country abroad, immigration is the entry of the population of other countries into the territory of a given country. These multidirectional flows of labor resources form the international labor market, which brings together similar markets at the level of states and regions. Labor migration is a form of existence of the international labor market.

Illegal migrants could enter another country both illegally and legally (by private invitations, as tourists) with the subsequent transition to an illegal position or illegal employment. A special type of population migration is forced migration, i.e., this type of migration happens under the influence of forced circumstances or stressful conditions in the form of wars. The urgency of the problem of labor migration is that labor resources have always been of a great value and a strategic reserve of a country. Even though "import" of labor from abroad in the form of labor migration has many benefits associated with it, this process is also viewed by some as a threat to the welfare state as well as the cultural identity of the receiving nation. Therefore, states employ immigration policies to regulate the number and composition of immigrants entering the country during a particular period. This work aims to study and identify modern problems and consequences associated with the migration of human resources, as well as to analyze the causes of migration and the mechanism of its regulation.

2. THE HISTORY OF THE EMERGENCE OF MIGRATION PROCESSES

Historically, migration processes originated many centuries ago. The first massive movement of workers was the import of slaves from Africa to America. In the 40s of XIX century there was an explosion of emigration from Ireland to the United States due to the "potato famine". Large-scale migration in the early 80s of XIX century from Italy and Eastern Europe to the United States was associated with falling prices for European wheat. The flow of migration slowed sharply due to the deteriorating economic situation in the United States and gained strength again during the economic recovery. A new wave of migration from Europe to the United States was noted in the 1920s. To the reasons already mentioned, we must add here the difficulties of post-war life in Europe. After World War II, three new flows of labor migration to the United States were noted. First, it is a "brain drain" - a steady flow of highly qualified professionals and their family members to North America. Second, the flows of refugees from Hungary (1956) after the suppression of the anti-communist uprising and from Vietnam (1974-1975) after the end of the Vietnam War, as well as from Cuba (1980). Third, the largest influx of this period is the influx of labor from Mexico, the Caribbean, and Asia to the United States. At the beginning of the new century, 84% of all immigrants came from these regions. Mass migration to the United States has always been great. The wealth of this country has attracted and continues to attract the population of many countries of the world. The size of the annual influx of migrants depended on the economic conditions in the United States, stimulating migration from Europe and other regions. Today more than 700 thousand people a year legally immigrate to the country. A special role in the processes of labor migration of the XIX-XX centuries is the migration of the population from China to the countries of Southeast Asia and North America. It was mainly of a resettlement nature and it is estimated that 70 to 100 million people migrated during this flow. In Europe after the Second World War, especially since the early 1960s, quite intensive processes of labor migration were also noted. Labor from Spain, Portugal, Greece, Yugoslavia, Turkey was actively used in the economies of the industrially developed countries of Europe. In the mid-1990s, the influx of immigrants to Western Europe was at the level of 180 thousand people a year. Countries receiving the bulk of immigrants are Germany, France, Great Britain, Switzerland. Australia is the classic country of immigration in the Asia-Pacific region. In the XIX-XX centuries, this country received a large number of emigrants from different countries. In the early 1990s, Australia pursued a migration policy that stimulated business development, therefore, first of all, foreigners were urged to invest in the country's economy. It is from this decade that the immigration wave to Australia has noticeably decreased. According to official figures, there were more than 35 million migrant workers in the world by the beginning of 2005, compared to only 3.2 million in 1960. If migrant workforce with accompanying dependents are also taken into consideration, then the number of migrant workers with their families can currently exceed 100 million.

3. REASONS BEHIND LABOR MIGRATION

The reasons for labor migration can be different, both economic and non-economic in nature. Non-economic reasons might include political, national, religious, racial, family, etc. issues. In recent years, economic reasons have begun to play an increasing role: job search, increased income, living standards, etc. Economic reasons lie in the different economic levels of development of individual countries. The labor force moves from countries with low living standards to countries with higher living standards. Chronic unemployment, which exists in some countries (especially underdeveloped ones), has become an important factor in the increase in migration. Therefore, the possibility of migration appears due to national differences in wage conditions. In industrialized countries, thanks to the ability to solve a complex of socio-economic problems, a fairly high standard of living has been made possible for the population, which has, basically, a certain level of education and culture. Therefore, in production and infrastructure there is a whole list of non-prestigious low-paid jobs and specialties for which it is difficult to find an employee. At the same time, in developing and former socialist countries, where unemployment is high and wages are low, there are many who are eager to take such jobs in order to provide financial stability to their families. It is essential to distinguish between internal labor migration, occurring between regions of one state, and external migration, which could also be called international migration, affecting several countries. International labor migration between developed countries occurs primarily for non-economic reasons. In this case, the prestige of the job or firm, the possibility of professional growth, career, and cultural needs play a significant role. Non-economic reasons include political and religious reasons, unification and disintegration of states, natural disasters, wars, environmental problems, and personal reasons. Each of these and many other non-economic reasons can and do lead to large interstate movements of labor, which will have the same economic consequences as international labor migration. For developed countries, a big problem is the so-called "brain drain", for example, from Europe to the United States. Israel has become a kind of center of attraction for immigrants. Its population has increased by 60% due to migration flows and to a large extent (by 30%) due to immigrants from the USSR. Another direction in labor migration is the departure of qualified specialists and scientists to developing countries, which is often caused by economic factors, new job opportunities and, finally, simply the desire to get a job in a new place, to test their capabilities in new working conditions. This flow of migrants is relatively small.

4. CONSEQUENCES OF LABOR MIGRATION

Practice shows that labor migration can be beneficial both for countries exporting labor and for countries receiving it. For an individual country, the export of labor is an important source of currency to the country. It is received regularly in the form of transfers to families and when an employee returns from abroad. The departure of labor force abroad means an improvement in the situation on the domestic labor market, a reduction in unemployment in the country. Temporarily idle funds of immigrants held in bank accounts can be used to finance the host country's economy. At the same time, remittances sent to the country allow families to increase the level of consumption, increase aggregate demand, stimulate the development of production, i.e., enable the country as a whole to solve a complex of internal socio-economic problems more successfully. Part of the money received through the purchase of shares, land, real estate is directly invested in the development of the national economy. Furthermore, working abroad allows people to acquire new professional skills, experience, knowledge, which they will use when returning to their homeland, increasing the productivity of work. They also expand the capacity of the domestic market, present additional demand for goods and services, stimulate production growth and additional employment in the host country. Countries that import labor are primarily concerned with reducing production costs.

Host countries save on costs that have been invested in education and training of workers and professionals in donor countries. Immigrant workers receive significantly lower wages than local workers, which helps to reduce production costs and increase the competitiveness of national goods in the world market. The influx of highly mobile foreign workers facilitates structural, sectoral and other changes in the national economy. Immigrants contribute to the rejuvenation of the nation, since mainly young people emigrate - the most mobile part of the population in the best working age, thereby improving the demographic situation, especially in the industrialized countries of Western Europe, which are characterized by an aging indigenous population. Foreign workers often play the role of a shock absorber in the event of crises and unemployment, as they can be the first to be fired from their jobs. They are not provided with pensions, health insurance and are not taken into account in the implementation of social programs. At the same time, labor migration can have negative consequences. The negative consequences for recipient countries are as follows. Entire sectors of the economy (services, trade, construction), with the long-term use of foreign workers, become dependent on their labor. This leads to a reduction in the number of jobs among the indigenous population, increases unemployment, and generally worsens the situation on the national labor market. There is expected to be a significant decrease in the wages of the national labor force, with the supply of foreign workers on the labor market growing, who fill vacancies for low-paid and unskilled jobs. Conflicts are likely to occur between the indigenous population and immigrants, as a result, social tension as well as hostility within the society will grow. More often than not, migration is presented as a threat to the cultural identity of the receiving nation, which turns migration into a security matter, enabling governments to implement strict immigration policies (Huysmans, 2000). It is no coincidence that in recent years, in the interests of neutralizing the negative consequences and enhancing the positive effect obtained by the country as a result of labor migration, the means of both state policy and interstate policy have been used quite widely. An increase in its volumes is becoming a feature of modern international labor migration. Although there were only 3.2 million migrant workers in 1960 in the world, this number increased to 35 million in 1995. The socio-economic aspects of international labor migration can be viewed from three points of view: the migrant, the country of departure and the country of arrival. It is well known that the economic interest of migrants is to improve their living standards in the country of destination. Countries, depending on various factors, may be interested in both immigration and emigration. Emigration interest, as a rule, is of developing countries, where the demographic situation is very difficult, and the standard of living is relatively low. The interests of all three subjects may coincide or contradict with each other. In addition to the economic and social aspects of international migration, there are also demographic and political aspects. An increase in population density complicates the relationship in the human-nature system. The concentration of the population in cities causes an increase in social tension, leads to incitement of ethnic conflicts, an increase in crime, etc. When forming the concept of migration policy, all these aspects should be taken into account.

5. REGULATION OF LABOR MIGRATION THROUGH GOVERNMENT POLICIES AND INTERNATIONAL INSTITUTIONS

To eliminate the negative consequences and enhance the positive effects received by the country as a result of labor migration, it is necessary to use a set of means of state and interstate regulation of migration processes. State interference in the movement of labor across state borders dates back to the regulation of international markets for goods and services. Already at the end of the 19th century, the legislation appeared that prohibited the departure of workers and the entry of unwanted foreign citizens. On the contrary, it encouraged the immigration of specialists for promising sectors of the economy, representatives of rare professions, people with a worldwide reputation in the field of science, culture, art and sports, business

representatives investing their capital in the economy of the host country, and, finally, workers willing to perform harmful and difficult work for the minimum wage. Today, the states of the world community have developed a whole system of measures to regulate intercountry labor migration, including legislation on the legal, political, and professional status of migrants. Migration policy is carried out directly through national migration services, usually created under the ministries of labor, justice, or foreign affairs. Immigration services carry out the functions of control over the entry into the country. Their responsibilities include issuing entry visas, permits, coordinating them with entrepreneurs' applications for employment, as well as monitoring the time spent by foreign workers in the country. Non-migration policies related to labor-market and education can also have indirect effects on the number of immigrants entering the country, which explains why immigration policies sometimes fail to have a desired effect on the migration process (Czaika & De Haas, 2013). Countries importing labor resources, constantly experiencing the need to attract labor, base their immigration policy primarily on measures to regulate the number and quality of arriving migrant workers, and the immigration quota indicator is used as a regulatory tool, which is annually calculated and approved in importing country. When determining the quota, the country's needs for foreign labor and for certain categories of the population involved (gender and age groups, education, etc.) are taken into account, as well as the state of national labor and housing markets, the political and social situation in the importing country. An example of high requirements for the quality of the arriving labor force is evidenced by the need to go through the procedure for recognizing the documents of education or vocational training held by the migrant, as well as the existing work experience in the specialty. The age limit is one of the most common criteria for selecting immigrants and is in favor of younger applicants. The following issues are also considered to ensure the quality of workforce: good health of an arriving migrant (typical for a number of Scandinavian countries and the United States); additional professional requirements related to a number of specialties or professions (in the United States, a foreign programmer must own the software accepted in the country, be familiar with the corresponding computer systems); limitations based on personal and psychological background (For instance, an applicant for South African citizenship must have a "pleasant character", and representatives of any of the parties of the totalitarian type are prohibited from entering the United States). There is also an argument that immigration policies are hardly effective since the primary causes of migration, such as labor market imbalances remain unaffected by those policies (Czaika & De Haas, 2013). Thus, the implementation of such policies, that do not address the core of the problem, is unlikely to solve the migration issue, but rather it is going to force migrants to seek other ways and routes of immigration (Hampshire, 2015). At the same time, it should be borne in mind that the value of any qualitative feature in the selection of immigrants is not constant and may change in favor of other priorities. But for a number of characteristics, such as the age qualification, the availability of a labor certificate, the possession of a profession and professional training, the requirements are quite stable over time. The world community and international organizations play a certain role in regulating labor migration. The world community has recognized it as an expedient and necessary condition to adhere to certain legal norms and standards enshrined in the documents of international organizations. By ratifying international conventions, countries regulating the process of labor migration recognize the priority of international law over national legislation, which is important both for the country and for migrants. If a labor-importing country is mainly responsible for the arrival and use of migrants, then the functions of a labor-exporting country primarily include regulating the outflow and protecting the interests of its migrant citizens abroad. Therefore, in many respects, the interests of the countries-exporters and importers of labor are closely intertwined. Nowadays, a considerable number of global institutions and organizations (primarily within the UN), as well as regional groupings, continue to deal with the problems associated with the

migration of the population and labor resources. Thus, the UN Commission on Population has a fund, part of which is used to subsidize national programs in the field of population migration. The activities of the International Labor Organization (ILO) also include the regulation of intercountry migration of the population. A number of international treaties adopted by the World Health Organization (WHO) contain special rules that relate to the physical condition of migrant workers. UNESCO documents contain provisions aimed at improving the education of migrant workers and their families. The role of the International Organization for Migration (IOM) is growing, its purpose is to ensure orderly and planned intercountry migration, its organization, exchange of experience and information on these issues. In addition, in the Western Europe region, the Intergovernmental Committee on Migration works to promote and protect the rights of migrant workers. The mechanism of national and international regulation of labor migration includes a set of the following instruments:

- creation of appropriate state institutions;
- international agreements (bilateral and multilateral agreements);
- quality requirements for foreign labor (certificate of education, work experience in the specialty);
- direct quotas and indirect regulation of labor imports;
- regulation based on economic criteria;
- administrative measures to ensure the import of labor;
- economic aid to regions of mass emigration; the formation of an emigration climate;
- foreign exchange and banking policy (privileges on foreign exchange deposits, opening foreign branches of domestic banks, using foreign banks);
- financial policy; investment and tax policy; customs policy, etc.

At the international level, several organizations have been created whose work is aimed at streamlining migration processes. The International Labor Organization (ILO) was founded in 1919, and in 1946 it became a specialized agency of the United Nations. Within the framework of the ILO, conventions and recommendations are adopted that establish labor standards in the field of wages, hours of work, holidays, and labor protection. 172 conventions and 181 recommendations have been adopted until today. International Organization for Migration (IOM) was founded in 1949. The main functions of the IOM are implementation of orderly and planned migration of citizens, organization of movement of refugees, prevention of brain drain, consultation on migration issues. IOM is not part of the UN agencies, but works closely with the UN. The SOPEMI Migration Monitoring System coordinates the activities of national immigration offices (established by the OECD member countries). Intergovernmental agreements on the recruitment of foreign labor stipulate the conditions of stay of migrants in the host country, the observance of which intends to protect the interests of migrants. The legal basis for the implementation of the activities of state bodies of the Republic of Belarus in the field of migration, first of all, are the Constitution of the Republic of Belarus, as well as the laws "On the legal status of foreign citizens and stateless persons in the Republic of Belarus" (1993), "On citizenship of the Republic of Belarus" (1991), "On Refugees" (1995), "On External Labor Migration" (1998), etc. These legal acts regulate the procedure for exercising control by the state, mainly over the legal movement of the population, the entry of citizens and stateless persons into the territory of the Republic of Belarus and exit from it. The functions of regulation and control are entrusted to the Committee on Migration under the Ministry of Labor. In order to coordinate the efforts of government bodies involved in solving migration problems, a national migration program for 2001-2005 has been developed. To create a base for regulated migration, agreed strategies are applied at the bilateral level through the conclusion of intergovernmental agreements on labor activity and social protection of citizens.

Belarus has concluded intergovernmental agreements on temporary work and social protection of citizens working outside their states with the Russian Federation, the Republic of Moldova, Ukraine, the Republic of Poland, the Republic of Lithuania, the Republic of Kazakhstan. The agreements ensure the observance of the rights and legitimate interests of migrant workers, equality of remuneration for their work with citizens of the state of employment, payment of benefits and compensations in case of early termination of an employment contract, as well as in case of injury, occupational disease or other damage to health associated with the performance of job responsibilities.

6. CONCLUSION

Labor migration is the relocation of the working-age population from one state to another for a period of more than a year, caused by economic and other reasons, and can take the form of emigration, departure, and immigration. Labor migration leads to equalization of wage levels in different countries. As a result of migration, the total volume of world production increases with the more efficient use of labor resources. Quantitative indicators related to labor migration are part of the current account balance and are classified by income, payments to non-residents and private unpaid transfers, which represent the estimated cash equivalent of property moved by migrants at the time of their departure abroad and subsequent shipments of goods and money to their homeland. The economic benefits of international labor migration include an increase in the income of migrants, transfers of funds from abroad to their homeland, and a decrease in production costs in countries receiving remittances. Developed countries are the main destination for immigration, while developing countries are a source of emigration. State regulation of the international labor market is carried out on the basis of the national legislation of the host countries and countries exporting labor, as well as on the basis of interstate and interdepartmental agreements between them. Regulation is carried out through the adoption of budget-funded programs aimed at limiting the influx of foreign immigration labor or at stimulating immigrants to return to their homeland of re-emigration. Most host countries take a selective approach in regulating immigration. The screening of immigrants is carried out on the basis of their qualifications, education, age, health status, as well as based on quantitative and geographical quotas, direct and indirect bans on entry, and other restrictions.

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THE IMPORTANCE OF DIGITAL TECHNOLOGIES IN THE REVIVAL OF TOURISM IN GEORGIA AND AZERBAIJAN

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ABSTRACT

Today, as never before, the use of modern technologies to solve existing problems has become urgent. The use of digital technology acquired new practical value during the Covid-19 pandemic when society faced new challenges. The fact is that the pandemic has had the strongest negative impact on the tourism sector. Therefore, in Georgia, Azerbaijan, as well as in other countries, tourism trends and key statistical characteristics have changed significantly. The revival of tourism, along with the epidemiological situation, will depend on many factors. Clearly, digital transformation, as a synthesis of advanced digital technologies combining physical and digital systems, will be crucial to shaping and realizing demand for a country's diverse tourism product. This put on the agenda the identification and analysis of the factors affecting the recovery of tourism and the expectations that we should expect after the end of the Covid-19 pandemic. We can boldly say that, today, digital technologies can be considered as a catalyst for the revival of the tourism industry and consequently the growth of Georgia's and Azerbaijan's economy. The aim of my research is to determine the impact on the expectations and prospects of the revival of the modern digital technology tourism industry in Georgia and Azerbaijan for the post-pandemic period. It will be of great importance how the popularity of Georgia and Azerbaijan will increase and their attractiveness coefficient in the digital world will increase. And, in general, what will be the response to the activities of travel companies in the post-pandemic period in terms of digital transformation. The methods of induction, deduction, observation, grouping and analysis were used in the research process. Digital technologies can be considered as a catalyst for the revival of the tourism industry and consequently the growth of the country's economy;
- *Digital technologies are transforming the tourism industry and introducing new tourism products and services;*
- *Leading the way for companies to interact with customers through online marketing, social media and various applications and so on.*
Keywords: tourism, analysis, digital technologies, statistics

1. INTRODUCTION

Today, Georgia and Azerbaijan, like the rest of the world, are facing great challenges. The Covid-19 pandemic has caused serious problems that have had a negative impact on almost all economic activities. Economic growth rates have declined, the social background of the population has deteriorated, relationships based on active communications have collapsed, they have been replaced by virtual, online platforms in the real world, and so on. However, until 2020, in the conditions of globalization, the quantitative parameters of the development of

Georgia and Azerbaijan were growing intensively. For Georgia and Azerbaijan, globalization has become a crucial issue in everyday political, economic, social, and cultural life. From the strategic point of view, it is very important for Georgia to enhance the world trade-economic, financial and other kinds of relations, especially when it is in the foreign interests of the country to share the advanced European values and experiences and join the European Union (Quliyev A., Abesadze, Abesadze, O., Amanova, L.,2019). The Covid-19 pandemic posed new challenges to the world. It is difficult to determine how much Georgia will remain an attractive country for international visitors in the post-pandemic conditions. (Abesadze, N. Statistics of tourism expectations in the post-pandemic period in Georgia.2020) Of course, Azerbaijan is facing the same problem. In order to form the right economic policy of Gerogia and Azerbaijan it is necessary to conduct a theoretical and practical research in the area of the integration of Georgia into the world economic area, to study the foreign economic contacts quantitatively, to reveal the main tendencies of the development, to calculate their forecasting indexes, to estimate the results correctly and to work out appropriate political-economic proposals and preventive measures.(Abesadze.,N.2015). Today, as never before, the use of modern technologies to solve existing problems has become urgent. The use of digital technology acquired new practical value during the Covid-19 pandemic when society faced new challenges. The fact is that the pandemic has had the strongest negative impact on the tourism sector. Tourism in the active phase of development, especially international, has moved to the stage of uncertainty and all related activities have actually reached the stage of dormancy. Therefore, in Georgia and in Azerbaijan, as well as in other countries, tourism trends and key statistical characteristics have changed significantly. The revival of tourism, along with the epidemiological situation, will depend on many factors. Clearly, digital transformation, as a synthesis of advanced digital technologies that combine physical and digital systems, will be crucial to shaping and realizing the demand for a diverse tourism product across the country. This put on the agenda the identification and analysis of the factors affecting the recovery of tourism and the expectations that we should expect after the end of the Covid-19 pandemic. We can boldly say that, today, digital technologies can be considered as a catalyst for the revival of the tourism industry and consequently the growth of Georgia's and Azerbaijan's economy.

The purpose and objectives of the study:
The aim of research is to determine the impact on the expectations and prospects of the revival of the modern digital technology tourism industry in Georgia and Azerbaijan for the post-pandemic period.

Research methods:
The methods of induction, deduction, observation, grouping and analysis were used in the research process.

2. RESULTS
Georgia and Azerbaijan are striving to boost tourism numbers with new projects and activities that are planned for increasing tourists' flow into the region, improving touristic infrastructure and services.Both countries have huge potential for implementing joint projects to further develop and support tourism in the region. As for tourism ties between Georgia and Azerbaijan, the statistics show that Georgia is one of the most favorable destinations for Azerbaijani tourists (Abesadze,N.,Abesadze, O., Amanova,L.,2020). What will happen in the future? How will develop tourism? It will be of great importance how Georgia's and Azerbaijan's popularity increases and its attractiveness coefficient in the digital world increases. And, in general, what will be the response to the activities of travel companies in the post-pandemic period in terms of digital transformation.

Prior to the pandemic, Georgia and Azerbaijan had a very good and successful experience in how to "sell" Georgian and Azerbaijan tour products through digital marketing or the Internet in different parts of the world. The country was popularized with various videos. But in a thirty-second clip it is difficult to make all the messages, and also, in terms of outdoor advertising, it is unthinkable to show all corners and all directions of Georgia on the billboard. Digital technologies allow potential visitors to receive different types of messages about Georgia and Azerbaijan that may be of interest to them. Georgia and Azerbaijan have a lot in common to offer foreign visitors, namely: picturesque nature, Black Sea subtropical zone and Caspian continental climate, winter resorts, historical monuments, rivers and waterfalls, rocky towns, traditional cuisine and, of course, Georgian-Azerbaijani hospitality. As can be seen from the table below, international travel visits were increasing until the pandemic. In 2019 alone, the number of visits to Georgia increased by 7.8% compared to the previous year, including 6.2% of tourist visits. One day at 8.3%. The number of visits to Azerbaijan increased by 11,3% compared to the previous year, including 10.4%% of tourist visits. One day at 13.6%.

Table 1: Classification of International Travel

	2018		2019		Change		Change %	
	Georgia	Azerbaijan	Georgia	Azerbaijan	Georgia	Azerbaijan	Georgia	Azerbaijan
International traveler Visits	8679, 5	2849,6	9357, 9	3 170,4	678, 4	320,8	7,8%	11,3%
Other visits (non-tourist)	1476,2 1	2605,3	1632 190	2863,5	155, 9	258,2	10,6%	9,9%
international visitors Visits.	7203,4	244,3	7725,8	306,9	522,4	62,6	7,3%	25,5%
Tourist vizits	4800,0	651,6	5100,0	719,9	300,0	68,3	6,2%	10,4%
Same-day Visits (Excursion)	2400,0	1024,4	2600,0	1164,0	200,0	139,6	8,3%	13,6%

Source: National Statistics Office of Georgia , The State Statistical Committee of the Republic of Azerbaijan

Georgia and Azerbaijan have significant potential for the development of various types of tourism. For example, both countries have the potential to become an attractive country for medical tourism. Based on proper assessments of the survey results, it is possible to offer additional services in tourist packages for tourist flows in Georgia, for example, aesthetic medicine, plastic surgery, dental medicine, balneological and other services. It should be noted that there are about 2400 species of natural water sources in Georgia. Their level of awareness in terms of tourism is still low. Sulfur waters, Sairme, Tskaltubo, Akhtala etc. Healing water procedures, Borjomi, Nabeghlavi, Likani, Sno, Mukhuri, Lugela "(which is unique in its natural calcium), etc. The diversity of high-quality tourism packages based on the use of natural resources, as a result of the right approach and assessments, can become one of the preconditions for the growth of medical tourism between Georgia and Azerbaijan. Azerbaijan has considerable experience in the development of medical tourism. They have a niche that ensures a systematic increase in international patient flows: healing mud volcanoes, mineral years, naphthalene oil, and so on. Sh. The latter is used to cure more than 70 diseases, including skin, tendon and neurological disorders. Obviously, the process of tourism revival in Georgia and Azerbaijan will not be easy. It is important that in order to stimulate both international and domestic demand, in parallel with the creation of high quality tourism products, convenient, safe tourist flows in the tourism market are ensured in full compliance with the necessary regulations for the post-pandemic.

In general, the buying process in the world is changing rapidly. Digital technology has completely changed the traditional, established business model of selling tour packages. In the past, one approach was quite enough to give a boost to sales. However, today, sellers of tourism products need to do much more to succeed, in particular, to create a different and individual experience that encompasses the real and digital "life" of the country. The sales approach must be complex and modern. Today, people are increasingly actively communicating with travel companies through electronic devices. When they start searching for any type of information, it adds spontaneity, which is reflected in mobile devices. It will be of great importance to popularize the use of mobile apps that will offer customers different tours and through modern virtual reality, users will be able to see what different parts of the city looked like during the past era. The special effect will be created by the feature of the voice guide built into the application, which informs the user about the unique, customized tour of the rarely told stories. With the help of a virtual guide, tourists are given the opportunity to visit often unnoticed and unknown places. Digital technologies are transforming the tourism industry and introducing new tourism products and services. This circumstance has created new perspectives for tourism businesses. The company has moved forward with communicating with customers through online marketing, social media and various applications. There is no alternative to using digital technologies to promote and raise awareness and attractiveness of Georgia and Azerbaijan as tourist countries. Because digital transformation requires systemic changes in tourism business processes, business models, and economic relationships in and around the tourism industry, a wide range of specialized technology and business consulting is required, which can be obtained from different countries, competent services, centers, private and public sectors.

3. CONCLUSION

- The use of digital technology has acquired new practical value during the Covid-19 pandemic;
- There is no alternative to using digital technologies to promote and raise awareness and attractiveness of Georgia and Azerbaijan as tourist countries;
- Digital technologies can be considered as a catalyst for the revival of the tourism industry and consequently the growth of the country's economy;
- Digital technologies are transforming the tourism industry and introducing new tourism products and services;
- Leading the way for companies to interact with customers through online marketing, social media and various applications;
- It will be very important to promote the use of mobile applications;
- It will be very important how the popularity of Georgia and Azerbaijan will increase and its attractiveness coefficient in the digital world will increase;
- The main thing is how the digital companies will react to the activities of travel companies in the post-pandemic period.

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ANALYSIS AND EVALUATION OF THE ECONOMIC ORDER QUANTITY MODEL IN OPTIMUM CASH MANAGEMENT

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ABSTRACT

The actuality of the research. One of the main problems of inventory companies that order different types of products is to find the EOQ by keeping total costs to a minimum. Having the feature of substitution for more than 2 products is the way to find the best reorder point and demand level for the product that reaches 0 in stock. In the process of substituting inventory types, the firm determines the upper and lower levels of the cash flow and the return point by using the Miller-Orr model, one of the optimum cash method models. Establishing an EOQ model for substitutable products by determining the cash level positively affects the balance of the total costs and expenditures of the firm. The aim of the research is to ensure the calculation of the EOQ model for substitutable products by choosing the most appropriate of the optimum cash management models to the financial processes of companies working with large-scale inventory orders. Correlation analysis was used for the data collected through quantitative research. In order to conduct research and reveal the relationships between variables, the data obtained from the enterprise "Özst Azerbaijan" were used. Necessary data at the time of the research were collected through an interview. These data cover issues related to the finance and product ordering of the enterprise. In our country, researching the subject or using it in practice has not been given much place. By doing this research, it is to ensure that the economic order quantity, substitutable products and the Miller - Orr model are used in the same process and that the company is kept in a balance in the total costs and expenses.
Keywords: EOQ, Miller-Orr model, Cost, Company, Optimum cash

1. INTRODUCTION

The EOQ model is not used frequently in our country. But it does not mean that this issue is not seen as a problem. Avoiding the expenses of the problem has been avoided. Costs that we perceive as minimums that we do not expect may turn into excessive numbers. By improving the web level to achieve the minimum level of our high-figure costs, we will ensure a fixed amount of cash at the cash register without exceeding the maximum rate of money flow (staying between the minimum and maximum levels). In order to determine a reasonable order amount by reducing the total costs, transfer costs and order costs in the economic order quantity, the calculation of the optimum cash amount within the lower and upper cash limits of the cash flows (it should be determined with the Miller-Orr model beforehand) is considered as a preliminary add. High-level factors such as transportation costs, re-ordering process, stocking, demand, cost per unit of product affect both the creation of EOQ and the movement of fiscal functions. The application of Miller - Orr model to the financial process of the company before the orders are placed will determine the economic order amount more clearly. Let's look at the questions raised by considering the general financial problems of the firm when calculating the economic order amount: "Will it be possible to make the payment instantly when the large volume of product orders are delivered?", "How can we find the economic quantity according to the total costs during the monthly or annual ordering periods?", "How can we minimize the total costs and apply it to the EOQ model?". The importance of questions in this way is due to the availability of a cash attitude. Having cash amount in the cash or assets with liquidity ratio, the fixed or incremental cycle of the monthly cash flow facilitates the calculation of the long-

term fixed economic order quantity formula for the business. Of course, the formula needs to be recalculated when the demand decreases or increases. The purpose of writing the article is to ensure that the most appropriate of the optimum cash attitude management models is integrated into the EOQ model. The models used in cash attitude management time stand on the basis of our research. After these models are investigated one by one, it has been revealed how positively they have effects on financial processes and functions. Formulas on each model are generally explored for businesses with large orders. The probabilities that the research carried out in practice can be used for each client company have been taken into consideration. Annual total costs (TM $_{(annual)}$) based on annual ordering costs (SM $_{(annual)}$) and annual stocking (STM $_{(annual)}$) costs are applied to the order model after minimizing. When the EOQ model is calculated for the customer firm, the monthly cash in and out of the company will be determined. A Miller - Orr model is faced with problems such as having to maintain a minimum cash balance, and the amount of cash flowing in and out on a daily basis is stoxastic, that is, it is not fixed. The optimum cash holding model determines the lower and upper level of the cash flow and the return point for the ordering firm by considering this or similar problems. Return point represents the targeted cash balance. As a result of integrating the Miller - Orr model into the EOQ model, the economic order model will be calculated by reducing the annual total costs according to the targeted cash balance.

2. ESTABLISHMENT AND EVALUATION OF THE ECONOMIC ORDER QUANTITY MODEL FOR SUBSTITUTABLE PRODUCTS

The correlation technique will be used to reveal that there is no difference in the demand rate if the substitutable products change, i.e. if they replace one or another. The result of the correlational analysis will determine whether the relationship between these two variables is positive or negative. With the incarnation of the positive and negative relationship, its appeal will also reveal that this relationship is strong and weak.

Substitutable products	Product price (y)	Demand level (x)
Mozzarella cheese	9.95 AZN	13 kg
Cheddar cheese	6.86 AZN	15 kg
Parmesan cheese	10.42 AZN	9 kg
Total	27.23 AZN	37 kg

Table 1: Product price and order quantity (monthly)
(Source: Data obtained from the accounting department of the company "Özsüt Azərbaycan" for 2019)

In Table 1, data on product price and demand ratio are noted. Demand rate (x) is accepted as independent variable, product price as work-dependent variable.

$n = 3$; $\sum x = 37$; $\sum y = 27.23$; $(\sum x)^2 = 1369$; $(\sum y)^2 = 741.4729$; $\sum x^2 = 475$; $\sum y^2 = 254.6385$; $r = -0.82$.

There is a negative and weak relationship between the change of substitutable products and the demand rate. This means that there is an independent relationship between the replacement of substitute products and demand. The result from the correlation analysis is that the increase or decrease in demand is not necessarily related to the change of substitute products. Demand can vary according to different factors. Now it is necessary to determine the accuracy of the hypotheses.

- H1a: There is a difference in the rate of demand based on the change of substitutable products.
- H2b: There is no difference in the rate of demand based on the change of substitutable products.

Assuming the H1a hypothesis as H1 and the H1b hypothesis as H0, it can be summarized as follows:

H1; p>0 H0; p=0

T test will be used to find the significance level of the correlation coefficient of the hypotheses. For this, the number after TH = r/√ (1-r2 / (n-2)) test statistics is required. When TH> Tt, the H1 hypothesis will be accepted, while the H0 hypothesis will be rejected. The correlation coefficient is tested at the level of p> 0.05. H0; If p = 0, the correlation coefficient is insignificant, H1; The fact that p etmektedir 0 means that is is significant.

|TH| = -0.82/√(1-0.6724/(3-2))=|-2.503|=2.503

Tt = tα; n-2 = t0.05; 1= 2.0013

Since |TH| > Tt, the H1a hypothesis was accepted as correct, while the H1b hypothesis was rejected. In short, there is a difference in the rate of demand based on the change of substitutable products.

Substitutable products	Product price (y)	Order quantity (x)
Mozzarella cheese (A)	9.95 AZN	16.25 kg
Cheddar cheese (B)	6.86 AZN	18.75 kg
Parmesan cheese (C)	10.42 AZN	11.25 kg
Total	27.23 AZN	46.25 kg

Table 2: Product price and order quantity (monthly)
(Source: Data obtained from the accounting department of the company "Özsüt Azərbaycan" for 2019)

The order quantity (x) is considered as the independent variable and the product price (y) as the dependent variable.

n = 3; ∑x = 46.25; ∑y = 27.23; (∑x)2 = 2139.06; (∑y)2 = 741.4729; ∑x2 = 742.1875;

∑y2 = 254.6385; r = -0.83.

There is a negative and weak relationship between the change of substitutable products and the order quantity.

- H2a: There is a difference in the amount of the order based on the change of substitutable products.
- H2b: There is no difference in the order quantity based on the change of substitutable products.

Assuming the H2a hypothesis as H1 and the H2b hypothesis as H0, it can be summarized as follows:

H1; p>0 H0; p=0

T test will be used to find the significance level of the correlation coefficient of the hypotheses. For this, the number after TH = r/√ (1-r2 / (n-2)) test statistics is required. When TH> Tt, the H1 hypothesis will be accepted, while the H0 hypothesis will be rejected. The correlation coefficient is tested at the level of p> 0.05. H0; If p = 0, the correlation coefficient is insignificant, H1; The fact that p etmektedir 0 means that is is significant. Based on H1a, H2a hypotheses, Table 3 shows the correlation between products A and B, B and A, B and C, C and B, A and C, C and A:

	A	B	C
A	0	1	0
B	1	0	1
C	0	0	0

Table 3: Correlation between substitute products (A, B, C)
(Source: Author's calculations based on interview questions made at research time)

Dependence between products essentially expresses itself more heavily in A and B products. According to the result obtained from the Pearson correlation analysis, the dependency factor between each 3 product pairs is indicated as in Table 4 below:

	A	B	C
A	0	1	0.4
B	0.8	0	0.1
C	0.6	0.2	0

Table 4: Dependency factor analysis based on business data
(Source: Author's calculations based on interview questions made at research time)

As it can be seen from the table, the dependency factor between B and A - 0.8, B and C - 0.1, A and B - 1, A and C - 0.4, C and B - 0.3 C and B are 0.2. The dependency factor between A and B is higher, which means that when product A is out of stock, it is easy to use from product B. Secondly, it is the dependency factor between product B and A, at which time it is possible to use product A when product B is out of stock. The adherence between other product pairs is known to be weaker. The parameters required to apply the substitute products to the model are optimum order quantity (SM), delivery time (TS), order cost (SM) and demand rate (TO). These variables are given in Table 5:

	SM	SM	TO	TS
A	119.4 AZN	83.076 gr.	13 kg	8 gün
B	96.04 AZN	98.076 gr.	15 kg	8 gün
C	83.36 AZN	32.140 gr.	9 kg	8 gün

Table 5: Variables on substitute products (in numbers)
(Source: Author's calculations based on interview questions made at research time)

In Table 5, monthly values for the substitute products are expressed in figures. When the optimum order quantity is calculated, transfer costs are not taken into account. Because the company whose data is being used directs the transfer costs to the supplier business.

General transfer cost is calculated on a monthly basis, but it is not possible to calculate this separately for cheese products. Based on the data, it is necessary to find the reorder point (YSN) for A, B, C products. The tables below indicate the 12-week demand rate and product inventory levels. Here;

- Z - time;
- CTR - demand rate;
- TS - delivery time;
- EO - inventory ratio.

The sections painted with age colors represent product renewal.

Z	H_1	H_2	H_3	H_4	H_5	H_6	H_7	H_8	H_9	H_{10}	H_{11}	H_{12}
T_O	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
EO	13	9.75	6.5	3.25	16.25	13	9.75	6.25	3.25	16.25	13	9.75

Table 6: 3-month demand rate and inventory level for a product A
(Source: Author's calculations based on interview questions made at research time)

YSN (A) = TS * TO =8*13=103

Z	H_1	H_2	H_3	H_4	H_5	H_6	H_7	H_8	H_9	H_{10}	H_{11}	H_{12}
T_O	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
EO	15	11.25	7.5	3.75	18.75	15	11.25	7.5	3.75	18.75	15	11.25

Table 7: 3-month demand rate and inventory level for a product B
(Source: Author's calculations based on interview questions made at research time)

YSN (B)= T_S * T_O =8*15=120

Z	H_1	H_2	H_3	H_4	H_5	H_6	H_7	H_8	H_9	H_{10}	H_{11}	H_{12}
T_O	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
EO	9	6.75	4.5	2.25	11.25	9	6.75	4.25	2.25	11.25	9	6.75

Table 8: 3-month demand rate and inventory level for a product C
(Source: Author's calculations based on interview questions made at research time)

YSN (C)= TS * TO =8*9=72

Reorder points on each product trigger a reorder if the products are less than the demand rate in stock. The delivery time for the products on a 3-month basis is expressed in the same figures.

Z	H_1	H_2	H_3	H_4	H_5	H_6	H_7	H_8	H_9	H_{10}	H_{11}	H_{12}
T_O	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
EO	13	9.75	6.5	3.25	0	-3.25	-6.5	-9.75	16.25	13	9.75	6.5

Table 9: Week intervals when product A is out of stock
(Source: Author's calculations based on interview questions made at research time)

In Table 9, the delivery delay on product A is indicated. The purpose of showing this delay on the 3-month (12 weeks) demand rate and the inventory level is to solve the problem of the stock when it is replaced with product B. The parts painted in red, mean the exhausted product that is not in stock.

Since the factor dependency between product A and product B is equal to 1, it is possible to substitute product A with product B within this 3-week period. And with this, the demand rate for product A will be transferred to product B. Product B is transferred according to the demand rate of product A (the more the weekly demand rate is, the more transfers are made), which is accumulated in stock for the product that can be replaced by product A. It is possible to see this clearly in Table 10:

Z	H_1	H_2	H_3	H_4	H_5	H_6	H_7	H_8	H_9	H_{10}	H_{11}	H_{12}
T_O	3.75	3.75	3.75	3.75	3.75	7	7	7	3.75	3.75	3.75	3.75
EO	15	11.25	7.5	3.75	18.75	11.75	4.75	-2.25	18.75	15	11.25	7.5

Table 10: Replacing out-of-stock product A with product B
(Source: Author's calculations based on interview questions made at research time)

As it can be seen from Table 10, product B will be consumed rapidly from the 6th week. Since there is a rapid depletion, the B product in the 8-th week will be found less than the demand rate in the stock. In practice, cash is kept for the delay of the product supply or for the commission, ie the penalty, so that it is not in stock. No commission is charged for the delay in the company we research. It is necessary to calculate a new demand rate for a B product to avoid product delays and cash payment for penalties, to ensure you have items in stock:

$$T_{Oy} = A_{TO} + K_G * B_{TO}$$

In calculating the new demand rate for product B, A will be used from the demand rate of the product, the correlation power between products A and B, and the demand rate of product B.

Here;
- T_{Oy} - the new demand rate for product B;
- A_{TO} - A product demand rate;
- B_{TO} - B product demand rate;
- K_G - Correlation power between product A and B
- $T_{Oy} = 3.25 + 1 * 3.75 = 7$

The new demand rate for product B is 7. After calculating the new demand rate, the new reorder point (YSN) needs to be calculated:

$$YSN_y = T_{Oy} * T_{S\,y}$$

Here;
- YSN_y - newly designated reorder point;
- $T_{S\,y}$ - the newly determined delivery time.
- $YSN_y = 7 * 8 = 56$

At the new reorder point, the new demand rate reached 7. This rate will be valid for the 6th, 7th and 8th weeks. From 9th week onwards, it will proceed at the previous demand rate of product B (ie 3.75). The new reorder point is calculated as 56. Delivery time is accepted as 8 days unchanged.

Table following on the next page

Z	H_1	H_2	H_3	H_4	H_5	H_6	H_7	H_8	H_9	H_{10}	H_{11}	H_{12}
T_O	3.75	3.75	3.75	3.75	3.75	7	7	7	3.75	3.75	3.75	3.75
EO	15	11.25	7.5	3.75	18.75	11.75	4.75	18.75	15	11.25	7.5	3.75

Table 11: Repairing deficiency of product B
(Source: Author's calculations based on interview questions made at research time)

Since the value obtained for the reorder point is 56, the reorder point will move to the 6th week and the repair of the product in the stock will have passed from the 9th to the 8th week. And in this case, there will be no product deficiency or punishment.

3. DEVELOPMENT AND EVALUATION OF THE EOQ MODEL IN INVENTORY MANAGEMENT FOR MORE THAN TWO SUBSTITUTABLE PRODUCTS

External factors were considered for the development of the model. External factors include the financial processes of the company. Due to the use of substitution products for the development of the model, optimum cash management models should be applied simultaneously when the EOQ model is used. Is it possible to use the Miller-Orr model in the financial process when the EOQ model is calculated? If we pay attention to the assumptions and limitations of the Miller - Orr model, we first reach the upper level of the cash balance by finding the minimum cash balance and return point of the company. It seems possible to do this procedure for any business. It is possible to apply the Miller-Orr model at the same time when the EOQ model is established in the restaurant sector. In order to develop the model, Miller-Orr model will be used to ensure that the cash flow in the financial processes of the enterprise positively affects the order costs. The data obtained for the establishment of this cash management model are based on the calculation and indicated in Table 12:

Fixed cost of cash transfer	Minimum cash balance	Alternative cost of holding cash	Alternative cost of maintaining cash.
1.000 AZN	100.000 AZN	220.605 AZN	0.55%

Table 12: Cash transactions (in numbers)
(Source: Data obtained from the accounting department of the company "Özsüt Azərbaycan" for 2019)

What we need to learn is to find the difference between the lower and upper levels and calculate the return point. For this;

Spread = 3 * (¾ * (t * n) / v)1/3
Spread = 3 * (¾ * (1000 * 220605) / 0.55)1/3=52,032

The difference between lower and upper cash levels were 52,032. This refers to the area where the cash will move.

Return point = Lower cash level (M) + 1/3 * Spread
Return point = 100000 + 1/3 * 52,032=100017,3

In order to maintain the balance between the lower and upper levels, the cash balance of the company was 100017.3.

Upper cash level = Lower cash level + Spread
Upper cash level = 100017,3 + 52,032 = 100069,332

And from here, we found the top cash ratio. The company should try to reach the return point in order to maintain the current stability when the cash transaction exceeds the upper cash level or falls below the lower cash level. For the Miller-Orr model, after determining the upper and lower cash levels and return point of the company we are researching, it is necessary to review the order amount in general.
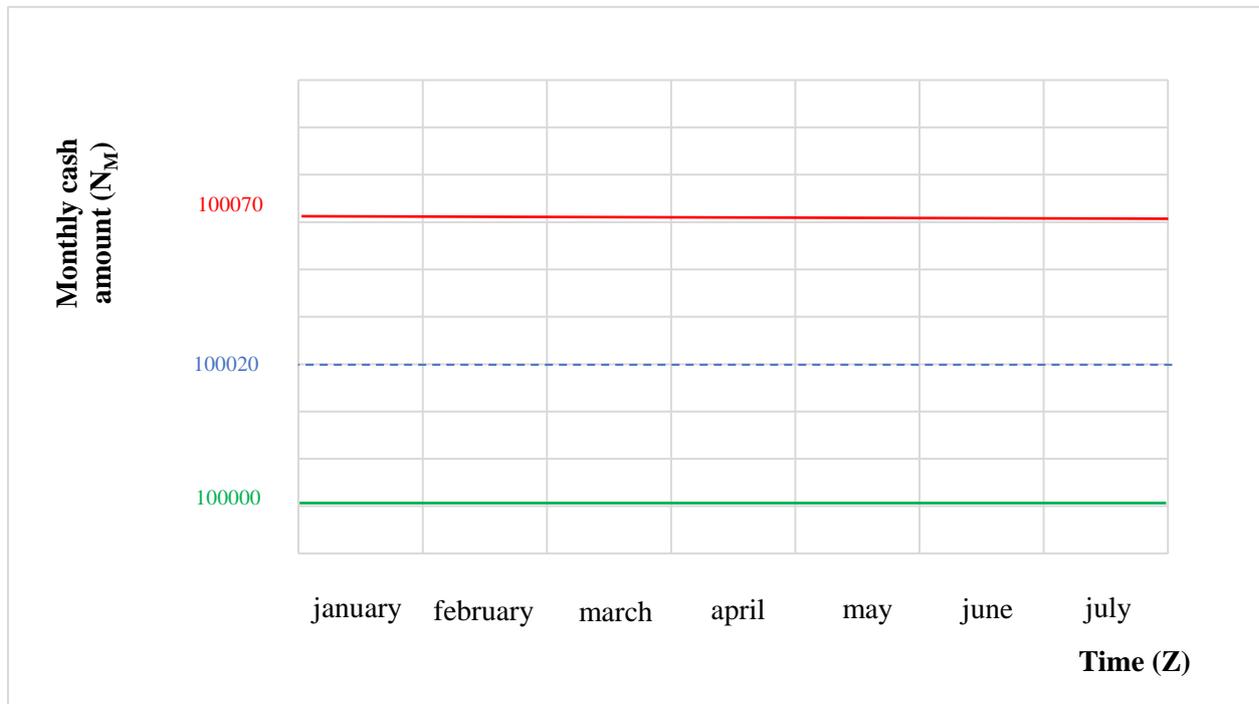
Graph 1: Upper and lower cash levels in the monthly cash amount of the Özsüt company (Source: Author's calculations based on interview questions made at research time)

Since we do not have data on the annual cash cycle (essentially daily / monthly income and expenditures) from the "Özsüt Azerbaijan" company, it will not be possible to show in the graph in which months the company is up or down from the top level. Due to the fact that sales increase in the spring and summer months, the rate of demand for products in March-July and, depending on this, the amount of orders increases. Order amount and demand increase will cause increase in order costs and income of the business. What we need to take into account is that the cash cycle of the company we are researching does not only include the costs of the order quantity of substitutable products and the income from sales. And therefore, adding the Miller-Orr model to all financial processes of the company in the establishment of the model will help to keep the total order costs in the EOQ model in balance and prevent the cash amount from exceeding the upper cash level or on the contrary, the cash amount from falling below the lower cash level. The EOQ model helps the company to determine the most economical order quantity by revising the substitute products in its possession over the model. Considering the dependency factor between products, we can find the most substitutable product and order quantity for the company by recalculating more than 2 products based on the demand ratio, order quantity, inventory level and reorder point on the EOQ model. The fact that the level of demand is variable is related to the change in sales rates with the season. As the demand rate changes with the season, it automatically affects the order quantity and order costs. In some companies, the annual demand rate may be constant. This stability causes the order quantity to be fixed. It is impossible to see this constancy in sectors such as restaurant business. Here, it is necessary to take into account external factors. External factors and the variability of demand create difficulties in using the EOQ model frequently.

4. EVALUATION OF THE PROS AND CONS OF THE EOQ MODEL IN INVENTORY MANAGEMENT FOR SUBSTITUTABLE PRODUCTS

The most positive aspect of the EOQ model for substitutable products in stock management is taking the inventory under control. Here, the raw material to be considered as inventory, production time or the company inventory used for sales is very useful for products that are out of stock. With the application of the EOQ model, the company can manage the product management correctly. It is possible to see the use of products on demand equally distributed. It is possible to stock the delivered product units and to keep track of the rate of product depletion in stock. This will actually enable the product cycle to be kept under control by making small calculations comfortably by the business. The figures related to the product being calculated give the company a table of the product consumption in stock, delivery intervals, monthly / annual order amount. It prevents over-ordering or consumption of extra products that are in stock. The downsides of the EOQ model for substitutable products in stock management arise in relation to the model assumptions. The company expresses the demand rate by regions (daily / weekly) in the same figures. And the annual demand is considered to be predetermined, which is seen as impractical for all businesses. Since we investigated the restaurant business as an example, if we take into account the internal / external factors, we can estimate the annual demand. However, estimated figures may confuse the direction of our order quantity. Since the demand is flexible, it affects the order quantity. Since the annual demand of the business is different from each other, the EOQ model is not used frequently. The time of the calculation of the EOQ model, transfer costs are covered by the ordering company. The transfer costs of the units (products) ordered in the company we have researched are paid by the supplier companies. In the EOQ model, when the number of product units increases, no discount is made by the supplier company. The model focuses directly on the order quantity and its ordering costs. It does not take into account the discounts. Making discounts can positively affect the reduction of costs. The time intervals between the products being out of stock and their ordering and receiving orders are the same. This is practically impossible. Because there may be problems caused by us or the other side, or the demand of the product may say. This means that the product remains in stock due to the decrease in demand, and the product is quickly exhausted in the stock due to the increase in demand. With the rapid completion of the product, the substitute products with the evaluation of the company should be put into the circuit for demand. When the EOQ model of the Miller - Orr model, which is the most suitable one of the optimum cash management models, is added to the financial process, it turns out that this model should be established for all products to be ordered here. Because it is possible to prevent the cash outflows (costs and expenses) from exceeding the level of cash level by applying the Miller - Orr model. It was not possible to take into account order costs and all cash inflows / outflows, as we could not get reports on all expenditures and cash outflows from the Özsüt company, which I took as a sample for the research. When we have all cash inflows / outflows, it will be possible to see the fluctuations between upper and lower cash levels clearly.

5. CONCLUSION

We can list the results as follows:
1) Since the focus is on substitutable products, the possibility of changing the demand level and the reorder point in the establishment of the EOQ model and imposing a penalty on the supplier at 0 stock level and not being able to meet the demand will be eliminated;
2) Using the EOQ model is not suitable for every sector. It is not very suitable to apply to the inventory order of the restaurant enterprise "Özsüt Azerbaijan", whose data is used as an example for research. It is more desirable for companies dealing with larger order quantities. Making calculations in small businesses such as restaurants may not give accurate results.

Because here, variables that are important for the calculation of the economic order model (such as transportation costs, penalty costs) are not included;

3) The purpose of the research paper was to calculate the EOQ model for substitutable products in optimum cash management. Since all of the data required for the financial segment is not provided by the company, there is no table on general costs / expenses and other product orders. It has been found that it is possible to use the Miller-Orr model, which is one of the optimum cash management models, in real business processes. By calculating the Miller-Orr model for the business, the lower and upper cash levels of the company and the return point were determined. And in general, product ordering, ordering costs, overhead costs and expenses, sales and so on. Cash flow generating fluctuations should cycle through specified levels. This process ensures that the costs of the company are manageable and the optimum ratio of order costs can be calculated according to the order quantity and demand level.

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ECONOMETRIC EVALUATION OF THE IMPACT OF EDUCATION LEVEL AND SCIENCE IN POVERTY RATE: THE CASE OF AZERBAIJAN

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ABSTRACT

The article covers education, science and poverty levels indicators, the exchange rate of the manat, per capita income and other indicators. The indicators were examined and correlation analysis was conducted to identify the factors that significantly affect the poverty rate. The poverty rate was econometrically assessed in the Azerbaijani example. It was found that the share of secondary special education institutions graduates and university graduates per 10,000 people, the number of articles per 1 million people in basic science and engineering indexed in Web of Science, per capita income reduces the country's poverty rate, while the increase in the manat against the dollar increases poverty rate. It was determined that the share of secondary school and vocational school graduates per 10,000 people did not have a statistically significant impact on the country's poverty rate. The dataset is based on data from national and international official statistics and covers the years 2001-2019.
***Keywords:** graduate, poverty, science*

1. INTRODUCTION

There is extensive research in the economic literature on the level of poverty, education coverage, level and quality of education, as well as the level of science and its impact on the country's economic growth (Caire & Becker, 1967), (Popov Ed. et al., 2013), (Datzberger, 2018), (Gauthier, 2018), (Carter, 2014), (Foster E. J. ; Greer J. & Thorbecke, 2010), (Foster, Greer, & Thorbecke, 1984), (Hajiyev, Shabanov, & Hasanli, 2021). The impact of innovations on the quality of education (Hasanli & Shabanov, 2018), the level and quality of education in the country (Shabanov & Quliyev, 2017), (Isakhanli & Pashayeva, 2018)), the prospects for the establishment of educational clusters in the regions of Azerbaijan were considered (Shabanov, 2019). The impact of the level of education on various socio-economic indicators was considered (Zubrytska, 2018). (Balamurali, Janflone, & Zhu, 2015) showed that a 1-fold increase in the level of education in the United States increases the ratio of income to the poverty line by 6.26%. The general conclusion of these articles is that education and science are important factors in increasing employment, GDP growth and poverty reduction in the country. In addition, the establishment of an effective innovation system in the country, the high share of high-tech and technological products in exports are factors that increase the welfare of citizens (Cornell University, INSEAD, and WIPO, 2020), (OECD, 2016), (Baneliene, Melnikas, Strazdas, & Toločka, 2018), (Zhou & Luo, 2018), (Nabieva et al., 2021), (Si, Ahlstrom, Wei, & Cullen, 2020). It is believed that the high level and quality of education, the transformation of science and entrepreneurship into a productive force, the establishment and development of an effective innovation system in the country increase the welfare of its citizens, make the country's economy competitive.

This article examines the impact of the education level and science on the country's poverty rate from the econometric point of view. It is essential to consider these factors, as the choice of explanatory variables is crucial in the dataset formation in econometric modeling.

2. DATASET FORMATION AND MODEL SPECIFICATION.

The country's poverty rate is one of the main indicators of the country's socio-economic situation. Detailed information on this indicator is given in a number of sources (Foster et al., 1984), (Foster E. J.; Greer J. & Thorbecke, 2010b). Poverty levels are calculated by using the following formula:

$$P = \frac{1}{H} \sum_{h=1}^{q} \frac{Z_h - Y_h}{Z_h} \qquad (1)$$

Here, H is the number of households, q is the number of poor households, Z_h is the poverty line, taking into account the family composition of household h, and Y_h is the real income of household h. The poverty line is the minimum income (in real terms) necessary to meet the living needs of a particular country. Thus, the P indicator calculated using formula (1) shows what percentage of the country's population lives below the poverty line. Poverty threshold and rate in Azerbaijan for 2001-2018 are given in the source (Yashar, 2019).

	2001	2005	2010	2013	2016	2017	2018
Poverty threshold, AZN	24.0	42.6	98.7	125.2	148.5	165.7	175.2
Poverty rate, %	49.0	29.3	9.1	5.3	5.9	5.4	5.1

Table 1: Poverty threshold and poverty rate in Azerbaijan
(Source: (Yashar, 2019))

The table shows that the poverty rate in Azerbaijan dropped from 49% to 5.1% in 2001-2018, which can be considered a very successful trend. One of the most important factors affecting the country's poverty level is education. Numerous indicators are used to describe the education field. When examining the level of education and the impact of science on contry's poverty rate, we initially should consider the choice of explanatory factors. It is known that in developed countries, secondary education consists of 3 stages. These include primary, secondary and high school. The grades corresponding to the listed levels of education in Azerbaijan are grades 1-4, 5-9 and 10-11. We a priori assume that the higher the share of graduates of these educational institutions in the country's population, their ability to find work and adapt to the requirements of the labor market would be higher. In this regard, it is desirable to select indicators for each of the three levels to study their impact on poverty. Due to the fact that the share of primary school graduates in Azerbaijan from 2008 to 2016 was 100%, we considered it inappropriate to include this indicator in our study.

Year	2001	2002	2003	2004	2005	2006	2007	2008
Primary school completion rate, %	93.9	94.6	95.8	96.5	97.7	98.2	99.8	100.0
Year	2009	2010	2011	2012	2013	2014	2015	2016
Primary school completion rate, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 2: Primary school completion rate
(Source: https://www.stat.gov.az/source/ millennium / source / MDG_en-05.01.2017.pdf)

Instead of the share of graduates of grades 10-11, we have included in our study the share of graduates of vocational and secondary special education. In addition, the share of university graduates was chosen as an explanatory factor. As an indicator of the level of science at the international level, we have selected the number of articles in the field of fundamental science and technology, indexed in the country in the international scientific and bibliographic database Web of Science. The article calculated the share of this indicator per 1 million population and selected it as an explanatory indicator. It is known from the scientific literature that in terms of the impact on economic growth, the number of articles published in the field of fundamental science and technology is more important than the number of articles devoted to economics and business (Jin & Jin, 2013). The number of indicators measuring the level of education were examined to form a database. The number of secondary school graduates per 10,000 population, the share of vocational school graduates, the volume of GDP, state budget expenditures, monetary incomes of the population, expenditures of the population, nominal wages in the country were studied, relevant correlation analysis was conducted and these indicators were reported but not included in the dataset. This allowed the explanatory factors included in the database to be independent of each other, i.e. to eliminate multicollinearity in the econometric models to be built. In addition, since the number of documents (articles, reports and reviews) indexed by country in the SCOPUS database (https://www.scimagojr.com) and the number of articles indexed in the Web of Science database have a strong positive correlation, it is sufficient to choose one of these two indicators. In this sense, we have preferred the article on natural and technical fields indexed in the Web of Science database per 1 million population as an indicator that characterizes the level of science in the country. Thus, the dataset of selected indicators for 2001 to 2019 is formed as shown in Table 3.

Il	Poor population, %	Number of specialists graduating from secondary special education institutions per 10000 persons (people)	Number of specialists graduating from higher education institutions per 10000 persons (people)	Number of articles in science and technology per 1 million people Indexed in the Web Of Science (pieces)	Exchange rate 1 US$= man	Per capita income, at current prices (manat)
2001	49.0	14.08	29.46	19.61	0.96	535.5
2002	46.7	15.74	33.93	29.92	0.98	618.8
2003	44.7	18.26	34.42	33.04	0.99	700.7
2004	40.2	17.26	37.41	41.94	0.98	796.7
2005	29.3	18.70	38.48	41.26	0.95	962.2
2006	20.8	19.16	32.90	32.63	0.89	1 201.3
2007	15.8	19.62	36.09	47.87	0.86	1 692.3
2008	13.2	19.68	37.11	54.37	0.82	2 378.3
2009	10.9	17.78	38.77	70.04	0.80	2 560.4
2010	9.1	16.18	34.53	66.15	0.80	2 866.1
2011	7.6	16.10	33.82	70.04	0.79	3 371.7
2012	6.0	17.20	38.04	73.55	0.79	3 789.3
2013	5.3	13.46	36.08	50.30	0.78	4 040.3
2014	5.0	15.58	34.64	41.70	0.78	4 192.4
2015	4.9	17.13	35.13	47.08	1.03	4 380.7
2016	5.9	17.61	38.07	61.16	1.60	4 710.1
2017	5.4	16.61	38.23	75.10	1.72	5 053.2
2018	5.1	12.49	37.50	76.93	1.70	5 407.8
2019	4.8	12.45	37.63	n/a	1.70	5 758.6

Table 3: Dataset
(Source: The State Statistical Comittee of the Republic of Azerbaijan and formed by the authors on the basis of official data of the portal https://www.worldbank.org)

The model specification was selected as following:

POVERTY_RATE_IN_PERCENT = C(1) + C(2)*SPECIALIZED_IN_10000PRS
+ C(3)*TERTIARY_IN_10000PRS(-2)
+ C(4)*JAST_PER_MILLION_PUPIL + C(5)*EXCHANGE_RATE
+ C(6)*INCOME_PER_CAPITA_MANAT + C(7)*DUMMY_2013   (2)

Here, POVERTY_RATE_IN_PERCENT variable is a poor population, as a percentage, SPECIALIZED_IN_10000PRS variable is a number of graduates of secondary special education institutions per 10 thousand population, TERTIARY_IN_10000PRS variable is a number of university graduates per 10 thousand population, JAST_PER_PER_MILLION_PUPIL variable is number of articles indexed in Web of Science, EXCHANGE_RATE variable is an exchange rate of manat to dollar, INCOME_PER_CAPITA_MANAT variable is a per capita income (in manats), Dummy 2013 is a dummy variable and has a value of 1 for 2013 and zero for other years. This factor was included in the model because the number of articles in 2013 dropped sharply by 46% compared to 2012. By including this dummy variable, the negative impact was neutralized.

3. BASIC RESULTS

The regression equation is constructed as following:

POVERTY_RATE_IN_PERCENT = 143.954298305
 - 2.7085700272*SPECIALIZED_IN_10000PRS
 - 1.67867325813*TERTIARY_IN_10000PRS(-2)
- 0.149699209936*JAST_PER_MILLION_PUPIL
+ 9.86627066171*EXCHANGE_RATE
- 0.00823614565702*INCOME_PER_CAPITA_MANAT
 - 12.324862579*DUMMY_2013   (3)

The economic meaning of the equation is as following:
- If the number of graduates of secondary special institutions (per 10,000 population) increases by 1 person in the current year, the poverty rate in the country will decrease by 2.71%;
- If the number of university graduates (per 10,000 population) increases by 1 person in the current year, then the poverty rate in the country will decrease by 1.68% with a 2-year delay;
- If the number of articles indexed by researchers in the Web of Science database (per 1 million people) increases by 1 unit in the current year, the poverty rate in the country will decrease by 0.15%;
- If the per capita income of the population in the country increases by 100 manat in the current year, then the poverty rate in the country will decrease by 0.82%;
- If the exchange rate of manat depreciates by 0.10 manat against the dollar in the current year, then the poverty rate in the country will increase by 0.99%;
- Changes in selected explanatory factors cause a change in the explained indicator by 96.3%.

During analysis of the econometric model results, it was shown that the ratio of the number of graduates of secondary special education institutions per 10,000 population to the level of poverty in the country was higher than the ratio of other explanatory factors. However, it does not mean that the number of secondary special education institutions graduates per 10,000 population outweighs other factors (the number of university graduates per 10,000 population, the number of articles indexed in the Web of Science per million people).

Thus, some university graduates and the authors of articles indexed in the Web of Science also graduated from special education institutions. From this point of view, these factors have a share in the ratio of the number of graduates from special education institutions. It should also be noted that the share of university graduates is affected not by the current year, but by a 2-year delay. We can explain this point by saying that a university graduate (we can also call him a young specialist) gains experience during those 2 years and manages to realize certain chances to increase his income. The number of articles published in the basic science and technology (per 1 million people) is slightly lower than the level of poverty in the country compared to the level of education. We explain this by the fact that the country still has the higher share of mineral resources in exports and shortcomings in the national innovation system.

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Mineral fuels, lubricants, the share of similar materials in exports, as a percentage	85,1	91,3	88,9	86,0	82,2	76,8	84,6	81,4	97,1	92,8
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Mineral fuels, lubricants, the share of similar materials in exports, as a percentage	94,1	94,4	93,1	92,7	92,4	87,9	91,2	90,5	91,7	90,7

Table 4: The share of mineral resources in exports in Azerbaijan
(Source: https://www.stat.gov.az/source/trade/az/f_trade/xt007_3-4.xls)

Table 4 shows that in 2016-2019, the share of mineral fuels, lubricants and similar materials in total exports in Azerbaijan were slightly more than 90%. It is known that in countries not rich in mineral resources, such as Singapore, Israel, South Korea, Austria, etc. the innovative development strategies are applied to increase the well-being of the country's citizens (WIPO GII, 2019a). In countries with the higher share of natural resources in exports, the innovative development is relatively slow. Examples of such countries are Russia, Iran, Kazakhstan, Turkmenistan, and oil-exporting Middle Eastern countries (Cornell University, INSEAD, and WIPO, 2020), (OECD, 2016). Thus, the econometric statistics of the model are described in the table below:

Dependent Variable: POVERTY_RATE_IN_PERCENT				
Method: Least Squares				
Date: 04/07/21 Time: 17:26				
Sample (adjusted): 2003 2018				
Included observations: 16 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	143.9543	17.32639	8.308381	0.0000
SPECIALIZED_IN_10000PRS	-2.708570	0.511679	-5.293490	0.0005
TERTIARY_IN_10000PRS(-2)	-1.678673	0.315293	-5.324171	0.0005
JAST_PER_MILLION_PUPIL	-0.149699	0.058849	-2.543795	0.0315
EXCHANGE_RATE	9.866271	2.594998	3.802034	0.0042
INCOME_PER_CAPITA_MANAT	-0.008236	0.000743	-11.09206	0.0000
DUMMY_2013	-12.32486	3.654411	-3.372599	0.0082
R-squared	0.978029	Mean dependent var		14.32500
Adjusted R-squared	0.963382	S.D. dependent var		12.93138
S.E. of regression	2.474516	Akaike info criterion		4.949603
Sum squared resid	55.10907	Schwarz criterion		5.287610
Log likelihood	-32.59682	Hannan-Quinn criter.		4.966911
F-statistic	66.77306	Durbin-Watson stat		2.469465
Prob(F-statistic)	0.000001			

Table 5: Econometric statistics of the model

The coefficients of the established regression equation are statistically significant by 95%. All necessary tests have been performed and the established model is adequate. The model is implemented using the Eviews software package.

4. CONCLUSION

The article use various specifications to assess the poverty rate in Azerbaijan, constructs regression equations and concludes: while the share of secondary special education institutions and university graduates per 10,000 population, the number of articles in the Web of Science on basic science and technology per 1 million people and per capita income reduces the country's poverty rate, the depreciation of the manat against the US dollar increases the poverty rate. It should be noted that the number of university graduates, in contrast to other indicators, affects the poverty rate in the country with the delay of 2 years. It was found that the share of secondary school and vocational school graduates per 10,000 people do not have a statistically significant impact on the country's poverty rate. The obtained results are consistent with the results found in the scientific literature on economics (Balamurali et al., 2015). We believe that in our future research, it may be of interest to look at the impact of the country's innovation level on poverty.

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EVALUATION THE IMPACT OF THE DEVELOPMENT OF CULTURE AND CREATIVE INDUSTRIES ON THE TOURISM SECTOR

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ABSTRACT
Cultural and creative industries are one of the fastest growing sectors in the world economy. CCI is an industry that combines economy, culture and creative technology. According to the 2002-2015 review to Creative Economy of the United Nations Conference on Trade and Development (UNCTAD), CCI showed an average annual growth rate of 7,3%. At the same time, the world exports of CCI products and services increased by more than twice over the years, from $ 208 billion in 2002 to $ 509 billion in 2015. Recent international research shows that CCI generates 6.1% of global GDP (4.3 trillion USD) and 3% of global annual income (2.25 trillion USD). About one percentage of world's labor force are working in CCI, which means 29.5 million jobs. The measurement, monitoring and evaluation of development processes in this sector are not fully available due to lack of comprehensive statistics on CCI in Azerbaijan. According to the UNESCO report in 2018, CCI's share of GDP was mentioned 1%. The research of authors aims to examine the current situation in Azerbaijan, determine the share of CCI in the economy and assess the impact of the development of this sector on tourism. The development aspects of the CCI, the realization of the potential for development of the CCI in the liberated lands, contribution of the proclamation of Shusha city as the cultural capital on development of this sphere has been examined and made relevant proposals in the period of Post-Pandemic.
Keywords: *Azerbaijan, culture and creative industries, tourism, creative sectors, GDP, Strategic Road Map*

1. INTRODUCTION

Cultural and creative industries are one of the fastest growing sectors in the world economy. In 2019, the 74th session of the UN General Assembly adopted 2021 as the "Year of Creative Industries for Sustainable Development" (*UNGA, 2019*). The role of this sector, which has a 3% share in global GDP (UNESCO, 2021), is also growing. CCI is a type of industry that combines economics, culture, and creative technology. In the coming years, the increase in the level of education in the world, the increase in income and leisure time will lead to an increase in demand for culture. Thus, as societies become richer and people's basic needs are met, so does their need for the consumption of intangible products. Creativity is a complex process of innovation that combines some or all of the following dimensions: ideas, skills, technology, management, production processes, and culture at the same time. Therefore, culture should be analyzed both as an intermediate product in the production process and as a final consumer product (films, books, music, cultural tourism, etc.). In general, creativity develops economic competitiveness, helping to protect local jobs alongside skills and talents. Creative industries can stimulate the development of tourism by providing creative content for tourism and supporting innovative approaches to tourism and marketing.

Relationship of tourism with the creative industry:
- development of tourism products;
- revitalize existing tourism products;
- experience in using creative technology to develop tourism;
- exceeding the limitations of traditional cultural tourism models (OECD, 2014).

Azerbaijan's National Priorities for 2030 determine the development of both CCI-s and tourism sector. It was emphasized in this document that in the future, the digital society, which supports the most modern technological areas and innovations, will become a leading force in development. An ecosystem that stimulates creativity and innovation in society must be established to keep the country competitive (NP, 2021). This article examines the impact of the CCI-s on the development of the tourism sector, assesses the current state of tourism and creative industry in our country, explores the development potential of CCI-s in the liberated areas and formulates relevant proposals.

2. A REVIEW OF CCI DEVELOPMENT ON A GLOBAL SCALE
The UN's declaration of 2021 as the "International Year of Creative Economy for Sustainable Development" can be seen as a manifestation of the growing attention to this area on a global scale. Consider that, this sector generates $2.250 billion in value worldwide each year and provides more jobs for people between the ages of 18 and 25 than in any other field. The cultural sector alone employs 30 million people worldwide. As for the tourism sector the direct contribution of the travel and tourism industry accounted for 3.3 percent of the total global GDP in 2019. Comparatively, the total contribution of the travel and tourism industry in 2019 accounted for 10.4 percent of the total GDP worldwide (Statista, 2021). Research shows that Travel & Tourism will be the key sector in driving the recovery of the global economy post-COVID-19 by generating new jobs and driving visitors back to destinations. Importantly, the sector will also have a positive economic domino effect on suppliers across the entire supply chain (WTTC, 2020). The development of these two sectors has a positive effect on each other. There are several areas to consider when analyzing the creative and cultural industries:
- Visual arts (crafts, painting, sculpture, photography), performing arts (theater, dance, circus) and heritage (museums, art and antiques market, libraries, archeological activities, archives);
- Cultural industry, including film and video, radio and television broadcasting, video games, book and press publishing, music;
- Creative sectors, (fashion design, interior design, graphic design), including design architecture and advertising (T. Emilia et al., 2008).

According to the Creative Economy Outlook for 2002-2015 of the United Nations Conference on Trade and Development (UNCTAD, 2018), CCI-s grew at an average annual rate of 7.3%. At the same time, world exports of CCI products and services have more than doubled over the years, from $ 208 billion in 2002 to $ 509 billion in 2015. International research of the recent years (CISAC, 2015) shows that CCI-s accounts for 6.1% ($ 4.3 trillion) of global GDP and 3% ($ 2.25 trillion) of worldwide annual revenues. For comparison, this is more than India's GDP. CCI-s employs about 1% of the world's working-age population, which means 29.5 million jobs: the fine arts (6.73 million workers), the book industry (3.67 million workers) and the music industry (3.98 million workers). The number of employees in CCI-s exceeds the total number of employees in the automotive industry of the United States, European countries and Japan. Innovative and advanced activities of small businesses and individuals are attracting more attention, with more young and middle-aged people working in these fields.

According to the information of the European Commission for 2018, CCI-s produce goods and services worth about € 509 billion annually and this number accounts for 5.3% of EU GDP. This is three times more than the share of agriculture in the EU GDP. These sectors employ 12 million full-time workers (for comparison, the number of agricultural workers in the EU is 10 million) and they make up 7.5% of the employed population in the EU. According to the figures, CCI-s are the third largest employment sector in the EU (MCCI, 2019). According to the economic figures of the Department of Digital Development, Culture, Media and Sport of the United Kingdom for 2018, employment in the creative industries increased by 30.6% between 2011 and 2018. However, the similar figure for the country during these years was only 10.1%. Almost half a million jobs have been created in the UK's creative industries, an increase of 2.8% annually since 2011 (DDDCMS, 2021). Regarding to the information of the department, with these growth rates, the creative industries were the fastest growing sector compared to other sectors of the economy. It is expected to be opened 1 million new jobs by 2030 in the UK. In general, according to the evaluation of the UNESCO, the United Kingdom and other advanced countries, CCI-s are growing twice as fast as traditional sectors of the economy and require less investment. The "Create UK" strategy developed in the UK in 2012, is established based on the principles of the government's core industry strategy program and identifies the creative industries as important as traditional industries in the British economy. According to the strategy, five main priority areas have been identified: access to finance, education and skills, infrastructure, intellectual property, exports and attarction of the investment to the country. As a result of the activities carried out over the years, the share of the British CCI-s in the British economy increased from 87.5 billion pounds in 2010 to 131 billion pounds (DCMS, 2017) in 2017 (an increase of 49.7%) it also had a 7.1% (DCMS, 2017) share in the United Kingdom's Gross Value Added Value (GVA).
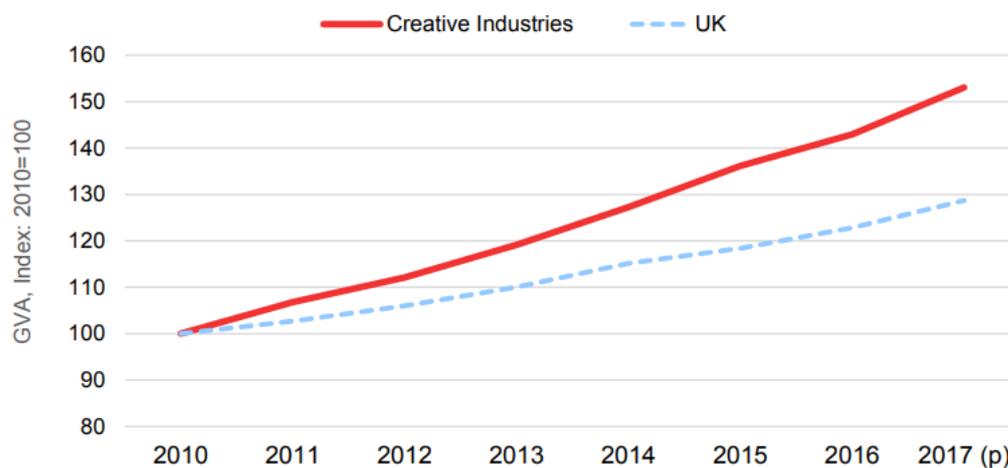
Fiqure 1: Index of GVA growth for Creative industries and for total UK: 2010 to 2017
(2010=100)
(Source: DCMS, 2017)

It is no coincidence that in the former Soviet Republics, as well as among the countries of the region, development processes related to CCI-s have already begun (eg, Ukraine, Georgia). (Creative Georgia, 2016; Cristina Farinha, 2017; Skavronska, 2017). Georgia adopted a Roadmap for the Development of Creative and Cultural Industries in 2016, and a Creative Georgia public legal entity was established under the Ministry of Education, Science, Culture and Sports of Georgia to coordinate the development of CCI-s, the development of social media is one of the priorities of the "Long-term National Cultural Strategy 2025".

CCI-s are essential for inclusive economic development, reducing inequality, and achieving the UN 2030 Sustainable Development Goals. Adoption of the UNESCO Convention on the "Protection and Promotion of the Diversity of Cultural Expressions" (UNESCO, 2005)is the main international document on the development of creative economies in terms of the improvement and implementation of rules and measures to support the production, distribution and use of products and services by CCI-s. International experience shows that the main role of states in the development of CCI is to create a favorable legal and administrative environment and business environment for them, the development of the CCI market, its promotion at the local and international levels, training of skilled labor, etc. to achieve such goals, effective coordination between sectors and ministries, provision of management and joint planning and relevant institutional organizational activities for this purpose should be implemented. There is a mutually beneficial relationship between tourism and culture. Thus, the tourism sector is important for creative industries because it has the following potential:

- evaluate cultural and creative values;
- expand the audience for creative products;
- support innovation;
- improve the image of countries and regions;
- open export markets;
- support professional networks and knowledge development (OECD, 2014).

As highlighted in the OECD's Impact on Culture Tourism (OECD, 2009) report, this link is changing with new forms of tourism based on tangible and intangible heritage. Destinations offer consumers the opportunity to develop creative economic approaches, support innovation, and make destination centers more diverse and attractive because they are looking for attractive and competitive tourism products. Here is an example: Austin, the capital of the US state of Texas, is considered the "capital of live music in the world." In 2010, 60% of tourists said they came to listen to live music as a reason to visit the destination. That year, it generated $ 1.4 billion in revenue and provided 18,000 permanent jobs. The importance of creativity in the knowledge economy is growing. Knowledge and skills become the center of value creation in the economy, and economic, cultural and social power in the creative industries. They contribute to economic growth and employment; contributes to the development of innovation, initiative and skills; supports urban and rural renewal; stimulates exports; preserves cultural identity and enhances cultural diversity.

3. CURRENT STATUS OF CULTURE AND CREATIVE INDUSTRY AND TOURISM INDUSTRY DEVELOPMENT IN AZERBAIJAN

In the XXI century, there is a dynamic development of both CCI and tourism on a global scale. Of course, Azerbaijan cannot stay out of the trends in this area. Because the development of the non-oil sector in Azerbaijan is a priority, and both of these sectors are of exceptional importance in terms of implementing the country's priorities. Thus, Azerbaijan must find new "driving forces" for sustainable economic growth, deep diversification of the national economy, full realization of export potential for goods and services. Although the oil sector is one of the pillars of socio-economic development, the non-oil economy must become the center of development (NP, 2021). From this point of view, both CCI and the tourism sector stand out. National Priorities also emphasize that only a diversified economy can be sustainable. Namely, the development CCI and the tourism sector that can play an important role in economic diversification. It should be noted that the number of tourists visiting Azerbaijan has increased dynamically since 2016. Thus, in 2019, the number of tourists visiting the country increased by 49 percent compared to 2015(SSC, 2021).

	2010	2015	2016	2017	2018	2019
■ Those who came to Azerbaijan	1962.9	2006.2	2248.8	2696.7	2849.6	3170.4
■ tourists from it	1279.8	1921.9	2044.7	2454	2605.3	2863.5
■ Those who left the country	3175.6	4095.8	4281.9	4108.9	4908.1	5567.7
■ tourists from it	1819.6	3256.2	3592.1	3447.4	4096.7	4347.3

■ Those who came to Azerbaijan ■ tourists from it ■ Those who left the country ■ tourists from it
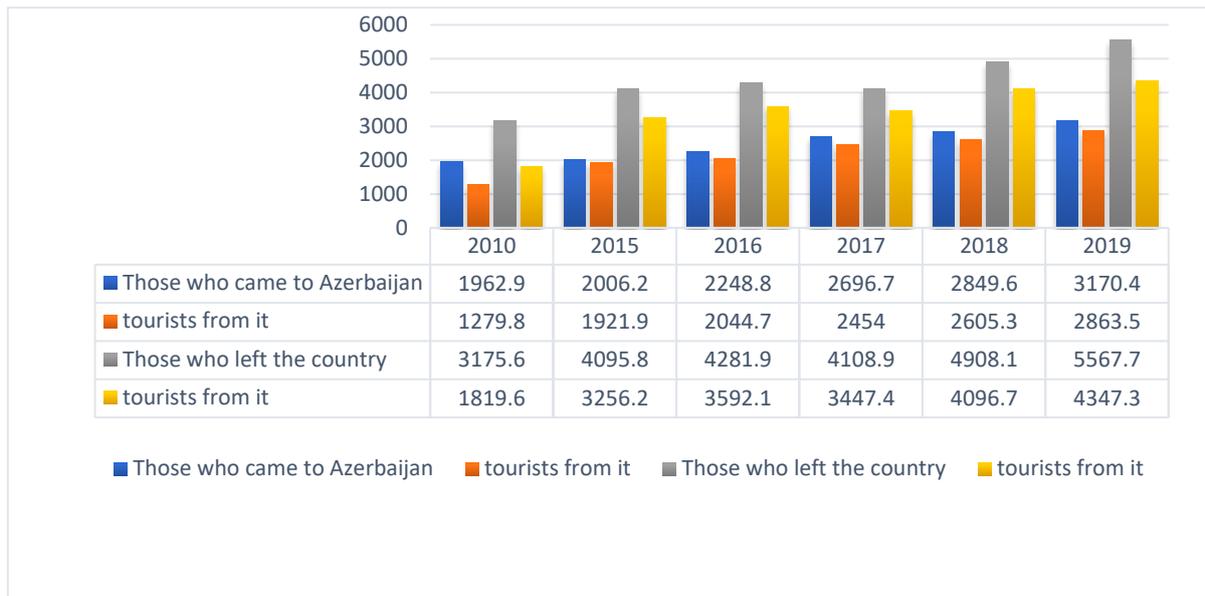
Figure 2: Number of tourists coming to Azerbaijan and citizens leaving the country as
tourists, thousand people
(Source: SSC, 2021)

It should be noted that a significant growth in the tourism sector is projected in 2020. Unfortunately, in order to prevent the spread of coronavirus infection, the introduction of a restrictive regime on the state border between the Republic of Azerbaijan and neighboring countries, as well as temporary restrictions on travel in most countries has led to a sharp decline in visitors in April-December 2020 (SSC, 2021). The visits were mainly for non-tourism purposes. As a result, in 2020, 4 times fewer foreigners and stateless persons came to Azerbaijan in compare with 2019. Our research showed that in 2010 only 65% of foreigners and stateless persons came to Azerbaijan for tourism purposes, but in 2019 the situation in this area has changed for the better. It was clear from the analysis of statistical data that in 2019, 90% of visitors to Azerbaijan made trips for tourism purposes. 57% of Azerbaijani citizens traveling abroad in 2010 and 78% in 2019 made trips for tourism purposes. As can be seen, since 2016, there has been an increase in both the number of tourists visiting our country and the mutual tourism turnover. Thus, in 2016, 2044.7 thousand people (SSC, 2016) and in 2019, 2863.5 thousand people (SSC, 2019) came Azerbaijan for tourism purposes. In 2018, Azerbaijani residents provided services worth $ 4.7 billion to foreign residents . During the period of these services, exports of tourism services amounted to 2.6 billion US dollars, while imports amounted to 2.3 billion US dollars. As a result, there was a surplus of $ 349.8 million (CBAR, 2020). The positive trend here is that while the balance of tourism services was negative in 2009, a positive balance was achieved in 2018. At the same time, the share of tourism in the structure of services exports was 56.2%. As for CCI-s, the lack of comprehensive statistics at the national level does not fully allow measuring, monitoring and evaluating development processes in this sector. The 2018 UNESCO Cultural Development Indicators Report on Azerbaijan was a reference point for determining the share of CCI-s in the Azerbaijani economy(UNESCO, 2018). The report puts the share of CCI-s in GDP at 1% ($ 374 million for 2016). The data of the Ministry of Taxes was used for the calculations, which also took into account only the data of individuals and legal entities registered as taxpayers. In general, the existence of problems such as concealment of income or low turnover, non-registration as a taxpayer suggests that the share of CCIs in the economy is higher than the above figure. As an example, before the pandemic, an average of 60,000 marriages were made in Azerbaijan each year (63869 marriages in 2019) (SSC, 2020).

Most marriages are accompanied by weddings. Assuming that an average of $ 2,000 is spent on music, entertainment, photography and video services for each wedding party, then one figure ($ 120 million) appears to be one-third of the figure calculated by UNESCO above. we see. This is a figure calculated only for wedding ceremonies and some services provided at the wedding. By the way, weddings for the development of domestic tourism can be held in the liberated city of Shusha, the cultural capital of Azerbaijan. As for international tourism, since 2016, there has been a practice of holding wedding ceremonies in Baku. During 2018 and 2019, 200-400 guests from India, the United Arab Emirates, the United States and Germany and from other countries attended the Indian wedding at the Bilgah Beach Hotel and Fairmont Baku, Flame Towers, which are among the most popular hotels in Baku. Let's take another example. Baku is included in the UNESCO Network of Creative Cities. Baku, one of the most beautiful cities in the Caucasus, always attracts the attention of musicians and cinematographers for its music videos with its modernity and richness of historical and architectural samples. World celebrities, especially Russian and Turkish show business celebrities, shoot their music videos in Baku, Gabala and other cities. This situation makes a positive contribution to the development of both the creative and industrial industries in our country, as well as the tourism industry. According to the UNCTAD Creative Economy Outlook for 2002-2015, Azerbaijan's trade turnover on CCIs for 2005-2014 was compared(UNCTAD, 2018). Thus, while the volume of exports and imports in 2005 amounted to 4.94 million US dollars and 51.77 million US dollars, respectively (trade balance - 46.83 million US dollars), in 2014, a similar trend was observed in exports and imports. The volume of imports amounted to 3.95 million US dollars and 138.04 million US dollars, respectively (trade balance - 134.09 million US dollars). This gives reason to say that the negative balance observed in the trade turnover of Azerbaijan for CCIs has increased almost threefold during the period. Since it is important for Azerbaijan, which is in the early stages of development of primary schools, to study the current situation in these areas, the Ministry of Culture of the Republic of Azerbaijan has been implementing a number of research projects with the support of a number of international organizations (Creative Azerbaijan, 2019). The latest research report by the Ministry of Culture clarifies the current situation with CCI-s, highlights the important potential role of these areas in the country's socio-economic and cultural life, and identifies the development of a long-term and multilateral integrative program as an important measure for Azerbaijan (Creative Azerbaijan, 2021). Also, the strategic roadmap stresses that cultural and historical heritage of the Republic of Azerbaijan is very rich. At present historicalcultural sites interesting for tourists are being restored and relevant tourism development plans are being prepared for such sites to use them as tourism attractions (SRM, 2016).

4. CONTRIBUTION OF THE LIBERATED TERRITORIES TO THE DEVELOPMENT OF CREATIVE INDUSTRY

One of the five priorities announced in the document "Azerbaijan 2030: National Priorities for Socio-Economic Development" is related to the great return to the liberated territories. It is emphasized in the document that we can bring the share of the liberated region in economic activity to the pre-occupation situation and increase it steadily. It is the CCI-s and the tourism sector that can play an exceptional role in restoring economic activity in the liberated territories. It should be noted that as a result of the occupation of Shusha by the Armenian armed forces in 1992, about 600 historical and architectural monuments were destroyed and looted. After the liberation of Shusha in 2020, the announcement by the President of Azerbaijan of the country's cultural capital (PA, 2021) opens up great opportunities for the development of CCI in this city. Work is already underway in Shusha to restore the Vagif Poetry Days and the "Xari Bulbul" Festival.

On the other hand, the construction of a new road to Shusha and the construction of an international airport in Fizuli create great opportunities for the development of tourism in these areas. It should be noted that in the 70s and 80s of the XX century, the development of tourism in Karabakh reached a high level, there were a large number of resorts, cultural institutions, leisure centers, and there were many beds in the accommodation facility. Thus, in 1987, a significant part of 50,000 foreign tourists to Azerbaijan, 250,000 tourists from different regions of the USSR and 2.5 million domestic tourists who took part in tours organized by local tourism and excursion bureaus visited Karabakh. In general, on the eve of the occupation of Shusha, the number of buildings of the Sanatorium-Resort Association reached 18. There were 316-bed Shusha rest house and 6-bed buildings of 1000-seat sanatorium of all-Union importance, medical building, 400-seat canteen and others. There is a need to develop a comprehensive program of measures to transform Shusha into a climatological and balneological resort, as well as to operate as a tourist center. It should be noted that international competitions have been held in Shusha before. At present, the city is planning to hold the International Nightingale Festival. At the same time, according to the Azerbaijan National Culinary Center, the International Culinary Festival will be held in Shusha in August 2021, and applications are already being received from 15 countries to participate in the festival. Our research shows that there is a great potential for the development of CCI-s and the tourism sector in the liberated areas. Reconstruction of these areas, especially the restoration of the city of Shusha, will make a significant contribution to the development of CCI-s and the tourism sector in Azerbaijan.

5. CONCLUSION
In conclusion, we can note that the attention to CCI-s is growing globally, and the UN declaration of 2021 as the "Year of Creative Industries for Sustainable Development" is a manifestation of this. Since 2019, increased attention to the development of CCI-s in Azerbaijan. However, at present, the creative industry in Azerbaijan is not yet fully accepted by society as a unified management and supply. It is important to bring new thinking and impetus to this area. There is a need to establish intensive partnerships with private sector participants on CCIs, and to establish more flexible and effective mutually beneficial relationships with creative unions and associations that bring together creative people in specific areas of culture. The application of optimal Public-Private Partnership models for the private sector should be stimulated in the more effective management of state-owned cultural institutions by sectors. In view of the above, it would be expedient to develop a "Strategic Roadmap for the Development of Culture and Creative Industries in Azerbaijan for 2021-2030." in order to ensure effective coordination of long-term strategic planning and development processes for the development of CCI-s in the country. This document can be an integral part of broader national goals, including the diversification of the economy, including exports, support for the development of small and medium enterprises, education reform, regional development, reducing youth unemployment. It should also be noted that these jobs are more open to digitalization than other industries. The development of CCI, in turn, can contribute to achieving the goals set for the tourism sector. Because Azerbaijan has hundreds of cultural tourism destinations. It can also attract cultural tourists, especially in the liberated territories. The organization of international music festivals and other creative events in Shusha and other liberated regions will also give impetus to the development of alternative tourism. We also propose to pay special attention to the development of CCI-s and tourism in the project "State Program for the Restoration and Sustainable Development of the Liberated Territories of the Republic of Azerbaijan for 2021-2025".

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DEVELOPMENT TENDENCIES AND DIVERSIFICATION PROBLEMS OF AZERBAIJAN'S ECONOMY

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ABSTRACT

The study finds that, despite various indicators of economic growth for the world and countries provided by credible international financial institutions, the outlook for economic growth in 2021 is negative due to the global pandemic in 2020. The developing countries are projected to expand at a faster rate. The negative dynamics that have been observed in most countries around the world are the product of a strict quarantine regime enforced in response to the pandemic and its repercussions, and it is unavoidable that the results of such steps will be passed on to the Azerbaijani economy. According to the study, non-oil GDP, which has been a positive contributor to GDP growth over the last three years, will decline by 2.3 percent in annual projections in the timeframe under consideration in 2020. However, in terms of its effect on shifts in overall value added output, it has long since lost its dominant role. To avoid the spread of new coronavirus infections, decreases in value added from non-oil industries, which account for around 70% of GDP, resulted in a 1.4 percentage point reduction in GDP decline. This was due to the April implementation of a strict quarantine regime. The pandemic's continued weakening of aggregate demand has stopped inflation from accelerating, whereas the quarantine regime has sped up disinflationary patterns. Of course, the new strategic plan, which is marked by the restoration of the country's territorial integrity, necessitates deep structural-institutional changes, the formation of export capacity, and long-term economic development through non-oil sector expansion, national economy competitiveness, improving, innovating as well as diversifying the economy. They will ensure the country's economic growth in Azerbaijan if the country's citizens' well-being is strong.
Keywords: non-oil industry, alternative energy sources, non-oil exports, global pandemic, economic growth

1. INTRODUCTION

As part of a new level of socioeconomic growth, one of Azerbaijan's top goals is to enter the ranks of developed countries by modernizing all aspects of public life. Our country's reforms are also based on global challenges of the moment, necessitating the need to identify the main contours of the country's future stages of development. The country's and the region's complex political, economic, and humanitarian processes necessitate the introduction of complex, systemic, and dynamic economic reforms to shape a post-oil economy on a global scale. Accelerating economic growth focused on high, sustainable, inclusive, and private initiatives, and ensuring the return of the population to the liberated territories, are two of the most pressing challenges ahead. As the formation of a fiscal framework must adapt to new realities, including the preservation of stable foreign exchange reserves and the gradual reduction of transfers from the State Oil Fund to the state budget, macroeconomic stability in terms of resistance to internal and external shocks will be needed in the future.

2. NEGATIVE EFFECTS OF GLOBAL QUARANTINE CONDITIONS ON THE DYNAMICS OF IMPORTANT ECONOMIC INDICATORS

The COVID-19 pandemic had more negative effects than anticipated in the first half of last year, according to the June issue of the *International Monetary Fund's* World Economic Outlook. Due to the national lockdowns, the estimates on significant economic parameters for

2020 and 2021 have been decreased. However, trade has grown at a time when disease treatment has been effective, vaccine testing has increased, and global quarantine conditions have improved as a result. The forecast scenarios for 2020 have been improved to reflect the gradual growth of economies and the relative recovery in demand, and the economy is projected to decline at a slower rate (Table 1).

Countries/regions	Data 2019	Forecasts					
		Indicators on 2020			Indicators on 2021		
		Issue in April	Issue in June	Issue in October	Issue in April	Issue in June	Issue in October
Economic growth							
World	2,8	-3,0	-4,9	-4,4	5,8	5,4	5,2
Developed countries	1,7	-6,1	-8,0	-5,8	4,5	4,8	3,9
USA	2,2	-5,9	-8,0	-4,3	4,7	4,5	3,1
Euro zone	1,3	-7,5	-10,2	-8,3	4,7	6,0	5,2
Japan	0,7	-5,2	-5,8	-5,3	3,0	2,4	2,3
United Kingdom	1,5	-6,5	-10,2	-9,8	4,0	6,3	5,9
Canada	1,7	-6,2	-8,4	-7,1	4,2	4,9	5,2
Developing countries	3,7	-1,0	-3,0	-3,3	6,6	5,9	6,0
China	6,1	1,2	1,0	1,9	9,2	8,2	8,2
Russia	1,3	-5,5	-6,6	-4,1	3,5	4,1	2,8
Turkey	0,9	-5,0	-	-5,0	5,0	-	5,0
Iran	-6,5	-6,0	-	-5,0	3,1	-	3,2
Azerbaijan	2,2	-2,2	-	-4,0	0,7	-	2,0
Trade growth rate (goods and services)							
World	1,0	-11,0	-11,9	-10,4	8,4	8,0	8,3
Growth rate of raw materials							
Oil	-10,2	-42	-41,1	-32,1	6,3	3,8	12
Inflation							
Developed countries	1,4	0,5	0,3	0,8	1,5	1,1	1,6
Developing countries	5,1	4,6	4,4	5,0	4,5	4,5	4,7

Table 1: The oil price line reflects the change in the average price for Brent, Dubai and WTI. The average oil price per barrel in the October issue is projected at $ 61.39 in 2019, $ 41.69 in 2020 and $ 46.70 in 2021.
(Source: IMF - "World Economic Outlook: The Great Lockdown" April 2020)

As shown in the table, the estimated figures for most countries or regions for both years have improved as compared to the previous scenario. Positive dynamics are expected to replace the negative dynamics forecasted for 2020 and observed during the assessment period the following year. As a result, while the global economy is forecast to contract by 4.4 percent in 2020, it is forecast to grow by 5.2 percent in 2021. This trend, which can be seen in other countries or regions, is largely explained by the relative improvement of aggregate demand determinants such as consumption and investment, which had dramatically deteriorated the previous year. The uncertainty surrounding the COVID-19 pandemic, the disease's re-expansion towards the end of the year, and knowledge of the idea of improving the quarantine regime in some countries make the October issue unlikely to be positive. However, it has weakened. According to the Republic of Azerbaijan's State Statistical Committee, the country's GDP was 58469.5 million manats in January-October 2020, down 3.8 percent in real terms from the same period the previous year.

Despite a major weakening of global demand for oil, the sharp drop in oil prices and the agreement to reduce oil supply to prevent a sharp drop in prices had a significant impact on the amount of value added in the country's oil sector. 64.0 percent of the 3.8 percent decline was attributed to the oil sector. Oil production dropped 7.6% from January to October, outpacing the positive effect of a 7.3 percent increase in gas production, resulting in a 6.3 percent decrease in oil GDP. Oil production has dropped since the OPEC+ agreement was agreed to be extended at a meeting in May 2020, with a resumption expected in 2020. According to OPEC monthly statistics, Azerbaijan is one of the largest non-OPEC countries expected to reduce oil production in 2020, with a decrease of around 0.06 million barrels per day (Figure 1). Our country's daily production will average 0.71 million tons in 2020 and 2021, according to the organization's estimates.
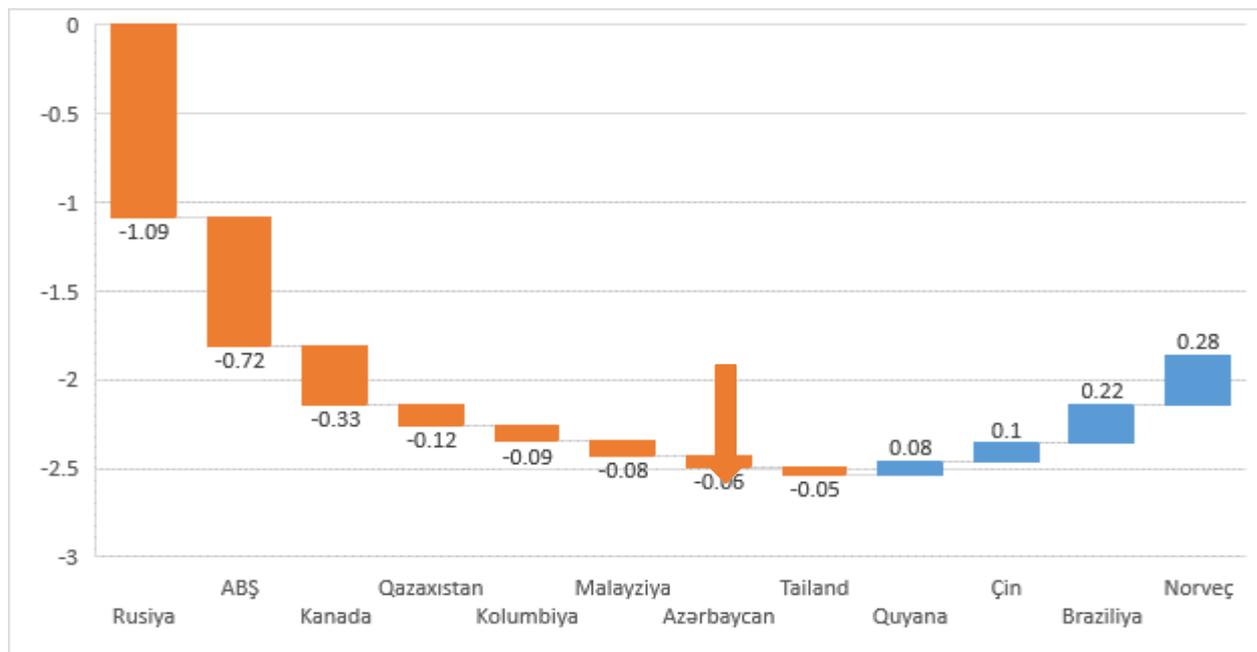
*Figure 1: Annual change in production for non-OPEC countries, mln. Barrel / day
(Source: The picture is based on OPEC's monthly bulletins)*

3. EXPANDING THE DIVERSIFICATION OF ECONOMIC DEVELOPMENT
Some of the most important developments in the country's economic growth are increased regional economic activity, the organization of their integration into global economic systems, and the formation of export potential. The creation of Azerbaijan's regions is an important part of Azerbaijan's successful and long-term socioeconomic development strategy. Completion of tasks envisioned in adopted and effectively implemented state programs for regional growth, as well as decrees on additional measures for regional socio-economic development. Long-term growth in the non-oil market, as well as the quality of services and social infrastructure in the regions, as well as the business environment, are all top priorities. More jobs have been created and poverty has been reduced as a result of improving the business environment, increasing investment, and launching new companies. Between 2004 and 2018, the gross domestic product increased by 3.3 times, with the non-oil sector rising by 2.8 times, manufacturing by 2.6 times, and agriculture by 1.7 times. Targeted policies resulted in the development of more than 2 million new jobs in the country, 1.5 million of which were permanent, more than 100,000 new enterprises, a 5% unemployment rate, and a 5.1 percent reduction in poverty during this period. The large-scale work done as part of state initiatives has laid a solid foundation for future regional development.

The work done in the coming years to promote socioeconomic development in the country's regions, including rural areas, will be driven by paragraph 3 of Article 109 of the Republic of Azerbaijan's Constitution. The State Program on Socio-Economic Development of Azerbaijan's Regions for 2019-2023 was adopted and is being implemented successfully in order to continue the work, improve infrastructure and social services, and increase employment and material well-being for the population living in the regions. The share of a number of budget revenue parameters in GDP is projected to grow in the non-oil sector, while remaining stable in the face of the global pandemic. Revenues to the state budget, including non-oil sector revenues, are expected to increase in 2021, while the GDP ratio is expected to stay constant (Figure 2). Budget revenues as a percentage of GDP are expected to remain at 33.6 percent in 2021, unchanged from 2020, whereas non-oil sector revenues as a percentage of GDP are expected to grow. The tourist and hospitality sector experienced the sharpest decline among non-oil sectors, and it had the greatest negative effect on non-oil GDP. Assuring the tourism sector's long-term development and importance as a main economic sector in the Republic of Azerbaijan President of the Republic of Azerbaijan Ilham Aliyev signed the "State Program for the Development of Tourism in 2010-2014" on April 6, 2010. The main goal of the State Program is to develop a modern tourism sector in Azerbaijan that meets high economic, social, and environmental standards while also contributing to the country's main economic development. Establishing conditions for the expansion of tourism operations, as well as ensuring its transformation into one of the key areas, is critical.

ratio of state budget revenues to GDP

ratio of state budget non-oil revenues to non-oil GDP

Ratio of state budget non-oil revenues to GDP
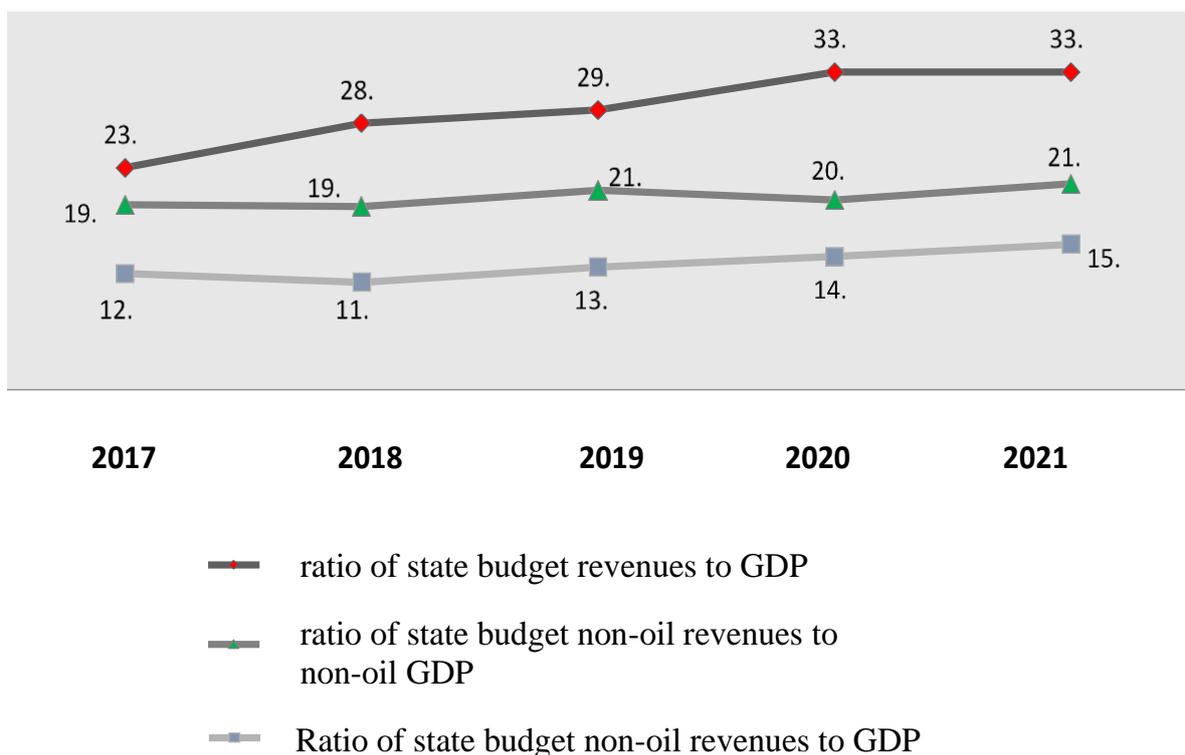
Figure 2: Ratio of state budget revenues to GDP, in %

The discovery of the COVID-19 virus inside the country's borders in March, on the other hand, had a significant effect on both foreign and domestic tourism, with both hitting new lows. According to the State Statistical Committee, from January to October 2020, there was a 56.7 percent decrease compared to the same period last year. It was 62.2 percentage points lower than the comparable indicator from the previous year (Table 2).

Indicators	Unit of measurement	2019 10 months	2020 10 months	Differene
Value-added	Mln. Manats	1624,9	711,0	-913,9
Real growth rate	%	5,5	-56,7	-62,2

Table 2: Placement of tourists and value-added on public catering sector
(Source: Developed based on data of the State Statistical Committee)

Despite the non-oil sector's decline in 2020, growth in non-oil industry and trade was observed, including agriculture as a key indicator of the country's export potential. It should be noted that, in contrast to 2019, the pace of growth in the relevant areas has slowed. Agriculture, forestry, and fisheries, which account for 7.5 percent of GDP, increased by 1.6 percent in the same period last year, but by 5% more than in the same period this year. Furthermore, the non-oil sector's real growth rate was 11.3 percent in the first ten months of 2020, compared to 15.7 percent in the same period of 2019. However, as in 2019, the non-oil industry had the greatest positive impact on non-oil value added this year, and was able to offset, although partially, the negative impact of the tourism sector (Figure 3).
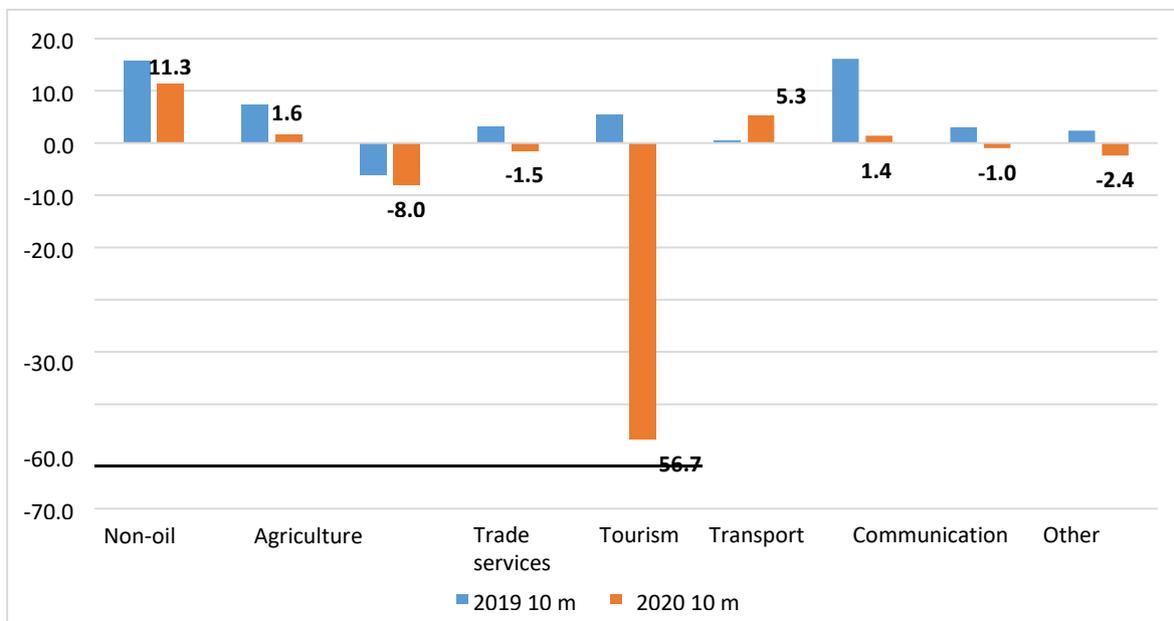
Figure 3: Annual change in value added in non-oil sectors, real %
(Source: Picture has been developed based on data provided by the SSC)

The transportation and warehousing industry, as seen in the graph, is one of the sectors with positive trends in relation to 2019, with value added increasing by 4.8 percentage points and 5.3 percent. The increase in value added in the field of transportation is explained by a high increase in revenue from air freight, despite a drop of 18.9% in freight and 39.0% in passenger transportation in the first ten months of 2019. Following tourism and hospitality industry, the construction sector experienced the next major downturn, with a fall of 6.4 percent of total GDP in 2018, which accelerated to 8.0 percent in 2019. A drop in fixed asset investments may explain the acceleration of the decline. It's worth noting that construction and installation work accounted for 63.1 percent of overall investments. According to the results of the first ten months of 2020, there was a fall in fixed asset investments, with domestic sources taking the lead in overall investments. Fixed asset investments totaled 11,540.2 million from January to October 2020. In real terms, it fell by 2.1 percent from the same time last year.

The decline was triggered by a 9.9% drop in non-oil sector investments during the year, according to the decomposition of oil investments. Despite the fact that oil sector investments increased by 11.7 percent in 2019, overall investment growth was due to the fact that oil sector investments lag behind other sectors. It was impossible to stand there and watch it happen. When looking at the funding sources, it's clear that the decline in fixed capital investment was caused by domestic sources. In contrast to domestic investments, which dropped 8.9% over year, foreign investment increased by 25.8% reversing negative trends in 2019. Domestic investment, which accounts for 64.0 percent of total investment, should be noted. As a result, despite a significant increase in foreign investment, there has been no increase in total investment (Table 3).

Indicators	Unit of measurement	2019 10 months	2020 10 months
Investments in the main capital	Mln. Manats	11407,4	11540,2
Real growth rate	%	-2,6	-2,1
Oil sector	Mln. Manats	4270,9	4781,8
Growth rate	%	-13,4	11,7
Non-oil sector	Mln. Manats	7136,5	6758,4
Growth rate	%	6,8	-9,9
Internal investments	Mln. Manats	8108,6	7390,1
Growth rate	%	13,8	-8,9
Foreign investments	Mln. Manats	3298,8	4150,1
Growth rate	%	-24,2	25,8

Table 3: Fixed capital investments and their classification
(Source: Table developed based on SSC data)

Investments in the public sector amounted to 4708.4 million manat in January-October 2020, accounting for 40.8% of total investments in fixed assets manats. It should be noted that this figure is 15.6% less than in the corresponding period of 2019. The imposition of a strict quarantine regime and subsequent extension of its length in response to rising global health threats and deteriorating medical conditions in the country had a negative impact on the population's economy, resulting in a decrease in income. The population's income dropped by 1.4 percent in nominal terms and 4.1 percent in real terms between January and October 2020. The fact that the population's income is lower than the rate of inflation, as well as a decrease, indicates that real purchasing power has been lost. The average monthly wage, which is a critical component of the population's income, continued to increase in double digits in 2019, as a direct result of the social package initiatives implemented in 2019. In this case, the fall in wages may be due to a reduction in other sources of revenue, such as 2020 transfers. With retail trade turnover of 1.5 percent and paying services provided to the population, the consumer economy continued to deteriorate in reaction to the lockout system and the long-term decline in real incomes. Despite a 25.9% drop in the overall value of goods and services sold in the industrial sector, the total value of goods and services sold in the consumer market fell 7.7% due to lower demand from both state and non-state territory. Despite the fact that social package policies were supposed to raise rates by increasing demand next year in late 2019, a sharp change in consumer behavior due to tense medical conditions has kept these expectations to a minimum. Thus, from January to October 2020, the average annual inflation rate was 2.8 percent, with food items being the primary driver of price increases. Food prices rose 5.1 percent in comparison to the same period last year, indicating that demand was not declining. As a result, it ranked first among the industry basket subgroups in terms of growth rate (Table 4).

In contrast to other categories, the primary causes of price rises in the food, beverage, and tobacco subgroups could be linked to a rise in global food prices as well as a decrease in demand for these products during the quarantine period. Food prices started to rise again in June after falling since February 2020, according to October data, rising by 2.3 percent on a monthly basis and 5.6 percent on an annual basis.

Subgroups included in the consumer basket	Jan-march	January-June	January – September	January-october	2019 10 month
Food, beverages and tobacco	5,2	5,5	5,2	5,1	3,7
Non-food products	1,2	1,3	1,3	1,3	1,2
Services	1,4	1,0	1,1	1,0	2,2
Total	**3,0**	**3,0**	**2,9**	**2,8**	**2,6**

Table 4: Changes in the price index for subgroups included in the consumer basket, average annual, %
(Source: The table is based on the SSC data)

Despite the declining dollarization trend, the manat's exchange rate dynamics have improved in response to the sharp drop in oil prices since the end of the first quarter of 2020, which has raised inflation expectations and raised the possibility of increased import inflation. As a consequence of the stability that has been achieved, these expectations have been reduced. It's worth remembering that over the last ten months, the average annual inflation rate has been near the middle of this range, which is consistent with the Central Bank's target range. It should be noted that basic inflation, as calculated without taking into account the prices of state-regulated goods and services, as well as seasonal agricultural products, was 2 percent in the average annual assessment from January to October 2020. Currency auctions conducted jointly by the Central Bank and the Republic of Azerbaijan's State Oil Fund were crucial in keeping the manat's exchange rate stable. As a result, the currency supply sold at currency auctions is used to ensure that SOFAZ transfers to the state budget are made on time and to raise the proportion of manat-denominated assets in SOFAZ's investment portfolio. Between January and October of this year, SOFAZ sold 6170.5 million dollars, with 9968.3 million manats used to manage SOFAZ transfers to the state budget. Important changes in consumer behavior in March influenced the high increase in foreign exchange supply for the first half of 2020. For the first ten months of 2019, the currency supply realized in the foreign exchange market was 19.4 percent higher than the amount of currency sold in the same timeframe of 2019. Oil exporters agreed in March to reverse weakening global demand patterns, forcing a steep drop in oil prices that eventually led to instability in the foreign exchange market, reducing Azerbaijan's oil revenues. As a result of these procedures, the selling of dollars reached 549.5 million in March 2020, which is the average monthly figure for 2019. That's roughly four times what it was in 1928.3 $ million is a large sum of money. Following that, pandemic-induced isolationist regimes changed consumer behavior once more, resulting in a decrease in currency demand and, as in previous months, a moderated supply of foreign exchange. In early 2020, fluctuations in the foreign exchange market affected the amount of deposits, including a fall in household deposits, and developments in the banking sector played a key role in this decline. The current pandemic has had an impact on the banking industry as well. Public deposits decreased by 5.3 percent in March due to the aforementioned reasons. They also dropped by another 5.3 percent in subsequent months due to the revocation of certain banks' licenses. The figures had risen into the double digits. The 2-digit increase in the annual change in total deposits seen at the beginning of the year was followed by a 4.1 percent drop at the end of October (Figure 4). The decline in growth rate as compared to the same time in 2019 can be explained by a drop in foreign currency deposits.

In annual terms, manat deposits rose by 11.6 percent in the first ten months of 2020 (up from 30.7 percent at the start of the year), while foreign currency deposits decreased by 13.2 percent (4.1 percent increase at the beginning of the year). The steps taken by the monetary authority to ease monetary policy are aimed at increasing the role of banks in the process of promoting economic activity, making loans more accessible. During 2020, the Central Bank has repeatedly revised the parameters of the interest rate corridor at various stages and implemented interest rate reductions to ease monetary policy. The discount rate 9.25% applied at the beginning of the year has been reduced from 6% to 6.5% to date. The decision to lower interest rates was influenced by the stability of the manat's dynamics, low inflation, and weakening demand.
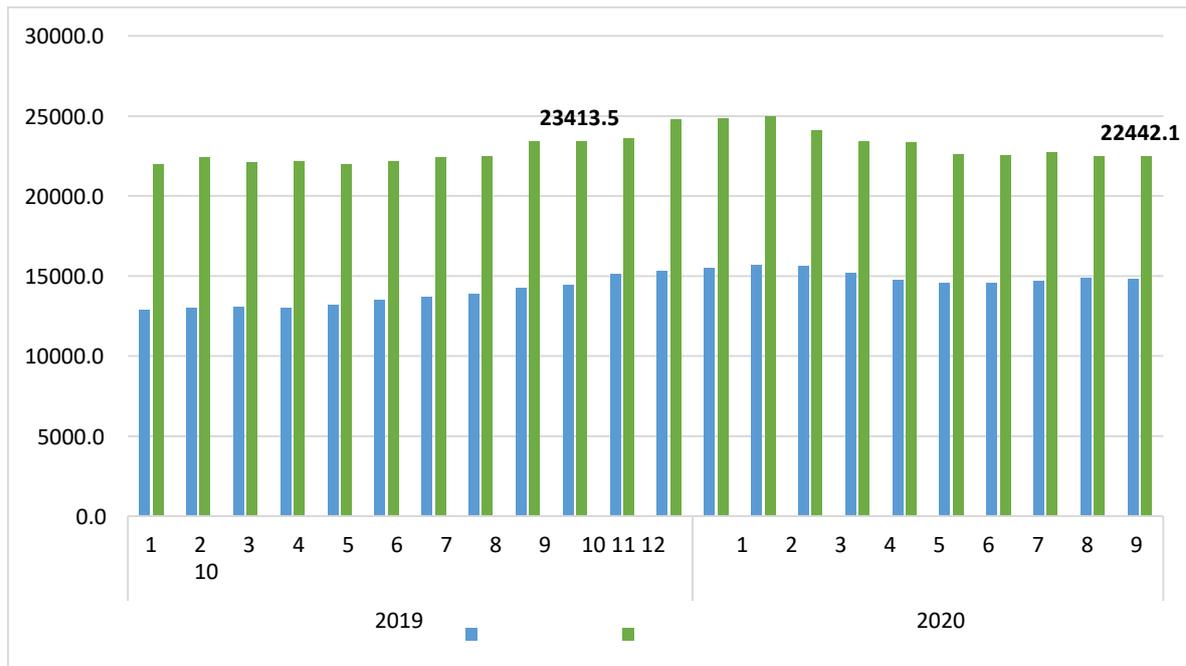
Figure 4: Total loans and deposits, at the end of the period, mln. manat.
Source: The picture is based on the CBA's statistical bulletins).

The decline in deposits in manat had an effect on the amount of money supply by the end of October 2020. The general money supply grew at a rate of 13.7 percent in manat, down 14.9 percentage points from the start of the year. Among the constituent elements of this monetary aggregate, there was a decrease in time deposits in manat, as well as a decrease in growth in other components. The drastic change in consumer behavior during the lockdown regime has weakened the growth of the monetary base, resulting in a weakening of demand. The prevailing pandemic conditions have significantly reduced economic operations, the growth of the monetary base, which was around 30% at the beginning of the year, fell to around 6% in April, and the growth rate in April was the same as in February which decreased by about 5 times compared to. In the following months, there was a gradual increase in the monetary base in manat, and the transition to double-digit growth from July onwards resulted in a 17.5% increase in late October. According to the World Bank, the Azerbaijani economy will recover to pre-pandemic levels by the end of 2022. The acceleration of domestic demand in 2021 would boost economic growth, according to the study, but this will be due to improved health and increased government spending. High oil prices are projected to help the current account return to surplus by reducing the financial deficit. Because of the anticipated tightening of fiscal policy and the long-term recovery in oil production, the speed of economic recovery is expected to be moderate without significant structural reforms after 2021 (amid growing financial pressures).

Achieving the growth of the country's information and communication technology industry is one of the country's modern economic development trends. Along with a country's socioeconomic growth, the level of application of information and communication technology is one of the most important indicators of its intellectual and science capacity, transparency and efficiency in government, and societal development. The widespread use of information and communication technology is critical for ensuring national security in the field of information, in addition to serving the country's overall growth. In modern times, the space industry has evolved into a critical tool for resolving global and regional socioeconomic, scientific, and technological issues, as well as a means of advancing in space. Space exploration contributes to scientific and technological advancements, which leads to creativity. Significant steps have been established, and strategic tasks have been set, in order to make this sector of the economy, after the oil and gas sector, the top priority. The world's oil and gas reserves are depleting, necessitating the use of alternative and renewable energy sources. Renewable energy sources include water, wind, solar, biological waste, and, with the aid of some facilities, even sea waves. The benefit of using this energy is that it has no negative effects on the atmosphere and does not pollute it with toxic waste. The development of this sector is already a priority for the Azerbaijani government. Azerbaijan's advantageous geographical position and climatic conditions allow widespread use of environmentally sustainable alternative (renewable) energy sources. The use of alternative energy sources in the production of electricity and heat while using the country's natural resources would allow for progressive changes in electricity's future growth. As a result, in 2004, the Republic of Azerbaijan implemented the "State Program on the Use of Alternative and Renewable Energy Sources." The State Agency for Alternative and Renewable Energy Sources of the Republic of Azerbaijan was created in 2013 to improve the country's management system in the field of alternative and renewable energy. A strategic plan for 2015-2018 has been established by the department. The aim of this plan is to increase the development and productive use of alternative and renewable energy resources, recognize and extend the use of renewable energy capacity, and develop measuring observation stations as an operation. Solar energy, which is Azerbaijan's primary renewable energy source, has become more widely used in recent years. The explanation for this is Azerbaijan's abundance of sunny days. The Absheron Peninsula and the Caspian Sea coast receive 2,500 hours of sunlight each year, while the Nakhchivan Autonomous Republic receives 2,900 hours. One of the successful steps taken in this field is the establishment of the Gobustan Experimental Landfill and Training Center. Azerbaijan's use of wind energy is also a promising field. Powerful winds blow in the Absheron Peninsula and along the Caspian Sea coast for more than 270 days a year. Wind speeds reach 7.2 meters per second on an annual basis. In other parts of the world, the number of windy days ranges from 20 to 70. As opposed to a coal power plant, a wind power plant with a capacity of 500 kW avoids the emission of 750-1250 tons of CO_2 and 3-6 tons of other harmful substances. The widespread use of wind turbines in the Absheron Peninsula, according to experts, will make a significant contribution to the country's economy. In this sector, large-scale wind energy usage could provide 20% of total energy balance while saving the same amount of fossil fuels. It is possible to save about 2.4 million tons of fuel oil and avoid the release of 7.5 million tons of carbon dioxide into the atmosphere by using wind energy over a 20-year period. To ensure the growth of non-oil exports, goals have been set for the near future to improve the country's competitiveness, achieve high growth rates in the non-oil sector, and raise GDP per capita at the expense of this sector. The large-scale work on creating techno-parks and industrial districts is commendable in this regard. This work began after the signing of the Law of the Republic of Azerbaijan "On Special Economic Zones" and the Decree "On the establishment and organization of industrial districts." The aim of developing and implementing these important new policies is to establish favorable conditions for the growth of small and medium businesses in the country's manufacturing and service sectors.

The low share of infrastructure spending is a necessary condition for lowering the costs of industrial enterprises. Simultaneously, the growth of small and medium enterprises necessitates the strengthening of cooperative relationships between businesses. Given that industrial districts are designed for the development of competitive products and services by small and medium-sized enterprises with the requisite infrastructure to engage in entrepreneurial activity, their high usage is strategic. One of the benefits for businesses in these areas is that they do not need to build infrastructure for them. As a result, the state provides all infrastructure elements to the businesses before they begin operations.

4. CONCLUSION

Economic growth depends on reducing the natural resources factor and ensuring the non-oil factor's supremacy in the country's gross domestic product and the formation of the state budget. The document "Azerbaijan 2030: National Priorities for Socio-Economic Growth," which was approved by President Ilham Aliyev's decree dated February 2, 2021, opened up new possibilities for identifying the country's long-term sustainable development goals and introducing reforms based on specific programs. The government has assigned the task of introducing reforms, programs, and initiatives in five key areas based on national priorities: 1) a competitive, strengthened economy; 2) a society built on diverse, egalitarian, and social justice; 3) competitive human capital and capacity for new innovations; 4) a significant return to liberated territories; 5) a clean environment and "green development" nation. The resolution of the issues reflected in the national priority would restore the liberated territories' historical role in the country's economic and social system. The area will become one of the most important ties in economic activity, with the same pace of growth as the rest of the world, if innovative methods and new technology are used. The initiatives and projects undertaken by Azerbaijan to restore the international transport and logistics corridor in the region will not only improve the country's access to global markets, but will also provide a major boost to the growth of liberated areas. Using available resources and geographical location, ensuring modern socio-economic growth in all Azerbaijani regions is a national priority driven by rapid development.

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FACTORS AFFECTING INVESTORS BEHAVIOR UNDER CONDITION OF BREXIT

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ABSTRACT

This paper identifies the factors and earning opportunities that affect investor behavior during the Brexit process. As a result of leaving the single market obstacles to the movement of capital and labor, the difficulty of trade relations, and the implementation of financial services under new rules have led to economic and political uncertainty. This situation was partially resolved on December 24, 2020. A number of indicators influenced investor behavior in 2016-2021. These includes: changes in the legislation; uncertainty after statements; earning opportunities. At the same time, the reputation of the London financial center complicates this issue. For investors, London is the number one financial hub in Europe and the center of their financial operations. While other European financial centers are trying to take advantage of this process. In the course of this process, there has been an increase in investment flows to the UK. This can be considered unexpected in the event of Brexit uncertainty. Because a number of experts predicted a decline in investment flows to the UK in the event of Brexit. However, according to a number of institutions, the UK ranks first in the world in terms of the attractiveness of the investment climate. It is the factors that affect investor behavior that determine this process. With the Brexit effect, investors have a chance to achieve their goals, ie to make a profit. Given that the EU has made great strides in the integration process, it was impossible for the UK to withdraw from the union with the prospect of a no-deal. As a result, the end of this process resulted in an agreement, and the UK does not actually lose connection with single market, with some exceptions. Thus, Brexit will only lead to losses in the short term. In this case, long-term targeting is more optimal.
Keywords: Brexit, Economic uncertainty, Financial regulation, Investor behavior

1. INTRODUCTION

The Brexit process has been on the agenda in the European Union since 2016. This event has caused uncertainty in European financial markets. On the agenda of the media No-deal Brexit probabilities was seriously discussed. The factors behind this process were Theresa May's Article 50 statement (Wearden, 2016) and her subsequent failed Brexit approach. Boris Johnson, despite his tough stance, has reached a high-priority agreement with the EU. This raises the question is the probability of a No-deal Brexit high. Uncertainty in the financial markets existed, albeit slightly, after the Canadian-style deal. The reason was that the agreement focused too little on the financial sector. The Memorandum of Understanding, reached in March 2021, resolved many details. This means that in the coming years, the partners will continue their relations through bilateral negotiations (Nardelli, 2021). Brexit has created uncertainty in financial markets (Garibli, 2017). This has ultimately increased volatility in the markets. Volatility also means the opportunity to earn. In this case, the behavior of investors attracts attention. If we look at the statistics and a number of reports, we can see that the UK is still attractive to investors. This shows that investors take into account the influence of other factors in decision-making in such processes.

2. THE MEAN OF UK FOR INVESTORS

The United Kingdom attracts investors on a number of indicators:

- Forbes selected the Kingdom as the best country for business in 2019; (Badenhausen, 2018)
- One of the world leaders in the financial sector; (TheCityUK, 2020)
- The headquarters of most professional financial institutions are located here;
- UK has all the infrastructure and professionals needed for financial markets;
- The main financial operations of the European Union are carried out in London;
- Geographically located in the center of other financial centers around the world (free from time difference)
- Attractiveness of financial regulation rules;
- Availability of a comfortable environment for foreign companies (for example, there are 1,400 financial services companies in about 80 countries) (Sowels, 2017, p.3) (46.8% of companies engaged in financial and insurance activities belong to foreign entrepreneurs) (ONS, 2020)
- Adoption of English as an international language;

London is the number one financial center in Europe: (Table 1)

	UK	USA	Japan	France	Germany	Other
Cross-border bank lending (Q2 2020)	15	10	13	10	7	45
Foreign exchange turnover (Apr 2019)	43	17	5	2	1	33
Interest rate OTC derivatives turnover (Apr 2019)	50	32	2	2	1	14
Conventional fund management (end-2019)	6	46	7	4	-	-
Insurance premium (end-2019)	6	39	7	4	4	39
International debt securities Outstanding (Q1 2020)	13	9	2	6	5	65

Table 1: The indicators of the financial centers (%)
(Source: TheCityUK, 2020)

In the list of net exporters of the largest global financial services, the UK is the leader in 2019 ($ 77.0 billion)(TheCityUK, 2020, p.8). London also ranks second in Europe and fifth in the world in terms of assets in the banking sector ($10.2 trillion)(TheCityUK, 2020, p.12). Operations of major European banks are implemented from London. After the Brexit, the banking sector may face higher commissions, which will have a significant impact on their revenues. In the 1960s and 1970s, London began to increase its prestige as a financial center around the world, and this accelerated in the 1980s. The free movement of capital in the EU has created the conditions for the development of this financial center (Howarth, 2017). The UK is in the top five in surveys conducted by various organizations. It was inevitable that the Brexit process would affect investor behavior. The delay in the Brexit process, the spread of hard and soft Brexit news, and the situation created by the statements of politicians about Brexit, inflamed uncertainty. Also, Brexit uncertainty depended on the outcome of trade talks. The issue of leaving the single market, the loss of passport rights, the adoption of equivalence rules include a number of uncertain decisions and future obstacles.

According to the trade agreement reached on December 24, 2020 and the current state of the economy, it is possible to predict how investment decisions will change:

- The agreement reached by the partners to the trade agreement also put an end to the uncertainty in EU since 2016.
- Adoption of a zero tariff rate on trade in goods could be good news for the country's economy, especially for the machine and medical industries, which are linked to Europe.
- The pound sterling depreciated against the US dollar. Despite positive Brexit news, the exchange rate has risen, but it did not return the "expensive" pound before the 2016 referendum (Huseynzade, 2020). The "cheap" pound has also helped investors, especially those from the United States.
- The government is providing incentive packages to protect the economy. This creates conditions for investors to be confident in government assistance.
- The Bank of England is trying to protect the economy by lowering interest rates. Although the latter reductions are mainly aimed at Covid-19, they are also valid for Brexit.

3. CHANGES IN REGULATION RULES

The main problem in the financial market related to Brexit is related to free access to the single market. The government had to constantly discuss labor and capital mobility and legal principles within the market with the EU (Garibli, 2017). However, in October 2016, T. May stated in his speech and later in a document called the "White Paper" that the Kingdom would take control of its borders and put an end to the legal procedures of the Union. This clearly meant that the single market would be abandoned. This means that 5,476 companies of British origin and 8,008 companies of Union origin will not be able to take advantage of the single market (EU Withdrawal Impact Assessment, 2018). As a result of the loss of passport rights, financial relations between the Kingdom and the EU will be governed by the principle of equivalence. "Equivalence" refers to the process by which the European Commission assesses that a third country's regulatory, supervisory and enforcement regimes are equivalent to those of the EU. Regime financial and banking services face restrictions on direct contact with the EU market (Deslandes J., 2019, p.5). Equivalence regime is not possible for banking services (credit and deposit), payment services, and UCITS sectors. Only professional services are available for Alternative Investment Funds (AIFMD) and Regulated Markets (MiFiDs). In general, the regime does not fully cover the financial sector. The regime does not yet exist in the banking and insurance sectors. On investment services, regulation of Over-The-Counter derivatives (EMIR), Credit rating agencies, securities financing operations, Financial benchmarks, Trade Repositories (SFTR) rules are fully enforced in equivalence mode (Casper De Vries, 2017, p.23). The kingdom was trying to get the upper form of this regime. Note that equivalence rules are better than no regulation. Let's look at an example to understand the difference between these two regulation regimes. A bank of British origin serves a customer from the Union to issue loans and bonds in the international credit market. The bank provides a derivative to the EU company to protect against currency and interest rate risk. The bank provides these services to the customer with the right of passport on CRD IV and MiFID. CRD IV does not exist in the equivalence rules, thus limiting lending and advisory services. If the EU's MiFID II rules for a third country recognize equivalence for the United Kingdom, it may be possible for a UK bank to provide loans and derivatives services with additional permission from ESMA (BBA.org.uk, 2016, p.6). Equivalence rules provide access to third-country firms to operate in member countries of the European Economic Area (Deslandes J., 2019). In this case, London could remain a place for EU to trade stocks and over-the-counter securities. As a result, companies will have to operate under more complex EU regulations (Sowels, 2017, p.7). It is now clear that future financial relations between the European Union and the United Kingdom will depend on the evolution of the European equivalence rules or the essence of

bilateral agreements. In March 2021, an agreement on financial services was reached. This agreement confirms the rules of equivalence. At the same time, according to the agreement, the parties will meet twice a year to discuss. This can lead to improvements in equivalence rules (Nardelli, 2021). One of London's "challenges" is that it is the main base for transactions with euro-based derivative financial instruments conducted by the clearing house (Sowels, 2017, p.10). It should be noted that the fact that these operations take place outside the Eurozone is somewhat controversial. The European Central Bank declared ECB would not support liquidity in 2011 for such transactions (ECB, 2015). However, the United Kingdom challenged the decision in the European Court of Justice and won. The decision may come into force again as the UK leaves the EU. Because in this case, the ECB can more easily make a decision against the UK, which is outside the EU jurisdiction. In this case, financial centers such as Frankfurt, Paris, and Amsterdam come to the fore to act for the financial center of Europe. However, no financial center in Europe has the infrastructure to do this, such as London, technical and legal problems must be solved (Howarth, 2017) (Williams-Grunt, 2021). This should destabilize the market. The "transfer" process will incur costs. It will not be easy for many companies, investors, and customers to move from the London financial center.

4. BREXIT INFORMATIONS AND FINANCIAL MARKET

Before the Brexit referendum, if we look at the forecasts for the development of major stock indices in Europe and the UK, Brexit effect has been obvious (Figure 1). This effect was mainly remembered by growth. Only in February and the last months of 2018 there were reductions. The first case is related to the slowdown in negative news about Brexit and the rise of the pound, in the second case, there was a decrease due to the No-deal Brexit effect. However, the relationship with the pound sterling is not always justified. As can be seen, the FTSE 100, FTSE 250, CAC, and DAX indices showed an increase during the period of Brexit uncertainty. Growth took place after the negative Brexit condition by repeating this situation many times, it can be concluded that there is a connection between fluctuations and negative news. Negative news consist of:

- News about the increasing probability of No-deal Brexit;
- Hard Brexit information;

In contrast, there is an increase in the stock market with Soft Brexit news. Statistical analysis shows that European stock indices are correlated with the FTSE 100. In this case, other European indices are affected by the processes taking place in the UK indices. Note that UK indices are affected by Brexit events (eg, statements by politicians, the pound's exchange rate) (Table 2 and Figure 2), in which case the same effect applies to the entire European market.

	DAX	*CAC*	*FTSE 100*	*FTSE 250*
DAX	1	0.67	0.87	0.98
CAC	0.67	1	0.74	0.63
FTSE 100	0.87	0.74	1	0.90
FTSE 250	0.98	0.63	0.90	1

Table 2: Correlation matrix for FTSE 100, FTSE 250, DAX, and CAC (2001-2021 April)
(Source: Data were obtained from Investing.com)

In 2016, the FTSE 250 index (*Std.dev = 3.37%*) was more volatile than the FTSE 100 (*Std.dev = 2.38%*). This happened in 2020 under the uncertainty of Covid-19 (*Std.dev = 8.94%; 6.87%*). The main reason for the increasing impact on the FTSE 250 is that it is made up of UK-based companies, which more clearly reflects the UK economy. Contradictory information, often spread during trade negotiations, led to short-term losses in the market.

As a result of observations, it is possible to witness the recovery of losses within a maximum of 3 days. Compared to other indices in European financial markets, UK indices have so far gained less value since the Brexit referendum (Table 3). This proves that the UK is the biggest loser in this process. In second place is the DAX index. If we look at the correlation matrix, it was more related to the UK indices. Graph 3 provides the exchange rate between the pound sterling and the USD and the search popularity of 4 Brexit related news (*Soft and Hard Brexit; No-deal Brexit; Ireland border*) via Google. As a result, Brexit news has a significant impact on the pound sterling. Although the most negative news by investors was Brexit news during the 2016 referendum, the undesirable news for investors in the following years was the increase in the probability of No-deal Brexit.
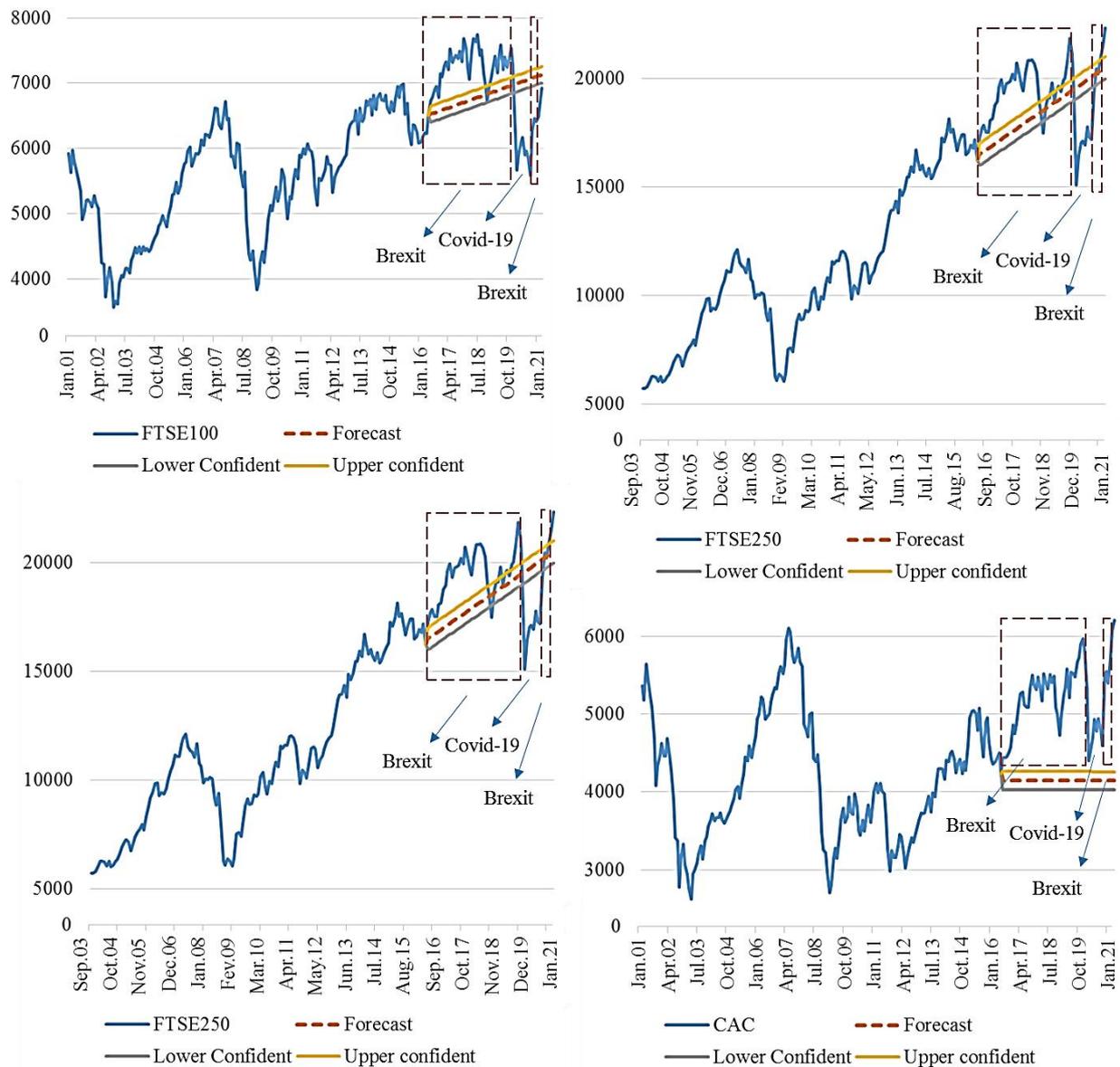
Figure 1: Brexit effect over the European indexes (2001-2021 April)
(Source: investing.com)

Table following on the next page

INDEX	From 24 Jun. 2016 to 31 Jan. 2020	From 24 Dec. 2020 to 22 Feb 2021
FTSE 100	+18.69%	+1.87%
FTSE 250	+31.42%	+2.38%
CAC	+41.39%	+4.56%
DAX	+35.84%	+2.99%

Table 3: Increase in price for the most important stock indexes for Europe
(Source: investing.com)

According to Table 3, it is possible to avoid uncertainty when focusing on a long period. The same is true in the Forex market. In political and economic uncertainties such as Brexit, markets are affected by the nature of the information disseminated.
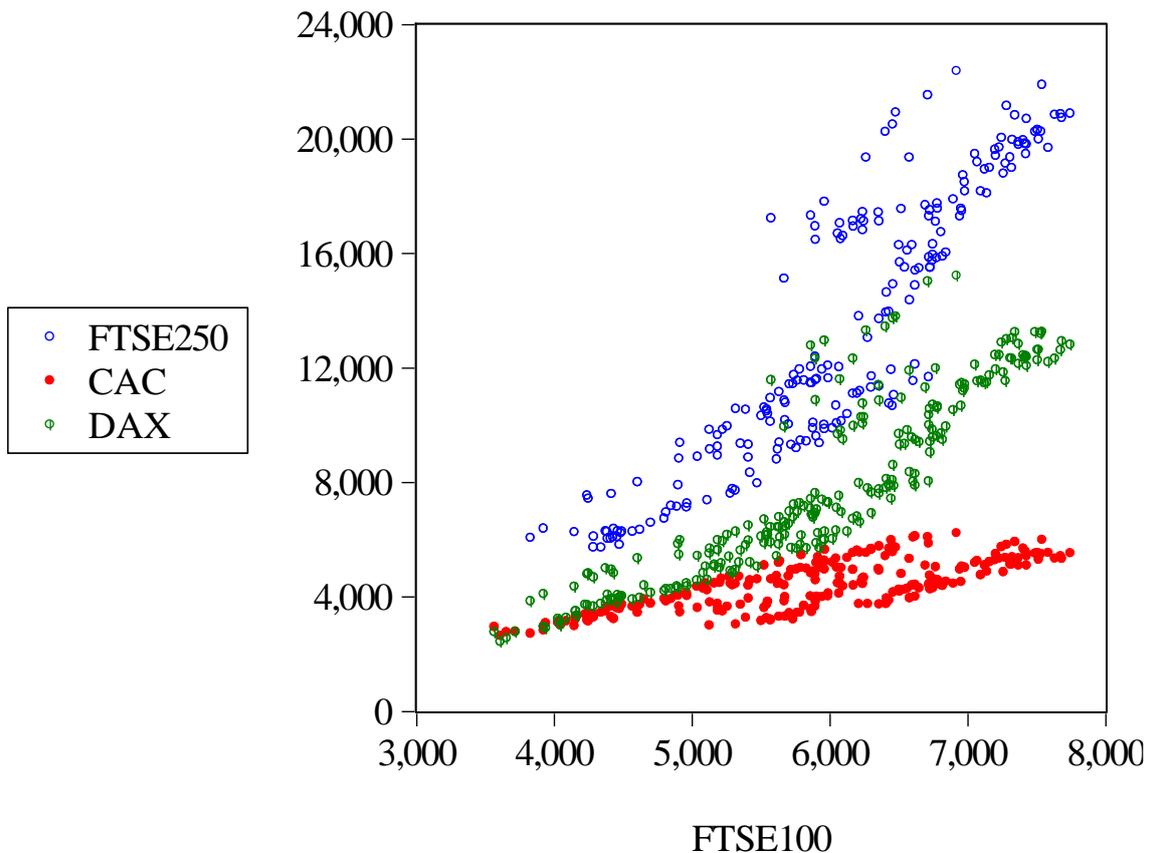
Figure 2: Correlation graph for FTSE 100, FTSE 250, CAC and DAX (2001-2021 April)

Figure following on the next page
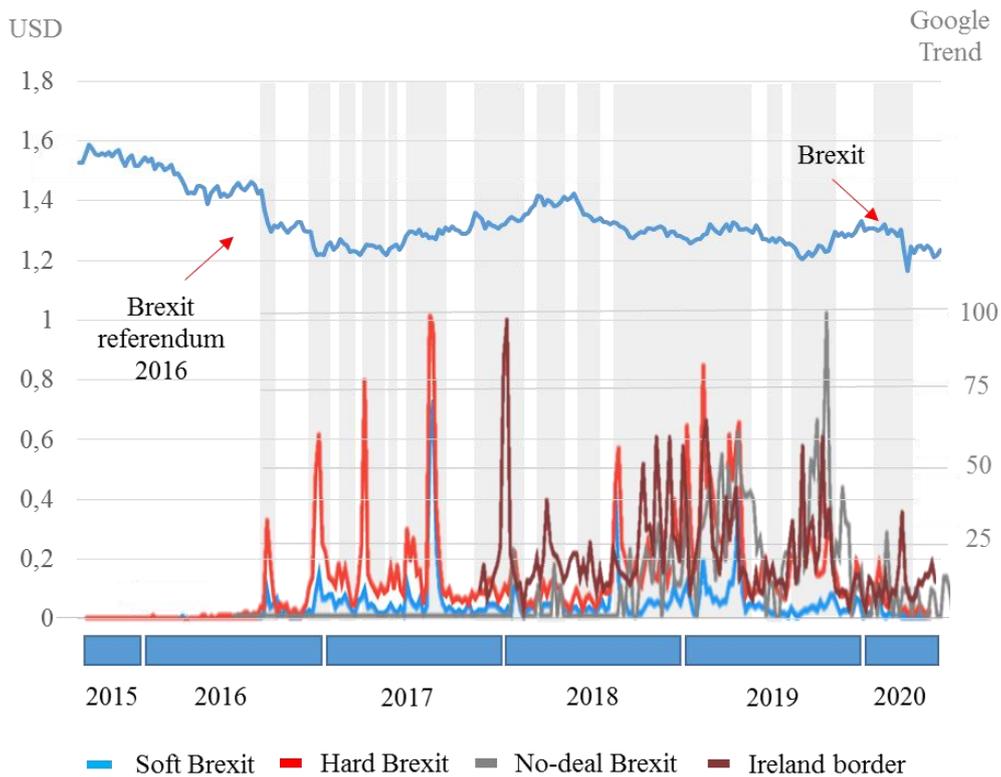
Figure 3: Analysis of the Brexit effect on the Pound with Google search volume, 2015 May - 2020 May
(Source: Bank of England, Google Trend)

	Average impact	**Maximum impact**	**Minimum impact**
Hard Brexit	3.60%	8.60	2.0%
Soft Brexit	2.80%	3.20%	2.40%
Ireland border	2.50%	4.0%	0.8%
No-deal Brexit	7.70%	9.45%	6.04%

Table 4: The effects of various Brexit information on the pound (GBP/USD)

Table 4 demonstrates the effects of various Brexit informations on the Pound Sterling. The highest impact occurs with No-deal Brexit information.
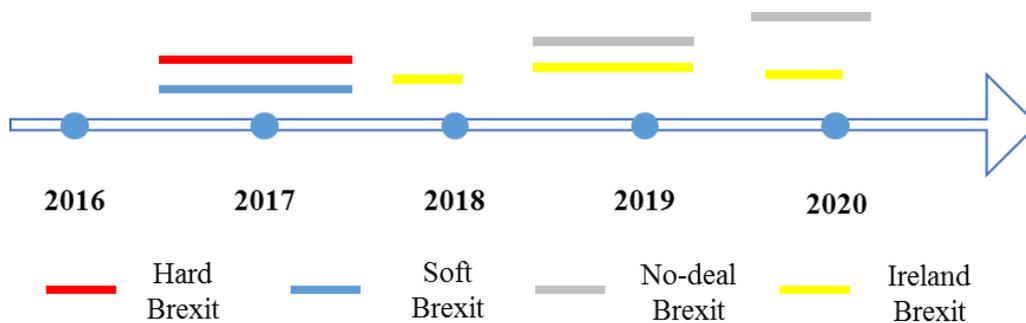
Figure 4: The range of popularity of Brexit information
(Source: Google Trend)

Figure 4 shows the periods when the relevant Brexit information was popular. Based on this, it is possible to identify the causes of uncertainty in the markets.

5. THE GROWTH OF INWARD FDI DURING BREXIT

Despite Brexit uncertainty, FDI inflows to the UK have increased. However, the opposite news can be seen on the media's agenda. The main point is the news that there will be an influx of investments from the UK under the influence of Brexit.
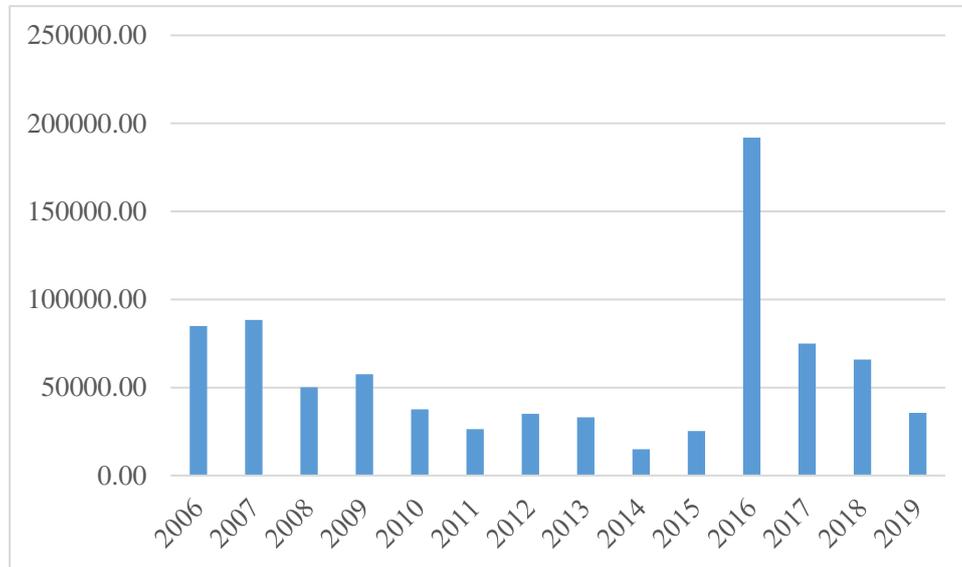
Figure 5: Net FDI into the UK, 2006-2019, (million GBP)
(Source: House of Commons Library, 2020)

The increase in FDI is more pronounced in 2016. According to UNCTAD, UK rank in EU on inward FDI flows, ranked first in 2016, 2017 and 2018 years. The Economist cites the reasons for this: low tax rates and a stable legal system. At the same time, the share of non-EU investments is growing in recent years (Ward, 2020). This could be one of the key issues in achieving the "Global Britain" idea.

6. WHY DOES INVESTMENT FLOW?

To understand the factors that contribute to this situation, let's note the pros and cons for investors in the UK during the Brexit process: (Table 5)

Disadvantages	Advantages
Leaving the single market and losing the right to a passport	Depreciation of the national currency
New regulation rules	Low interest rates
Economic uncertainty	Supporting the business environment
The declining trend in the economic indicators of the United Kingdom	Optimal and stabile market infrastructure
	Reputation of the UK

Table 5: Evaluation of the UK by Investors

As can be seen, the indicators on the advantages side were obtained mainly by state regulations. In this case, the UK government was able to minimize part of the impact of the shock and economic crisis caused by Brexit on the economy through interventions. Using Brexit, UK tried to overcome the stagnation in the macroeconomic situation (Huseynzade, 2020). All of these factors ultimately affected investor behavior. Despite all the uncertainty, the UK has been able to attract investors.

7. HOW TO EARN DURING UNCERTAINTY? EXAMPLE OF BREXIT

Until December 24, 2020, there was uncertainty in the United Kingdom and the European Union. The situation created by both Brexit and the Covid-19 pandemic is causing fluctuations in financial markets. In this case, how can investors obtain benefit from this situation? After all, volatility also means the opportunity to earn.

7.1. Aim for the long term

One way out of economic uncertainty is to focus on the long term. Undoubtedly, the indexes that have suffered the most from the Brexit process are the FTSE 100 and 250. In 2020, trade negotiations between the United Kingdom and the European Union were delayed and uncertainty in the markets increased along with Covid-19. This situation was especially complicated by the fall in oil prices. In this case, only technology companies have shown some growth. However, very few technology companies are represented in the FTSE 100. On the other hand, due to the impact of the pandemic, a number of British companies stopped paying dividends (Barclays.co.uk, 2020). However, these types of fluctuations are mainly characterized as short-term effects. After a while, growth occurs, and this creates an opportunity for earn.

7.2. Take advantage of the depreciation of currencies

In some cases, currencies depreciate during economic uncertainties. The pound lost -8.06% (euro -2.39%) after the Brexit referendum. The loss is not limited to this. However, this is thought to be good for the UK economy. For example, the behavior of the Bank of England proves this thesis (Huseynzade, 2020). Multinational companies that make up the FTSE 100 index can return the money they earn to the country's economy. Because in this case, foreign investors can earn more by turning their earnings into pounds. Also, if these companies earn income from foreign economic activity, new investment opportunities arise due to exchange rate, so the pound is currently relatively inexpensive. Prior to Brexit, this opportunity was somewhat limited. During the Brexit process, the pound lost historical value against the USD and creating mentioned opportunity for investors.

7.3. Use diversification opportunities

It is possible to make a profit by staying out of the volatile condition caused by Brexit. Asian financial markets appear to be the most suitable markets to take advantage of diversification opportunities. For example, the share of the assets of the State Oil Fund of the Republic of Azerbaijan in Europe is declining during the Brexit process, and these assets are mainly directed to the Asia-Pacific market (SOFAZ, 2021).

7.4. Assess the effects of other factors

In recent years, the main "voice" in European financial markets is Brexit. However, there is a fact that other factors cause positive or negative fluctuations. This was the case with the discovery of the Covid-19 vaccine. At that time, there was no positive news in trade negotiations, but there was an increase in indices, due to vaccine. As a result, investors can earn benefit in the financial markets, taking into account such indicators.

7.5. Investment opportunities created by Brexit

Prior to the December 24, 2020 trade agreement, there were two possibilities: a deal or a no-deal. In these scenarios, fluctuations in the value of the pound were expected. In this case, it would be beneficial to invest in ETFs used to reduce risks and increase diversification opportunities. At the same time, investors who are confident that the EU and the UK will reach an agreement could invest in companies owned by the UK in indices such as the FTSE 100 and

250. Because the financial market of the United Kingdom is characterized by flexibility. When they lose value under the influence of information, they can recover it quickly. If investors hoped the parties would come to an agreement, they could make a long-term profit by buying real estate in the UK due to low interest rates. During the period of uncertainty, the real estate market does not show good results. However, it will be profitable when everything returns to normal. During periods of growing uncertainty, price increases slowed, and when this was over, there was an increase (ONS, 2020). Investing in gold can be seen as a traditional way in such cases. In the case of Brexit, there was a depreciation of the pound and a rise in the price of gold. Another way seems to be investing in cryptocurrencies. It is possible to make a profit by determining the inverse relationship between the value of Bitcoin and other cryptocurrencies during uncertainties (Huseynzade, 2019, p.78). However, the risk is not small at these points. Earning opportunities in some cases act as a means of protection, not profit.

8. CONCLUSION

Factors influencing investor behavior with the Brexit effect can be identified:
- Changes in regulation;
- Increasing the probability of No-deal Brexit with the prolongation of the negotiation process;
- Investment opportunities created by the macroeconomic situation;
- Statements of politicians and the context of the agreements reached;
- London's reputation as a financial center and its opportunities;

During the Brexit uncertainty, investors had a chance to profit. To do this, investors must target in the long run, take advantage of currency volatility, take advantage of diversification and take into account the impact of other factors on markets. However, in many cases, these opportunities act as protective behavior.

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ANTI-CORRUPTION MEASURES IN REGULATING THE INTERACTION OF CIVIL SERVICE AND ENTREPRENEURSHIP

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ABSTRACT

The article examines the issues of anti-corruption regulation of the relationship between the civil service and entrepreneurship, as well as measures to improve the efficiency of government bodies in business regulation. Objectives: based on the analysis of legislation, to determine anti-corruption measures in the regulation of entrepreneurship, to reveal the influence of the civil service on business, to determine the boundaries of the participation of civil servants in the regulation of entrepreneurship, to determine the effectiveness of the control functions of the state body in the regulation of entrepreneurship. The article uses the methods of comparative analysis, logical generalization and synthesis. The author used a mutual analysis of business activity, economic indicators and anti-corruption statistics, revealed the impact of eliminating administrative and bureaucratic mechanisms on improving the business climate in the country. Analyzed the legislative framework for anti-corruption management of the activities of civil servants. The analysis of various approaches to ensuring the opportunities and freedoms of civil servants and the expectations of the interests of entrepreneurs in the process of making decisions on the regulation of entrepreneurial activity is carried out. Reforms are outlined in the model of public administration in Azerbaijan. Particular attention was paid to optimizing the work of the civil service and improving anti-corruption mechanisms. As a result of the study, recommendations were made to improve the efficiency of civil servants providing services to entrepreneurs.
Keywords: *Civil Service, Civil Servants, Anti-Corruption, Efficiency of Public Administration, Mechanism*

1. INTRODUCTION

Corruption is not a national phenomenon. This problem is universal, accepted all over the world, which is constantly discussed and tried to solve. This can be seen from various conventions (6), documents of international law. Since the mid-1990s the General Assembly of the United Nations, through multiple resolutions, has expressed serious concern about the problems and threats posed by corruption to the stability and security of societies, undermining the institutions and values of democracy, ethical values and justice, and jeopardizing sustainable development and the rule of law (18). "Corruption is a constant in the society and occurs in all civilizations; however, it has only been in the past 20 years that this phenomenon has begun being seriously explored" (Štefan Šumah, 2018). We are convinced that international cooperation in preventing and combating corruption is a transnational manifestation of paramount importance, and there is a "need for a comprehensive and multifaceted approach to effectively preventing and combating corruption." Preventing corruption is one of the goals, and the promotion and strengthening of measures to improve the efficiency and effectiveness of the fight against corruption "confirms the universality of this problem" (20). The essence of corruption is manifested in the bribery (venality) of officials. In particular, the institutional roots of corruption stem from the relationship between the state and the official. This relationship allows an official to abuse public resources in two ways: either directly in their own interests, for example, by embezzling funds from the state budget, or by taking bribes to act in the

interests of others. Corruption is the replacement of professional ethical values with criminal, antisocial and immoral norms (Golik Yu.V., 2005). Thus, corruption poses a threat to society and the state. However, corruption should not be seen as a symptom of poor or incompetent governance. Because the interests in each society are different. As long as there is a conflict of interest in a society, there will always be corruption. Since the regulation of the interests of individuals, the state and society is carried out through state bodies, the elimination and fight against corruption becomes one of the main goals of the state. In accordance with these conventions and other international legal acts, laws and regulations have been adopted at the national level. Law of the Republic of Azerbaijan "On Combating Corruption" No. 580-IIQ of January 13, 2004, Law of the Republic of Azerbaijan "On approval of the Regulation on the Anti-Corruption Commission of the Republic of Azerbaijan" No. 906-IIQ of May 3, 2005 and amendments thereto December 30, 2008, Law of the Republic of Azerbaijan No. 945-IIQ of June 24, 2005 "On approval of the Rules for submitting financial information by officials" with additions, amendments No. 93-IIIQD of April 7, 2006 and No. 420-IIIQD of October 01, 2007, "National Strategy for Increasing Transparency and Combating Corruption" approved by Presidential Decree No. 2292 of July 28, 2007, "National Action Plan for the Development of Open Government for 2020-2022" reflects the main steps taken in this direction. The strategic course on the application of anti-corruption measures was determined by the Decree of the President of the Republic of Azerbaijan No. 347 of June 8, 2000 "On strengthening the fight against corruption in the Republic of Azerbaijan". The Commission for Combating Corruption of the Republic of Azerbaijan and the Main Directorate for Combating Corruption under the General Prosecutor of the Republic of Azerbaijan act as specialized bodies in the field of combating corruption (21). Despite the adopted laws and the established institutional foundations in recent years, statements about anti-corruption measures in Azerbaijan are often observed in the speeches of President I. Aliyev. Society and entrepreneurs are actively involved in preventing corruption. Therefore, research to improve the mechanisms of anti-corruption regulation of interaction between public service and entrepreneurship is relevant.

2. ANTI-CORRUPTION MEASURES AND BOUNDARIES OF THE PARTICIPATION OF PUBLIC OFFICERS IN THE REGULATION OF ENTREPRENEURSHIP

The existence of corruption and the fight against it stem from its functional nature and can be large-scale in terms of "time-space". The fact that corruption is not eradicated increases the likelihood of its existence in public administration, state and municipal systems (Minakov P.A., 2007). Thus, in accordance with the legislation "Corruption is illegal receipt by officials of material and other benefits, benefits or privileges using their status, the status of the body they represent, official powers or opportunities arising from this status and powers, as well as attraction by physical and legal persons of these officials to their side by illegal offer or promise, or transfer of the marked material and other benefits, benefits or privileges to them" (1; Article 1.). This definition makes it possible to explain the meaning of corruption as an abuse of power and harm to the interests of the state and society for the sake of one's own interests. Corruption offenses include direct corruption offenses and offenses that create conditions for corruption.

Anti-corruption measures in the civil service can be divided into two main groups:
1) Measures to combat external manifestations of corruption. This is expressed in specific corruption offenses, that is, official receipt, extortion or bribe-giving.
2) Measures to combat institutional conditions that can lead to corruption in the public service, i.e. offenses that create conditions for corruption.

From a legal point of view, corruption in the public service is confirmed by the presence of specific crimes provided for by criminal law.

In the thirty-third chapter of the Criminal Code of the Republic of Azerbaijan, crimes of corruption and crimes against the interests of the service are:

- abuse of power (Article 308);
- the use of state budget funds, targeted budget funds or extra-budgetary state funds for other purposes (Article 308-1)
- illegal conduct of public procurement or spending of public funds without conducting procurement procedures (Article 308-2)
- exceeding official powers (Article 309);
- appropriation of official powers (Article 310);
- bribery (passive bribery) (Article 311);
- bribery (active bribery) (Article 312);
- illegal influence on the decision of an official (trade in power) (Article 312-1.);
- fraud with official position (Article 313);
- negligence (Article 314.);
- illegal decision-making on a land plot in exclusive state ownership (Article 314-1);
- the allocation of land or permission to carry out construction and installation work in violation of the rules established by law (Article 314-2);
- failure to prevent construction work carried out in violation of the rules established by law (Article 314-3).

However, different anti-corruption measures related to the business activities of officials are specified in different laws. Mainly:

1) Permission of civil servants to engage in entrepreneurial activities. According to the law, a civil servant cannot engage in any other activity, except for scientific and creative activities (2; Article 20.1.2). Also, in order to obtain material and other benefits, benefits or privileges, to provide individuals and legal entities with the use of their status, the status of the body (institution) represented by them, official powers or opportunities arising from this status and powers, illegal assistance in the implementation of entrepreneurial activities, and also in obtaining subsidies, subventions, grants, loans and other benefits, is an offense that creates conditions for corruption (1; Article 9.3.2). To engage in entrepreneurial activity directly, or through other or fictitious persons, to work part-time (except for scientific, pedagogical and creative activities), as well as members of the executive bodies of economic entities and financial and credit organizations engaged in entrepreneurial activity, is an offense that creates conditions for corruption (1; Article 9.3.3.).

2) Receiving illegal financial rewards or benefits from individuals and legal entities as a result of providing them with any assistance using their official powers. In order to avoid such cases, "an official may not demand or accept gifts as a reward or that give the impression of such an award for himself or others, which may affect the impartial performance of official duties or which give the impression of such influence" (1; Article 8.1) For this reason, for example, it is a corruption offense to demand, receive material and other benefits, privileges or concessions directly or indirectly for oneself or third parties in exchange for actions or omissions in connection with the performance of their official duties or powers (1; Article 9.2.1.). Also, the Decree of the President of the Republic of Azerbaijan No. 103 of June 22, 2009 "On strengthening the fight against corruption offenses in the management of state and municipal property" expanded anti-corruption measures in this area.

3) Participation of a civil servant in the management of joint stock companies, limited liability companies and other business entities, directly or through a representative. The realization of the interests of joint stock companies, limited liability companies and other similar

organizations by the civil servant himself or through a representative (relative, acquaintance, friend, etc.) leads to corruption. From the experience of recent years, it can be seen that officials own large shares of joint-stock companies and become owners of enterprises and organizations existing in commercial and entrepreneurial structures (Voronin Yu.A., 2006). According to the law, these actions are considered offenses for officials (1; Article 9.3.3).

One of the main problems is the legalization of illegal funds received in the service after dismissal from public service. One of the important anti-corruption mechanisms is the control of internal and external financial accounts of employees, even after leaving the civil service. In self-defense, officials use their relatives and representatives to hide their assets and property. In accordance with Article 3. of the Law of the Republic of Azerbaijan No. 767-IIIQ of February 10, 2009 "On Combating Money Laundering and Financing of Terrorism" measures against money laundering and terrorist financing are:
- monitoring;
- development and implementation of an internal control system by monitoring participants and other persons participating in monitoring;
- prohibition on informing the client or other persons about the measures taken against the legalization of money or other property obtained by criminal means and the financing of terrorism;
- ther measures stipulated by the laws of the Republic of Azerbaijan and international agreements to which the Republic of Azerbaijan is a party.

Currently, in accordance with the law, officials must provide the following information (1; Article 5.):
- about their income every year, indicating the source, type and amount;
- on property that is subject to taxation;
- on deposits, securities and other financial resources in credit institutions;
- on participation in the activities of companies, foundations and other economic entities as a shareholder or founder;
- on a debt exceeding five thousand five hundred manats;
- for other financial and property obligations over 1,100 manats;
- Require officials to provide information on their income annually indicating the source, type and amount from officials only in accordance with the procedure established by law.

As you can see, in case of violation, both laws allow investigating the current financial situation of officials and the use of funds that they earned in the past. Failure to provide information about your income for unjustified reasons or deliberately submitting incomplete or distorted information may result in disciplinary action against such persons. Persons against whom special disciplinary measures are applied in accordance with the Constitution and laws of the Republic of Azerbaijan may be brought to disciplinary responsibility in accordance with these rules, and the Commission for Combating Corruption of the Republic of Azerbaijan may publish information in the official state newspaper about persons who do not comply with these requirements. The main problem is that civil servants use contacts and acquaintances obtained as a result of their work in previous state bodies in their own interests, moving into commercial structures. This manifests itself as a form of corruption, that is, a form of corruption using personal contacts after being dismissed from public service. Legislative gaps and personal ties allow this form of corruption to spread across different levels of government. The experience of the People's Republic of China in overcoming this situation is interesting.

In this country, the activities of a civil servant, even after being dismissed from the civil service, are under control. Another problem is the protection of trade secrets. This problem is both state and official. In accordance with the legislation, "State secrets are confidential, professional, commercial, investigative and judicial secrets of a profession (for example, a doctor, lawyer, notary), the use of which is limited in order to protect the legitimate interests of citizens, departments, enterprises and organizations, and other legal entities, regardless of the type of property "(4; Article 34.4.). Personal data by type of access are divided into confidential and open categories. One of the limitations of information considered intended for official use is" facts of violation of the law by state bodies and their officials "(4; Article 37.1.9) According to the law, a civil servant is not entitled to use information obtained in the course of his official activities for personal purposes (3; Article 17.3). The imperfection of the control system leads to an increase in corruption and the transfer of state interests through a civil servant to commercial and other spheres. Thus, the corrupt officials, despite the existence of the necessary laws and all the prohibitions, through the transfer of information, try to put pressure on the civil servants who work properly. For this reason, it is indicated (4; article 41.1) that the owner of the information takes administrative and technical measures to protect the information intended for official use. The law also defines the terms for restricting access to information (4; article 40). In accordance with Article 30 of the Law of the Republic of Azerbaijan "On State Secrets", the procedure for liability and settlement of disputes for violation of this legislation has been established. One of the factors contributing to corruption can be the misinterpretation of personal loyalty. In this case, the very appointment based on personal loyalty can lead to deformation of the civil service system, and when recruiting personnel to eliminate corruption, recruitment for vacant administrative positions is carried out on the basis of interviews and competition, while close relatives are prohibited from working together. The civil servant must inform the head of the state body in cases where the transfer to another position may lead to a conflict of interest (3; Article 15.3). After the termination of the civil service, a civil servant cannot be employed in subdivisions, enterprises, organizations or their subdivisions, which he previously supervised during the period established by law. After being fired, he cannot transfer information that he owns to commercial and other structures. In the practice of foreign countries (for example, Russia), if a civil servant is dismissed from the civil service and accepted for a new position within 2 years, he must report the last public position within the first 10 days of work (5). A civil servant should not allow his interests or the interests of interested persons to influence the performance of his official duties and should not create conditions for this (3; Article 11.3). It should be noted that the subject of the conflict can be not only the civil servant himself, but also other relatives who are directly involved in the process (Kodan S.V., 2007). Conflicts of interest can manifest themselves in various forms, such as evading ethical compliance. The legislation does not provide for separate liability for conflicts of interest and liability for corruption as a result of failure to resolve conflicts of interest. Therefore, it is difficult to determine the relationship between corruption and conflicts of interest. In this case, it is necessary to compare three concepts: "corruption", "conflict of interests" and "personal interests of a civil servant", to clarify the essence of each of them in accordance with the law. A situation resulting from a conflict of interest was considered a form of offense. In many cases, there is no need to prove anything when an official (civil servant) is dismissed due to a conflict of interest. In this case, the presence and concealment of a conflict of interest is already assessed as a propensity for corruption. A conflict of interest can inevitably lead to a change in moral values and, therefore, create conditions for a different application, meaning and interpretation of ethical norms by an official. In some cases, self-interest, lying and withholding information can become the behavior of a government official exposed to a conflict of interest, and can change for the worse, affecting professional behavior.

This reduces responsibility and compliance with the law, which does not allow promoting the model of civil service, called elementary law enforcement (Kabashov S. Yu., 2013). In the event of a conflict of interest, a civil servant either deliberately fails to perform the necessary actions provided for by law, or experiences difficulties in objectively fulfilling his duties. Thus, the purpose of preventive measures against the activities of a civil servant that may lead to corruption is not only to indicate the reasons that have a real negative impact on the work of a civil servant (for example, the influence of personal interests), but also to prevent this impact. In cases where a contradiction may arise between the official duties of a civil servant and his personal interests, the civil servant is obliged to provide information on the nature of these interests (3; Article 15.2). Currently, a draft law "On the prevention of conflicts of interest in the activities of officials" has been prepared. The draft law addresses issues related to the prevention and elimination of conflicts of interest in the activities of civil servants and other officials, as well as restrictions imposed on officials in order to prevent conflicts of interest during their tenure.

3. EFFICIENCY OF PERFORMANCE OF CONTROL FUNCTIONS OF THE PUBLIC SERVICE SYSTEM IN THE REGULATION OF ENTREPRENEURSHIP

In addition to gaps in legislation, the complexity of the application of legal norms in practice leads to corruption (Talapina E.V., 2006). Imperfections in legal norms are divided into 4 groups:

1) In procedures for the implementation of legal norms, for example, when paying fines, when a citizen has to spend a very large amount of money, which can lead to giving a bribe to be exempted from paying this amount. In order to prevent this from happening in Azerbaijan, as well as to reduce direct contact between officials and citizens, the procedure for the implementation of legal norms is organized according to the principle of a "single window".

2) A large number of checks allows the official to conclude a deal with the person being checked. In order to prevent such a situation in Azerbaijan and eliminate unreasonable checks, the President of the Republic of Azerbaijan adopted Decrees "On prevention of interference that hinder the development of entrepreneurship", "On measures to ensure the organization of activities of business entities on the principle of a single window."

3) Legal norms allow an official to choose different options for behavior based on his own opinion, and the fact that the law does not always indicate how an official should behave in certain circumstances allows an official to behave differently, increasing his tendency to corruption.

4) Legal norms empower an official or government body to develop and adopt regulations, which does not always mean that these regulations will contain anti-corruption measures. The factors that determine corruption are usually bureaucratic, and an official, having significantly increased the level of application and regulation of legal norms, as well as misinterpreting their application, can create conditions for corruption (Romanov V.L., 2008). In recent years, Azerbaijan has seen an increase in the number of anti-corruption measures and an increase in public and state control in this area. This can be seen from the data in the following Chart 1.

Chart following on the next page
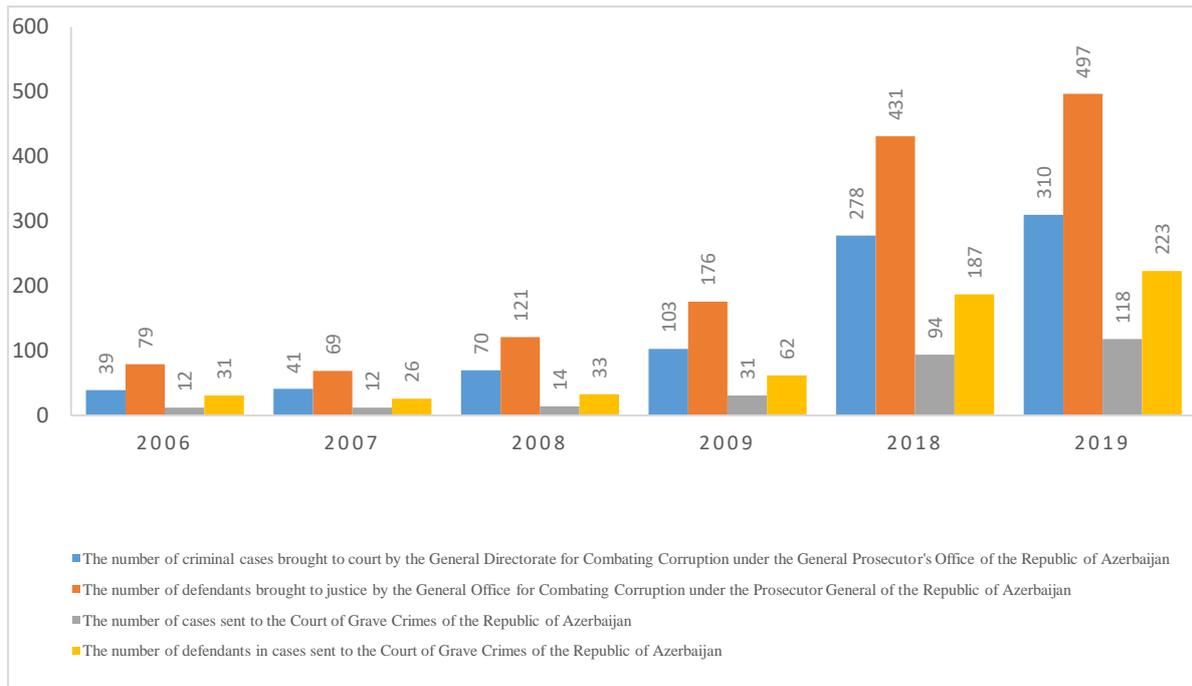
Chart 1: Measures taken by the Main Department for Combating Corruption under the General Prosecutor's Office of the Republic of Azerbaijan

The analysis shows that, compared to 2006, in 2019, the number of criminal cases referred to courts increased by 7.9 times, and the number of cases referred to the Grave Crimes Court of the Republic of Azerbaijan increased by 9.8 times. The number of accused persons increased by 6.3 and 7.2 times, respectively. This directly reflects the increased transparency in this process. In 2019, effective business cooperation was intensified between the Main Directorate and the Ministry of Labor and Social Protection, the Ministry of Economy, the State Customs Committee and the Food Safety Agency. This, in turn, has a preventive value for detecting corruption and other offenses in these areas. In 2019, the General Directorate for Combating Corruption under the General Prosecutor's Office of the Republic of Azerbaijan conducted an investigation based on 32 materials received from the Ministry of Labor and Social Protection, 25 materials from the Food Safety Agency, 21 materials from the Ministry of Economy, 7 materials from the State Customs Committee. Criminal cases have been initiated on a number of these materials. Based on these materials, 59 cases of embezzlement and embezzlement with the use of official positions were initiated against 101 people, 55 cases for fraud with the use of official position against 69 people, 18 cases of abuse of office against 36 people, 20 cases for bribery (passive bribery) against 52 people, 43 cases for bribery (active bribery) and incitement to personal bribery against 68 people, the rest of the cases were related to other corruption crimes (8). The results of the anti-corruption reforms carried out in our country in 2019 are reflected in the annual reports prepared by Transparency International. The report, published at the end of 2019, notes that Azerbaijan has improved its position by 26 points in the Corruption Perceptions Index compared to 2018. As a result of the widespread application of modern world experience and reforms in the management system, including the tax and customs system, they have significantly increased state budget revenues. An increase in the number of ASAN service centers (State Agency of Azerbaijan for the provision of services to citizens and social innovations under the President of the Republic of Azerbaijan) to 17, created to provide public and private services in a single space in accordance with the principles of efficiency, transparency, politeness and responsibility, is an example of anti-corruption measures. Since its inception, "ASAN service" centers, and this is a short period of time, received more than 35 million applications.

Also, the launch of DOST centers (Sustainable and Operational Social Security Agency) as a unique project that allows 132 services in the field of employment, labor, social protection and security through a "one-stop shop" is a clear example of achievements in the fight against corruption in our country (Ilham Aliyev, 2020). Services provided by central and local executive authorities, state and state-controlled legal entities, public legal entities established on behalf of the state, and budgetary organizations are assessed based on the "ASAN service" index. During 2019-2020, the State Agency assessed a total of 554 services, including 270 services from 25 central executive authorities, 229 services from 13 local executive authorities in Baku and 55 services from 4 legal entities providing public services. According to the rating table for 2020, among 554 services "Electronic state registration of a limited liability company with local investments", the service of the Ministry of Economy, which contributes to the development of entrepreneurship, is in 14th place, and the service "Electronic payments and VAT refunds" through a single deposit account " is in 27th place, "Online monitoring of the execution of appeals, inquiries and letters sent to the Ministry of Taxes and Tax Collection by applicants" - in 28th place. Of the 990 services provided on the portal of public services (https://www.dxr.az/tesnifatlar # 0), 62 services are related to entrepreneurship and entrepreneurial activity, 160 services for taxes, 6 services for customs, 31 services for state regulation and control, the rest of electronic services also serve the development of entrepreneurial activity. Analysis of legislation shows that measures are constantly being taken to create a favorable environment for entrepreneurship. "The main part of the reforms carried out in the country is aimed at improving the business environment and developing entrepreneurship. Thus, the suspension of inspections in the field of entrepreneurship for a period of 2 years (extended until January 1, 2022), a reduction in the number of licenses and simplification of the procedure for issuing permits for entrepreneurial activities, the amount of fees paid, continued work on the creation of an electronic portal in this area, the creation of appeal boards on the protection of the rights of entrepreneurs, the application of the principle of a "single window" in the transportation of transit goods through the territory of the country, tax and customs privileges for 7 years to increase investment in the country, further expansion of e-customs services in order to simplify customs procedures in export-import operations, used Green Corridor "to minimize the number of required documents and procedures when crossing the customs border of goods and vehicles, establish other pass systems from international practice, improve public procurement procedures, create call centers in government agencies that respond to requests from entrepreneurs, provide information and consulting services, and other procedures have been implemented "(Ilham Aliyev, 2020). Over the past few years, the government has taken important steps to protect the rights of entrepreneurs and ensure transparency, and prevent unjustified government interference in business activities. Thus, in accordance with the Law of the Republic of Azerbaijan dated October 20, 2015 "On the suspension of inspections in the field of entrepreneurship", inspections in the field of entrepreneurship in the territory of the Republic of Azerbaijan (subject to exceptions) were suspended from November 1, 2015 to January 1, 2022. months after the entry into force of this Law, 640 inspections were carried out in business entities, without tax inspections. For comparison: 38 months before the suspension of inspections, more than 185,000 inspections were carried out, excluding tax inspections" (9). In his closing speech at the meeting following the results of 2019, President Ilham Aliyev said: "Great opportunities have been created for entrepreneurs. Therefore, we demand from entrepreneurs that they be honest, work cleanly, do not go astray, and do not hide taxes. If someone unreasonably demands something from you, immediately report it to the Presidential Administration, the Cabinet of Ministers, central executive bodies" (Ilham Aliyev, 2020). As a result of economic reforms and anti-corruption measures, the number of business entities in Azerbaijan is increasing every year, and this can be seen from the data in Table 1.

Years	GDP, million manats	Share of the private sector in GDP ,%	Investment in the economy, million manats	Total value added, million manats	The number of Entrep-reneurial entities	The number of created entrep-reneurial entities	The number of liquidated entrepreneurial entities	State budget revenues, in fact, million manats	State budget expenditures, in fact, million manats
2005	12522.5	77.8	6 733.4	11,576.0	270266	31172	180	2055.2	2140.7
2010	42465.0	81,7	14118.9	39 588.5	389048	38084	5818	11403.0	11765.9
2015	54380.0	81.2	20057.4	49521.0	661332	76681	16490	17498.0	17784.5
2016	60425.2	83.7	22706.4	55,503.7	777534	145485	33667	17505.7	17751.3
2017	70337.8	83.8	24462.5	65333.4	896641	148499	33809	16516.7	17594.5
2018	80092.0	84.7	25877, 0	73 893.7	955978	84378	30041	22508.9	22731.6
2019	81896.2	85.0	24986.6	74 562.8	1002282	103949	30483	24398.5	24425.9

Table 1: Mutual analysis of business activity and economic indicators
(Source: https://www.stat.gov.az/source; 04/12/202)

Analysis of the data in the table shows that over 14 years the volume of GDP increased 6.5 times, the volume of investments in the economy increased 3.7 times, the total value added increased 6.4 times, the number of business entities increased 3.7 times, and the number of newly created enterprises 3.3 times, the state budget revenues increased 11.9 times. The number of liquidated enterprises is 3.4 times less than the number of newly opened ones. This once again reflects the positive dynamics of entrepreneurship development and is the result of anti-corruption processes in the country.

4. CONCLUSION
The fight against corruption has intensified in recent years. Basically, measures are aimed at eliminating the causes of corruption, which are of a preventive nature, and help to more radically eliminate the problem. We consider it necessary to take measures to:
1) Ensuring clear legal regulation of the activities and powers of the state body and civil servant;
2) Restricting the rights of officials and the conditions under which they can make free decisions;
3) Improving the requirements for high moral and professional qualities in the public service;
4) Increasing the salaries of civil servants and keeping them from corruption. Wages should be higher in areas where there is a risk of corruption, and the loss of a civil servant upon dismissal should be higher than income from bribes;
5) Improving the methods of submitting declarations for property and income of all civil servants, without exception, etc.

The main state measures to improve anti-corruption legislation should be:
- Anti-corruption expertise of legal acts and projects, approval of the law on the issue of conflict of interest;
- Increase the intensity of competitions and interviews for all positions to ensure transparency and objectivity in the selection of civil servants;
- Development of institutions for monitoring the implementation of anti-corruption legislation (non-state and state), etc.

Thus, anti-corruption legislation should exist as a single system and measures of financial control, against cases of violation of ethical legislation should be improved.

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THE EXPERIENCE OF APPLICATION OF EFFECTIVE MODELS OF SCIENCE-EDUCATION-BUSINESS COOPERATION IN MODERN TIME

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ABSTRACT

The article is devoted to the study of the experience of applying modern effective models of science-business cooperation. Realization of science-education-business cooperation through different sources leads to weakening of the links between the components of "fundamental research application, research-industry production" cycle. As a result, the speed of development of the research sector lags behind the speed of development of the country's economy and doesn't meet the needs of entrepreneurship for new technologies. Integration processes in science, education and business are conditioned by the acceleration of scientific-technological progress under modern conditions, the application of innovative scientific developments in mass production and the informatization of the economy. The development of science-based industries places new demands on the training and re-training of innovative responsive personnel, as well as on science, education and business in a complex that cannot develop independently and adapt to changes in technology and equipment. All these issues have determined the timeliness of this study. Socio-economic analysis, generalization and economic-statistical methods were used in the research process. The article identifies the main priorities of high-tech development, the main directions of state policy in Azerbaijan in this direction and the importance to form a more productive architecture of scientific-education-business cooperation. The article also reveals the modern requirements and shortcomings of integration processes in science, education and business, explores the principles of the national strategy of scientific development and modern international models of scientific and business cooperation, and makes relevant proposals for their application in Azerbaijan.
Keywords: scientific-business cooperation, education policy, integration processes, model

1. INTRODUCTION

One of the modern challenge of 21st century is making the scientific potential to become the main sources of the stable economic development, to make industrial knowledge and innovations to become new products and technologies and also strengthen science-business collaboration. In his context, a program document «Strategic Road Map for the national economic prospects of the Republic of Azerbaijan» [1] which directed to renewal of national economy structure, aimed to determine the new vanguard sectors provided the stable development of the country's economy, processing comparatively to production, sectors based on high technology in comparison to non-technological sectors, development of private entrepreneurship and other essential components in relation to state entrepreneurship. The Strategic Road Map taking the global and regional priority and the available source of the state economy aimed to form an inclusive economy based on high technology covering the short-term - until 2020, medium-term - until 2025 and long-term - after 2025 according to 12 strategic roadmaps of 11 leading sectors. Main priorities of high-tech development should be directed to a new stage of the innovation society - formation of an economy which based on the generation, dissemination and using of knowledge. The basis of the technology development is formed, by transformation of innovation and scientific results, into the new products, unique habits and abilities and application them to the constantly variable activity fields.

Applying Investment resources into the intellectual activity becomes the most efficient way of utilizing them. Intensification of production and using of the results of scientific and technical progress lead to a sharp shortening of the innovation cycle and renewal of the technological innovation rate. State policy implemented in Azerbaijan in recent years, including the State Strategy for the Development of Education, the State Program for Industrial Development for 2015-2020, the creation of innovative structures such as technoparks, industrial parks, industrial districts for the development of small and medium businesses, etc. In order to achieve technological progress, studying the best practices of countries that have already passed this stage it would be advisable to form a more productive architecture of scientific-educational-business cooperation directed to state policy and management.

2. THE MAIN PRIORITY OF THE HIGH TECHNOLOGI ACCORDING TO THE MAIN DIRECTION OF THE STATE POLITICS IN AZERBAIJAN

Implementation of scientific-educational-business cooperation from various sources leads to a weaken of the links between the components of the cycle of «fundamental research-application, research-industrial production». As a result, the development rate of the research sector falls behind from the rate of development of the country's economy and do not meet the requirements of entrepreneurship to new technologies. Integration processes in science, education and business are settled by the acceleration of scientific and technological progress in modern conditions, the application of innovative scientific developments in mass production and the iinformationization of the economy. Development of science-intensive industries made new demands on the field of education and business of the training and retraining of innovative sensitive personnel, as well as the science, education and business in a complex that can't develop independently and adapt changes in the technology and engineering. Insufficient funding of science and education by the state and their weak integration with the production do not satisfy the requirements of innovative development of the economy and the balance graduate's specialists of higher educational institutions are not ensured the balance of specialists demanded in national economy. Thus, according to statistics, about 75% of graduates of Azerbaijani universities can't find a job in their specialty. It's obviously seen that in term of science and practitioners we need the formation of the innovative education which is based on integrated mutual development of education, science and production system. Simultaneously, education is accepted as a main chain of the integration processes at the state level. In this regard, universities must be the central chain of the integration processes of science, education and production. At present, Azerbaijani universities are entering a new stage of development, gaining the status of the National Innovative University or Republic University which is named the second model of academic knowledge. Characteristic features of this model: the aspect of knowledge application, innovation centers, technoparks, business incubator, including small innovative enterprises creating innovation infrastructure, beginning from the coordination of the educational plans mutual cooperation with the trainee, social responsibility for the information produced. Modern universities are cooperating more actively with scientific institutes and centers, creating joint application efforts of scientific laboratories, research institutes to solve new global problems, creating innovative application companies. Within the framework of establishing innovative-applied firms, universities and scientific organizations have the opportunity not only to develop the material and technical base, but also to accelerate the commercialization of scientific developments, to train highly active specialists who are scientifically active and innovative. Significant impetus to the integration of science, education and business efforts is provided by state support. The «State Strategy for the Development of Education in the Republic of Azerbaijan» [4] approved by the Decree of the President of the Republic of Azerbaijan No. 13 dated October 24, 2013 aims to update the structure and content of education, as well as to develop fundamentalism and practical orientation of curricula and

programs, strengthen the durability educational system. This strategy provides the following as a priority: integrated scientific-educational, applying experienced models of enterprises; formation of national universities, which are considered as centers of integration in order to increase the efficiency of the use of intellectual potential, which still has a place in the modern higher education system. The «State Program on Increasing the International Competitiveness of the Higher Education System in the Republic of Azerbaijan for 2019-2023» approved by the Decree of the President of the Republic of Azerbaijan dated November 16, 2018 [5] is a continuation of purposeful steps taken in this direction.

3. THE NECESSITU OF FORMALIZATION MORE PTODUCTIVE ARCHITECTURE OF THE SCIENCE-E DUCATION-BUSINESS COLLOBARATION

In the context of the challenges of the modern world, it would be better to utilize the advanced practices of technologically development countries, on preparing a new architecture for focused scientific, educational and business relations. From this view of point, the reforms are implemented in France for last years also typical for Azerbaijan. Thus, there have notable similarities both in the institutional organization and functional forms of science, also in the style of public management. Far from it, there have multipolarity in science policy and management in Azerbaijan. The university science from the Ministry of Education, institutes of the Academy of Sciences from the Presidium of the Academy of Sciences, corporate science from relevant ministries and companies, science under the principals of the project funding from the State Science Fund, and admission to higher and secondary schools are realized by the State Examination Center. Certainly, multipolarity in the management of scientific-higher education relations can be unexpectedly which aims to integrate into the European higher education area. In 2013, a new on higher education and science was adopted in France to increase the efficiency of the conductor system for managing scientific development, which was formed in the 50s and 60s of the last century. Relevant governing bodies and programs for the realization of higher education strategies based on the principles of the law formed - «New National Research Strategy», «France-Europe 2020», «National Strategy for Higher Education», «New Industrial France», «Innovation Tax Incentive System». For the realization of the strategies were prepared the main directions, work plans, monitoring and evaluation methods by these organs. For the first time in the history of France on the law statement named "Higher education and Science" covering both of the development issues both of the two system drew the followings into the front: enlarging and diversifying the collaborations between the science and education communities, increasing the quality of the scientific research, the tasks of the transformation the results of the researches to the workplace. In France, the coordination of science and education policy began to be carried out by the Ministry of National Education, Higher Education and Science. For carrying out driver function between the other ministries and interesting subjects who attended at the development of scientific-innovation was entrusted to the Head office of Science and Innovations of Ministry. Funding of the scientific researches were entrusted to the Inter-Ministerial Mission for Science and Higher Education. The accuration services of the quality and effectiveness of the scientific research and higher education carrying out by the Higher Council for Scientific Research and Higher Education Evaluation created condition for the raising the ability of competitiveness of science and education. Another efficient mean of the funding research in France is the State Investment Bank for projects financing. Industrial development programs and transfer projects of the innovative technology are financed by this bank. The bank has capital of 21 milliard euros and branches in 42 regions of France. The world's innovative leaders prefer the trend which is focused on the directs results of the fundamental scientific researches in Germany, Great Britain and Japan. In this countries were prepared a new structure of the state support for the science, establishing the mechanism of the diversifying of the financial resources of the scientific

development and also applied constantly system for development of the tax incentives for the institution which invest capital for the science. For this puporse additional benefits are widely utilized on the field such as bank loans and state subsidies together with the tax credit, special taxation regime for the profit which is getting from the innovation grants and intellectual property and so on. European experience shows that the operator function of science-education-business programs can be entrusted to some organization at the same time. For instance, the program operator function on the field of the higher education and scientific researchers can carry out by the Ministry of Education and the Academy of Sciences, the field of ecology and energy by the Ministries of Ecology and Energy, for the industrial clusters Ministry of Economy and other relevant investment bank.

4. THE PRINCIPLES OF THE SCIENTIFIC GROWTH AND ITS INTEGRATION PROCESSES WITH THE BUSINESS

In order to make this kind of reforms efficient in Azerbaijan, it would be advisable to build the scientific development of the national strategy on the following principles:

- to direct scientific research to the global and local challenges which are faced by modern society, , to convert these challenges into specific goals of the state science policy, to determine and support the priority fields of national science and technology development on based of public-business partnership;
- to create proper conditions and incentives for the sustainable development of scientific research
- to strengthen public-business partnership, to support entrepreneurship and high-tech small companies, to stimulate the attraction of foreign direct investment in research;
- to ensure the production of knowledge based on the development and international clearness of the components of the science-business partnership system and to increase the attractiveness of the national education ecosystem.

These principles are influenced one way or another in the State Strategy for the Development of Education. By implementing institutional and structural reforms which can ensure to realize the science-business partnership system from a single center, it is possible to further increase the effectiveness of application mechanisms based on these principles. In other words, it would be beneficial to alter the existing model of multipolar management with more efficient and more flexible methods of influence in order to ensure the self-sufficiency and self-organization of the science-higher education-business ecosystem. State Strategy for the Development of Education in Azerbaijan collectivized with the principles of development of science-education-business relations. This strategy is aimed at integration into the European educational space based on improving the quality of education and recognition of its results. Application of public administration models in different areas of the strategy and the tradition of participation of public institutions serve to ensure the lucidity, simplicity and investment attractiveness of the education system. Most principles of the national education strategy - lucidity of the higher education system to all over the world, distribution of the higher education institutions in terms of territory, participation of all partners who are interested in the development of higher education in the coordination process, sufficient resources for development, and so on are in a line with the principles of the European model.

5. CONTEMPORARY INTERNATIONAL MODELS OF THE COLLOBARATION SCIENCE – BUISNESS AND THE TASKS OF APPLYING THEM IN AZERBAIJAN

Further branching of the multilevel education system for the European educational field is characterized by the training of specialists at the bachelor's, bachelor's, master's and research master's levels.

Horizon 2020, Erasmus Mundus, Erasmus Plus Projects and Tuning methodology are very essential tools on studying and application of the European experience. At present, the Tuning methodology plays an important role on compiling educational programs and plans in the 28th of European countries. In according with this, Firstly the conjuncture of the labour market is studied, then with the help of survey among the specialists of the proper fields of economy, priority specialties, general and specific competencies relevant with them, determines educational demands which require relevant competencies, establishing correlation connects between the competencies and subject modules and their distribution among the subjects based on the module principles of credits. In connection with the improvement of the scientific-educational relations, the most urgent issues is to simplify the exam and the reducing of the restrictions on admission master degree. Today's master is tomorrow's doctorant, teacher of the university, researcher, production manager. For the last years, some universities use of full-time education without making any relevant changes in curriculum and study programs, thus it leads to a sharp decline in the quality of the master degree. Giving the right to defer military service to students who admitted master degree as a clear example of that how we appreciate the importance of master degree quality in the formation of the country's scientific and educational potential. Main problems of scientific research, as being in the technologically developed countries, must be focused on the challenges which are important for economic growth. Today, the basis of national science formed in the state-funded scientific-research of universities, departments, scientific-research laboratories, institutes of the Academy of Sciences and scientific institutions of line ministries. The research areas of these institutions are mainly aimed at solving problems that are specific to the post-Soviet space, directly departments, institute and scientific schools of private scientists, that are not having in common with the local and global challenges of modern times, not responding of the demand of entrepreneurs. Innovative institutions with special status, such as techno parks, start-ups, and master centers, aimed at accelerating the commercialization of new technologies and research results should be widely used in universities and research institutions. For identification of common interests between science and industry, raising the level of education and improving of the staff of technological enterprises and other relevant issues can be solved in this type of innovative platforms.

6. CONCLUSION

Purposeful policy is being carried out to ensure the political, economic, social independence and territorial integrity of Azerbaijan, as well as its technological independence. The tasks set by the President to ensure the technological development of the country - the transformation of scientific potential into the main resources of sustainable economic development, the transformation of productive knowledge into necessary products and innovations, the pace of development of science and innovation sector and the needs of entrepreneurship in new technologies The quality and timeliness of the implementation of strategically important tasks, such as coordination, further highlights the importance of the implementation of scientific-educational-business partnership from a single center and with high professionalism. We consider that the leaders of the unniversities must be more innovative. It's impossible to describe the future of the universities without the educational-scientific-business triangle and the diplom of such universities will be unsufficient for the labout market. without There is no future development of the university For ou. We think that, there will be formed material and technical basis, co-ordinated with the profile of the universities. Universities had to put all the means which is gaining from the education and budget to the future, but not for the aesthetic view of the universities building. However, it's not too late yet. The experts who are indicated the importance between the higher educational institutions and the business world , also noticed the essential of developing innovation and enterpreneurship in cooperation with industry and

business, also emphasized necesseraies development of the culture of innovation and entrepreneurship. If the reforms are carried out in all directions correctly, the result will be optimistic.

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SAVING THE WORLD THROUGH TECHNOLOGY: THE ASPECT OF E-LEARNING IN EDUCATION

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ABSTRACT

Introduction and purpose of the study - Our present world is characterized by the empowering revolution of technology. The dominance of IT in 21st Century is eminent. Humans exposed to external threats like the Covid-19 pandemic are made to rely on technology than ever before. While our developed systems are disturbed in the wake of this crisis, emphasis is made on the reliance of technological power than on human capacity. This research aims to undercover how major sectors like education are hinging their activities on technology. E-learning is fighting the odds in the time of distrust and uncertainty. The research strategies used are: 1) a quantitative analysis of affected students (internationally), 2) studies published on the role of technology in education and crisis management. Data has been collected first-handedly by surveying student responses and supporting secondary sources. The findings support our given stance on technology's savior role in current times. It is evidenced that the majority of higher educational institutions are going by e-learning methods. There are implications on the quality and means to this approach, to be dealt with in futurist stages of advancement. This research work is formulated on the basis of secondary sources. It includes academic literature, scientific published articles covering global aspects of the pandemic and role of technology. Some primary information regarding the international students has been collected at the initial stage of research. Used sources includes materials of scientific-practical conferences and business forums, expert analyses, documents of international organizations, as well as of business associations specialized also in scientific research. Methods include rational reasoning based on the analysis of relevant subject and of statistical data, analysis of COVID-19 reports and data that is publicly available on the websites of different global forums. The concluding discussion and implications can be, principally of interest to readers of education technology. Also, the content gives a direction to the future of e-learning and present state of academic. The paper discusses how educationists and investors are corresponding to crisis management.
Keywords: Technology, Education, e-learning, Crisis Management, Covid-19, Pandemic

1. INTRODUCTION

As water is to life, technology has become a vital sign for the 21st century human race. The information technology revolution has changed people's control of life; the way they work, communicate, and progress. Tech is ingrained into our soci0-economic and political roots now. Organizations have transitioned to a technological way of doing their routine operations, and seek more investments in IT rather than physical assets. Even in the time of novel risks like the ongoing COVID pandemic they look up to the technology as a crisis management tool. Education is the code of life, and with changing times it needs constant renewal to keep us on the fast track. Necessarily it is demanded of academia to be highly up-to-date with current trends and practices; technology is an irreversible trend of our present century. With the onset of 21st century, academia was already challenged to integrate digital skills in the traditional pedagogies. However, the emergence of COVID-19 has left the academic sector with no option at hand expect adoption of e-learning. This novel pandemic has changed our education process for an indefinite future; across the globe 93 percent institutions remain shut. ICT is the only resort to the crisis management of all educational endeavors.

Despite the implementation hurdles and new-born platforms, e-learning has taken the market with a swamp. This research objectifies how technology is rescuing our timeworn tutoring system.

2. PREVALENCE OF IT IN THE 21ST CENTURY

Throughout the past, advancements have revolutionized the way and means to present living. Over the course of time, we have transitioned from the mechanical to information technology age. 21st Century humans are dominated by the encompassing arch of IT in every sphere of their lives. The interaction between the technology evolution and the economic and societal development has always been an important aspect of human history. Unconditionally, today human functionality is technology centric; from smartphones that make us connect to the jobs that we perform, everything is IT driven. Organization for Economic Co-operation and Development had rightly anticipated in the late 90's an exciting period of technology in the 21st Century. It was not long after, just within the first decade of 2000's there was profound change in political, economic and social structures that created a new paradigm in the world order. Kumar (2008) has noted technology to be an enabler for changing expectations to realities.

The prevalence of IT could be estimated by how technology has enabled:
1) Greater knowledge
2) Communication
3) Economic stability
4) Industrial-efficiency
5) Globalization
6) Life style changes etc.

Most importantly it has enabled greater knowledge i.e. rise of literacy and more means to education. With the availability of vast reading material, literacy rate has amplified from 10 to 80% over the past 50 years. Accessible reading also led to the Reformation in Europe. The most notable break-through in significance to education is the shrinking size of computers (from room size desktop to a palm top) (Pal, 2008). However, the rate of technological impact is determined by the country/society's investment in IT sector.

3. TECHNOLOGY IN THE TIME OF CRISIS

Crisis is an unforeseen risk, like the emergence of a pandemic; we face from situations out of our natural ability to control. Foresight and timely planning could make us ready to embrace challenges if not completely warding it off. Nevertheless, risks can be mitigated by efficient and effective formulation of contingencies. Ironically, 21st Century is a wake to possibilities and unprecedented crisis. Humans of today are living in a fragmented and multi-actor context, where crisis management demands mechanisms for rapid information sharing (Galaz, 2009). History is a witness to the uncontrolled death toll resulting from brutal Pandemics like the outbreak of Plagues, Cholera, Influenza, HIV/AIDS, and now the novel COVID-19. With the advancements in technology, the global crisis management has become more coordinated and monitored with internet-based surveillance systems. Currently, the novel corona virus is the biggest crisis around the globe having been reported in 213 countries. What does technology bring us? 21st century technology has brought *wireless communication* to the forefront. For each and every country exposed to COVID-19, technology is a vital sign; already having a tangible impact on community collectivism, political behavior, and economic sustenance internationally. Nearly all IT enabled sectors are adapting; to minimize the physical proximity, and create a more wireless connectivity. The educational sector is hard-hit worldwide, where distant education has cut all physical ties.

Nonetheless, it is one of the mainstreams that did not get gridlocked in spite of the disaster. All thanks to the timely incorporation of virtual models of education that academia stood its ground in continuation of the teaching-learning activities.

3.1. Academia's Transition to e-Learning

Modern day education is less dependent on paper and more reliant on technology. Digital libraries have taken away the influx of readers to physical libraries. Storage capacity depends on the cloud space than on the stacking shelves. Learning and teaching practices, both have become technology centric. Digital literacy is one of the 21st Century core competencies that developed education systems are based on, while developing economies are geared towards it (Voogt, Erstad, Dede, & Mishra, 2013). In particular, following the rampant spread of COVID pandemic, information technology has impacted on educational practices. Consequently, we have seen an academic shift i.e. e-learning. The following facts and figures endorse the transition to e-learning as a rescue strategy of the academia in response to crisis management:

- Over and above 1.2 billion children are out schools, in 186 countries (WEF)
- Nationwide closure has globally impacted 70% of student population; affecting ~ 2 billion learners (UNESCO)
- Zoom is widely noted to be used by 96% U.S. Universities (US News and World Report)
- EU is coming up with Digital Education Action Plan in mid-2020 for supporting online learning (European Union)

Whether residing in their home countries or being stranded in foreign lands students, e-learning is the one and only identified way out. For instance, Azerbaijan is a hub of multicultural students. It attracts students from more or less 50 countries. Presently, a survey of an international dormitory revealed that the 150-200 students from 35 distinct nationalities were continuing their academic learning activity via e-learning platforms. Clearly the pandemic has disrupted our traditional classroom learning. Owing to a substantial demand, notable online learning platforms are providing an open access to their services/courses (Zoom, Coursera, edX, Moodle etc.). However, education experts maintain that there has already been an increasing trend in adoption of education technology. The global e-learning market is projected to touch $350 Billion by 2025.

4. SUMMARY AND IMPLICATIONS OF INFORMATION TECHNOLOGY ON FUTURE LEARNING

Globally, individuals are living in a time of crisis. Especially with the impulsive outbreak of a pandemic, we know that if we cannot totally abate it we can at least manage it. Research and development indicates that 21st century technology has made equipped us for automation and communication. Cutting out on the need of physical presence in many ways. However, with the unfortunate impact of COVID-19 we all are by force or by will hooked to IT. The first quarter of year 2020 has seen an unexpected shutdown of businesses, borders, essential services and physical spaces. The routine activities which were once normal have now become strange. Our communities have been transformed by technological forces. Nearly every sector of our socio-economic life is affected, and E-Systems are becoming the new normal. Educational institutes are among the badly shook organizations; with this academic shift from traditional classrooms to virtual study rooms. Higher education sector is using this crisis as an opportunity to integrate more digital tools and to best leverage them. In this time of distress, everyone is wondering whether e-learning will remain in focus post-pandemic. For now, ICT's savior role in academic survival is quite evident. This shift is bound to impact the worldwide education market and investments in education technology remain lucrative, given the surge in its usage.

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FACTOR INFLUENCE TO THE LABOR PRODUCTIVITY LEVEL IN AZERBAIJAN REPUBLIC

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ABSTRACT

An increase in labor productivity is a significant factor providing ensuring economic growth of the country. The main research question is: "What factors influencing labor productivity determine the positive development dynamics of the Azerbaijani economy?" This article considers the impact of such factors as the average monthly wage, the percentage employed in industry, in agriculture, forestry and fisheries, in construction, and the mean years of schooling to the labor productivity level in Azerbaijan. The aim of this article is to quantify the influence of the above-mentioned factors to the labor productivity level based on the economic and mathematical modeling. To achieve this goal, the following tasks were completed: (a) theoretical justification and identification of significant factors influencing the productivity level in the economy of Azerbaijan; (b) the statistical analysis of labor productivity indicatior for the period 2015-2019 and (c) creating the correlation-regression model based on selected factors. The analysis of the labour productivity dynamics for the period of 2015-2019 in the sectoral context is presented. Modeling of factors' influence is performed by means of regression analysis. The methodology employed are disclosed with the scientific deduction, that allowed to identify the key factors influencing productivity dynamics; the analysis of statistical data for productivity level in Azerbaijan for the period 2015-2019, and economic and mathematical modeling in the form of regression analysis. Results obtained demonstrate the significant influence of such factors as the average monthly wage, the percentage employed in industry, the percentage employed in agriculture, forestry and fisheries, the percentage employed in construction, and the mean years of schooling to the labor productivity level in Azerbaijan. The most influential are the average wage level and employment in the primary sectors. It is proved that the productivity defines the developmental vector for Azerbaijani economy and its economic growth.
Keywords: educational level, employment, labor productivity, wage level

1. INTRODUCTION

The economy of Azerbaijan has been gradually developing over the recent years, and can be referred to as the transition period economy. Like other national economies of the post-Soviet era, it is facing challenges related to economic growth. To ensure economic growth, an increase in the productivity of the national economy is required. Therefore, the study of the determinants contributing to the increase productivity in the labor sector, is essential for the development of the economy. Increasing productivity depends on many factors. From experience, it is clear that differences in the dynamics related to increasing productivity, are explained by different socio-economic circumstances. In particular, such factors as the level of education reached [8], to which degree scientific research and innovation are being implemented, [11] and the amount of remuneration as a motivational component at any workplace [4,7] are fundamental in determining the level of productivity, and consequently, the rate at which economic growth takes place in different countries. The study of all the above determinants and their influences, quantitative and qualitative, inspired the topic of this study. The purpose of the article is economic and mathematical modeling of the factor influence on the change in labor productivity in the economy of Azerbaijan.

In order to achieve the goal, a number of tasks have to be completed:
1) Theoretical substantiation and identification of significant factors affecting productivity in the economy of Azerbaijan.
2) Statistical analysis of labor productivity for 2015-2019 and characteristics of the current trend.
3) Construction of a correlation-regression model describing the factorial influence on the dynamics of changes in labor productivity in the economy of Azerbaijan.

2. LITERATURE REVIEW

Labor productivity as a key determinant of economic growth was paid attention to by many famous scientists such as V. Petty [24], D. Ricardo, K. Marx, A. Smith [27], M. Keynes [20]. Theories formulated by them explain the behavior of economy in terms of aggregate performance indicators, which include (aggregate demand and aggregate supply). The contribution of Azerbaijani scientists G. Azizov [5], Sh.T. Aliev [3], N.M. Mustafayeva, R. Jabiev [17], K.Kh. Abdullaev [1], A. Allahverdiev, E. Huseynov [2] and others, is also worth noting. In their works labor productivity is considered as a structural element of Azerbaijan's economy, which focuses on its sectoral structure. Foreign authors, including Gehringer, Agnieszka [13], Gerald Hübner [14], Joachim Krause and Matthias Lücke [18], Griffith, Rachel and Redding, Stephen and John Van Reenen [15], Elvin N. Afandi and Gabor Pellenyi [10], Kevin J. Stiroh [19], Jan Fagerberg [12], Shahabinejad [26] and others did comparative analyses of different economies in their works, while paying special attention to the factor of labor productivity. However, none of the aforementioned scientists, paid attention to modeling those factors that affect labor productivity, in particular in the economy of Azerbaijan, which is what our research focuses on.

3. METODOLOGICAL APPROACH

The key research question is: "What factors affecting labor productivity determine the positive dynamics of the development of the Azerbaijani economy? "

The study used general scientific methods of analysis such as:
1) For the theoretical substantiation of the studied literary sources, the method of scientific deduction was used. This allowed the key factors affecting the dynamics of labor productivity to be identified, focusingin particular, on the economy of Azerbaijan).
2) Analysis of statistical data in the industry to set out the contributions of different industries to the development of the economy of Azerbaijan.
3) Economic and mathematical modeling in the form of constructing a regression, in which the dependent variable (y) is the dynamics of labor productivity in the period 2005-2019, and the independent (influencing) factors are:
   - x1- Average monthly wages in the economy as a whole.
   - x2- Percentage of people employed in industry
   - x3- Percentage of people employed in agriculture, forestry and fisheries
   - x4- Percentage of people employed in construction
   - x5- Mean years of schooling (years)

In addition to the aforementioned specific methods of scientific research, graphical analysis, comparative analysis, and the classification and systems approach, were applied in the analysis of the sectoral component of labor productivity in the economy of Azerbaijan.

4. RESULTS

The level of labor productivity is an important indicator. Where there is increased productivity, it confirms the efficient use of labor resources and capital. One of the qualitative indicators of labor resources is the collective intellectual level, which is developed through primary, secondary, and tertiary education. Education has become one of the deciding factors influencing the country's economic development [4,14]. When education levels rise, individual workers' requirements related to working conditions and wages also become more complex. This is reflected by the indicators of the percentage of employees in the sectoral structure of the economy as a whole. To ensure economic growth as a result of labor productivity, highly qualified human capital is needed. The need for a proper education system is amplified by this. This is emphasized in the works of the scientists Azer Allahveranov, Emin Huseyov, G. Azizov, Griffith, Rachel and Redding, Stephen and John Van Reenen [2,4,15,30]. Taking into account their opinions, and their own views on the educational factor, the influence of the average duration of schooling on the level of labor productivity needs to be considered [4,5]. Based on the opinion of G. Azizova, Kevin J Tiron [4,19] ensuring full employment requires investment in the creation of new jobs and continuous improvement of human capital. The intensification of labor productivity is closely related to the issue of employment of labor resources in the economy. It is thus important to know what the sectoral needs are of the labor market, as its efficient distribution is based on the level of labor productivity [5,6,10]. It follows from the aforementioned that the amount of the average wage, the level of education and the level of sectoral employment will determine the productivity level of the economy of Azerbaijan as a whole. After analyzing the statistical data, it is advisable to choose independent variables, or influencing factors, such as the amount of the average wage, the percentage of those individuals employed in industry, the percentage of individuals employed in agriculture, forestry and fisheries, the percentage of individuals employed in construction, and the mean years of schooling. Based on the opinions of scientists and the listed statistical indicators, the hypothesis tested in this research is as follows:

- Hypothesis H0 (*Null Hypothesis*): The average monthly wage (x1), the percentage employed in industry (x2), the percentage employed in agriculture, forestry and fisheries (x3), the percentage employed in construction (x4), and the mean years of schooling (x5) do not influence to the labor productivity level (y) in the Republic of Azerbaijan

- Ha (*Alternative Hypothesis*) : The average monthly wage (x1), the percentage employed in industry (x2), the percentage employed in agriculture, forestry and fisheries (x3), the percentage employed in construction (x4), and the mean years of schooling (x5) significantly influence to the labor productivity level (y) in the Republic of Azerbaijan.

4.1. Influence of employment to the productivity

To display the real picture of the development of the economy of Azerbaijan, we will analyze the indicators of labor productivity in the sectoral breakdown for the period including, and between, 2015 and 2019.

Figure following on the next page
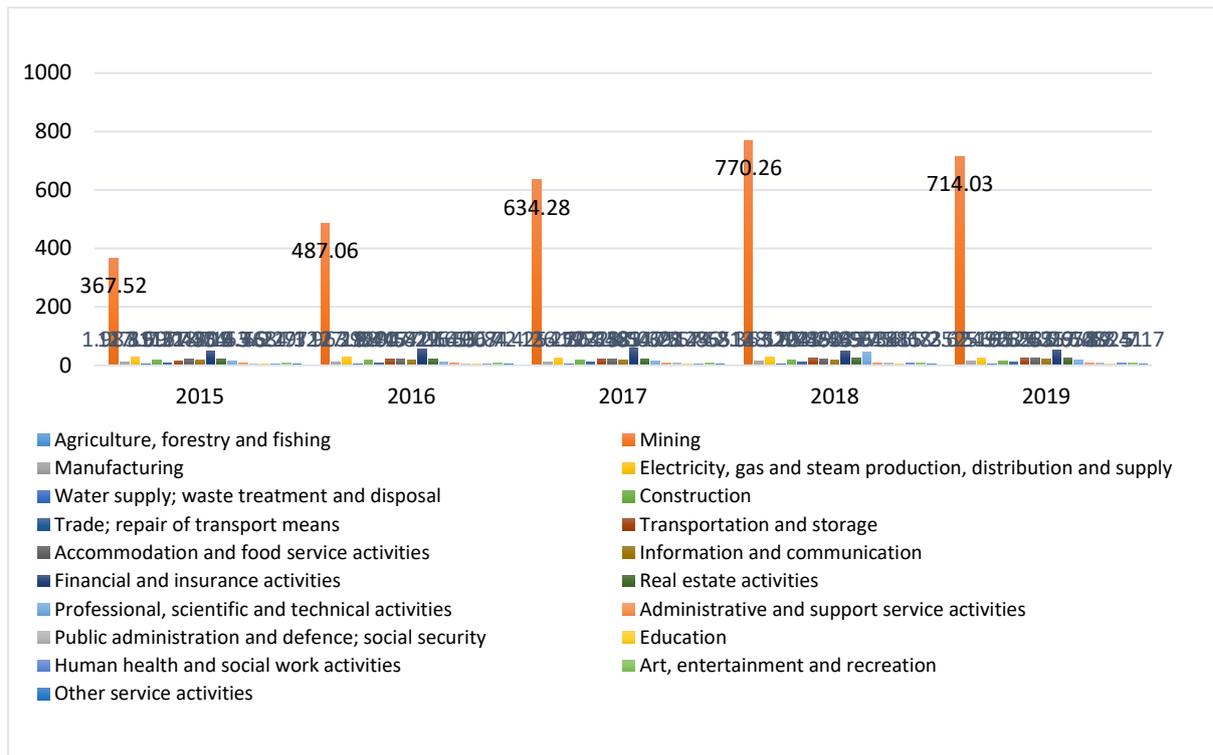
Figure 1: Labor productivity (thous. manat per person) of employed population (nominal GDP) - Compiled by the author on the basis of statistical data from Azerbaijan (Source: https://www.stat.gov.az/)

As can be seen from the presented dynamics, labor productivity in the economy as a whole for the period 2015 to 2019, had an upwards trend. The growth rate of labor productivity in terms of the nominal GDP for 2019, in relation to that of 2015, amounted to 42.46%. However, in reality, the dynamics of labor productivity is visibly increasing in the oil sector. The main reason is the influx of foreign capital and the high profitability, brought about by high energy tariffs. At the same time, scientists are considering the need to diversify the economy of Azerbaijan, focusing on the development of the non-oil sector. In particular, Gerald Hubner pointed out the need to increase labor productivity through investment in human capital [14]. Joachim, K. and Matthias L [18] focus on reducing informal employment and increasing the efficiency of the agricultural sector through increased labor productivity. Elvin N. Afandi and Gabor Pellenyi note the need to increase the use of the potential of agriculture and labor productivity in it as a result [10]. Based on the opinion of the above scientists and our own vision of the Azerbaijani economy, it is being considered relevant to single out employment in the fundamental sectors of the economy such as oil, agriculture x1 x 2, and other industries). This is to be applied as a determinant of the predetermining determinant of labor productivity.

4.2. Influence of wage level to the productivity

As an important incentive for workers, wages can have a significant impact on the gains of productivity. In the economic literature, and in official government documents, it is often said that wages should increase "in accordance with the growth of labor productivity". In a balanced economy the growth rates of average wages and specific NPP (net national product equal to the difference between gross national product and the amount of depreciation of fixed capital) should be approximately the same, the correlation between labor productivity and wages is the same [21]. In the works of the representative of the neoclassical school of economic theory, J. Clark, a detailed scientific substantiation of the theory of marginal labor productivity is presented [9].

Based on his theory of marginal productivity of labor and capital, a worker's fair wage should equal his marginal productivity. That is, by increasing wages, the maximum level of labor productivity is gradually achieved. The marginal productivity of the employee must be equal to the optimal level of wages. Since upon reaching the peak, labor productivity begins to decline. It is necessary to ensure equality between the marginal productivity of labor and wages in order to achieve maximum values of output. J. Clark concluded that the size of wages depends on the productivity of labor and the level of employment of workers, that is, the more workers are employed, the lower the productivity of labor and the lower the wages should be. The inconsistency of the thesis put forward is that an increase in the number of workers does not lead to a decrease in labor productivity, but to a more detailed division of labor, which, as a result, leads to an increase in labor productivity. Professor Azizova G. A. emphasizes the importance of labor productivity as one of the fundamental factors, the increase of which, as practice shows, can be achieved by stimulating the labor force. Despite the significant growth rates, the level of labor productivity in Azerbaijan is significantly lower in comparison to developed countries [6]. Taking into account this fact, Azizova G.A. considers how an increase in labor productivity affects the likelihood of an increase in wages, and how wages affect labor productivity. Having carried out a comparative analysis of changes in labor productivity and wages using the regression model, [7] and identifying the existence of a mutual influence between labor productivity and wages, G. Azizova comes to the conclusion that the outstripping growth of wages is an important condition for further growth of labor productivity in Azerbaijan. In our opinion, one should agree with the author's opinion about a differentiated set of determinants of productivity, focusing on the social component of the country's human capital. G. Azizova also emphasizes that the reason for the differences in the level of wages is not only the provision of land and natural resources, but also the level of technologies used, which will increase labor productivity, which will have a positive effect on the level of real wages.

4.3. Influence of educational level to the productivity

The level of education of the population is an important factor determining the development of human capital. According to William Petty [24], human wealth depends to a large extent on the level of knowledge of its inhabitants and is more productive than natural resources or the stock of physical capital. For his part, Adam Smith was also involved in the study of people as a resource of high productivity, welcoming Petty's ideas, confirming that people's abilities are the determining factors of economic progress, suggesting that the wealth of a nation is achieved by improving the productive potential of human labor [27]. Thus, his famous proposal for a division of labor is closely related to the development of specialized skills, which can be compared to improvements in machines that already facilitate and shorten working hours. The neoclassical model of economic growth in the well-known work of R. Lucas [23] emphasizes the importance of the accumulation of human capital, which plays a leading role in terms of improving the qualifications of workers. As a result, the marginal productivity of labor increases both within the firm and outside it. In his model, human capital plays essentially plays the same role as scientific and technological progress. In our opinion, in order to achieve growth in labor productivity, it is worth focusing on the quality of the institutional environment, available sources of funding, and business specialization. It is worth noting the similarity of neoclassical views with such modern researchers as Kevin J. and Stiroh [19], who point to the importance of technological progress in high-tech industries and the growth of investment, which have a positive impact on changes in the US economy. As neoclassical analysis shows, cumulative growth in labor productivity has accelerated due to technological progress in high-tech industries and increased investment. From the point of view of the productivity theory, the approach described by the authors reflects all the necessary prerequisites for the growth in

productivity, and at the same time, it is based on a list of controllable factors, and does not include many unregulated factors the latter referrring to (risks and uncertainty). Therefore, the application of classical and neoclassical theories in today's conditions, unfortunately, is very limited and requires additional verification in special economic and mathematical models. The dominant role of foreign direct investment was also emphasized by modern Azerbaijani researchers Azer Allahveranov and Emin Huseyov [2]. In their research, they also see the need for a radical renewal of the human capital base, which in turn will ensure the long-term and sustainable development of the Azerbaijani economy. However, it should be borne in mind that in addition to attracting foreign direct investment, it is worth paying attention to expanding entrepreneurial opportunities in the private sector, which ultimately will have a positive effect on the development of the economy as a whole. It is necessary to note the significant contribution of T. Schultz to the creation of the theory of human capital, in whose opinion the return on investment in human capital has delayed effect. For instance, the result obtained from the contribution will only become visible after some time [25]. In the research by the scientist, there is a direct correlation between labor productivity and the level of human capital. The higher the level of an employee's human capital, the higher the level of its productivity. The significance of the contribution to human capital and its impact on the growth of labor productivity is reflected in the works of contemporaries. Among modern scientists, it is worth highlighting the study by Griffith, Rachel and Redding, Stephen and John Van Reenen [15], who studied the factors that determine the growth in a group of industries in twelve OECD countries. As a result of their research, they identified the dominant influence of both investment in human capital and R&D. Together with the factors highlighted by the authors, it should be noted that the adaptability of knowledge and human capital has a time lag, and therefore there is a certain gap in time between the emergence of new technologies and their implementation, which hinders productivity growth not because of the lack of innovation, but because of their insensitivity (delays).

5. MODELING OF FACTOR INFLUENCE TO THE PRODUCTIVITY LEVEL IN AZERBAIJAN

The study of the influence of factors was performed using regression in an applied software package in an exel file. Using the regression analysis, the influence of the following factors on the level of labor productivity was.

The following regression equation was obtained:

$$y = -68.2262 + 0.0235 * x_1 + 4.0437 * x_2 + 1.3419 * x_3 + 2.1354 * x_4 - 2.2044 * x_5 + e,$$

where x1 is the average monthly wage in the economy as a whole.

x2- Percentage of employed in industry
x3- Percentage of people employed in agriculture, forestry and fisheries
x4- Percentage of people employed in construction
x5- Mean years of schooling
e- unexplained determinant

Table following on the next page

	Definitions of the dependence of labor productivity from selected factors					
	Labor productivity	Average monthly nominal wages and salaries paid by sectors in the economy	The percentage of employment in the industrial sector	The percentage of employment in the agriculture, forestry and fishing	The percentage of employment in the construction	Mean years of schooling (years)
	Y	x1	x2	x3	x4	x5
2005	3,08	123,6	7,2	38,7	5,2	10,7
2006	4,56	149	7,4	38,5	5,3	10,7
2007	6,81	215,8	7,5	38,4	5,3	10,2
2008	9,52	274,4	7,5	38,2	5,4	10,2
2009	8,33	298	7,3	38,1	5,4	10,5
2010	9,81	331,5	7,1	38,2	6,6	10,5
2011	11,90	364,2	7	37,9	7,1	10,5
2012	12,31	398,4	7	37,7	7,2	10,5
2013	12,87	425,1	7,2	37,1	7,2	10,5
2014	12,82	444,5	7	36,8	7,3	10,5
2015	11,64	466,9	6,9	36,4	7,2	10,5
2016	12,69	499,8	7,1	36,3	7,2	10,5
2017	14,59	528,5	7,2	36,4	7,2	10,6
2018	16,41	544,60	7,5	36,3	7,3	10,6
2019	16,58	635,1	7,4	36	7,4	10,6

Table 1: Definitions of the dependence of labor productivity
from selected factors - Compiled by the author on the basis of statistical data from
Azerbaijan.
(Source: https://www.stat.gov.az; http://hdr.undp.org/en/indicators/103706)

The regression equation shows that, if the average monthly salary for the economy as a whole increases by 1%, then labor productivity will multiply by 0.0235. If the percentage of employed persons in the industry rises by 1%, then labor productivity will multiply by 4.0437. If the percentage of persons employed in agriculture, forestry and fisheries increases by 1%, then labor productivity will multiply by 1.3419. If the percentage of persons employed in construction increases by 1%, then labor productivity will multiply by 2.1354. If actual mean years of schooling decreases by 1%, then labor productivity will decrease by 2.2044 times. The degree of reliability of the regression model is determined by the coefficient of determination R^2. In our case, $R^2 = 0.9841$. This means that the explained variation is significant, being 98.41%, due to the selected factors. Only 1.59% is attributable to unexplained variations that could be caused by other factors, or the standard error of this simulation.

6. CONCLUSION
The analysis confirmed that the economy of Azerbaijan, has in general, moved in a positive direction, specifically referring to labor productivity, as from 2015 to 2019. The low level of labor productivity in 2015, however, was due to the dependence on the oil sector to boost the economy. This was a crisis period for Azerbaijan, brought about by low oil prices. The regression analysis depicts the influence of factors on labor productivity in Azerbaijan, of which the main factors are: the amount of the average wage, the percentage of people employed in industry, the percentage of people employed in agriculture, forestry and fisheries, the percentage of people employed in construction and mean years of schooling.

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OPPORTUNITIES AND PRIORITIES OF AZERBAIJAN'S TRANSITION TO THE CONCEPT OF INCLUSIVE GROWTH

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ABSTRACT
At the article, it searches the problems of ensuring the transition to the concept of inclusive growth in Azerbaijan from a theoretical, methodological and practical point of view. SWOT analysis and evaluation of existing concepts related to the concept of inclusive growth leads to the conclusion that inclusive growth is, above all, the optimal use of labor potential, ensuring effective employment, minimizing poverty and its negative consequences, the level of income between different social groups. It is necessary to eliminate the sharp differences, as well as to reduce inequality in living standards between different regions, especially in the provision of social infrastructure, in general, comprehensive human development, as well as access to health and education services. It is also a fact that the transition to inclusive development is not possible without ensuring the transition to sustainable development. Then, the possibilities, main ways, characteristics and mechanisms of transition to the concept of inclusive growth on the basis of concrete materials of Azerbaijan are evaluated on the basis of SWOT analysis, while identifying priority fields, and its implementation, the creation of appropriate social infrastructure to ensure sustainable development in the long run, a sharp increase in the share of human capital in GDP, the creation of the necessary institutional structures for effective social policy and the transition to inclusive development are national priorities. It is also emphasized that the balance of resources of our country, the degree of their use, the achievements in socio-economic development in recent years will allow our country in the near future to move to the concept of inclusive economic growth. At the end of the article, the concrete suggestions and recommendations are put forward to improve the mechanisms of social development, social progress and effective implementation of the social security system in our country to ensure the transition to the concept of inclusive growth.
Keywords: inclusive growth concept, sustainable development, inclusive development, Strategic Roadmap, development concept, social development, social security system

1. INTRODUCTION
The gained successful achievements, created economic, socio economic, financial potential, human capital, infrastructure, institutional base, as well as the level of improvement of social welfare allowed our country to present the transition to inclusive development as a practical problem in the field of socio-economic development and allowed it to be implemented step by step in Azerbaijan during last 15 years. At the same time, the economic, social and humanitarian crisis that has surrounded the world as a result of the coronavirus pandemic in recent years, as well as the relatively limited role of the oil factor in the development of the national economy, increased global pressure on the nature of economic development as a whole has deformed the factors, criteria, social orientation, driving forces, principles, and mechanisms of economic growth. This, in turn, is aimed at ensuring the transition to the concept of inclusive development in the near future in accordance with the changing situation and economic realities in our country, the Presidential Decree of February 2, 2021, made it an objective necessity to define "Azerbaijan 2030: national priorities for socio-economic development. Thus, the establishment of a "dynamic", inclusive and socially just society in our country in the next decade has been identified as one of the main priorities.

It should be noted that the nature of socio-economic development in our country, its inclusion is guided by the Constitution of the Republic of Azerbaijan. Article 15 of the "Economic Development and the State" section of the Constitution states: "Economic development in the Republic of Azerbaijan works for increase the welfare of the people based on different types of property. The Azerbaijan State creates conditions for the development of a socially oriented economy on the basis of market relations, guarantees free enterprise, prevents monopolies and unfair competition in economic relations."

2. THEORETICAL AND METHODOLOGICAL BASES OF THE RESEARCH OF TRANSITION PROBLEM TO THE CONCEPT OF INCLUSIVE GROWTH IN AZERBAIJAN

In the world practice and existing economic literature, there is no single approach to the socially oriented market economy, in other words, the main point, indicators of inclusive development, opportunities, ways and mechanism of their implementation. Thus, at the opinion of the commission preparing the "Europe 2020" strategy shows that inclusive development intends making full use of the country's labor potential, ensuring full employment, reducing poverty and its consequences, minimizing income disparities between different social groups, achieving social development as a whole, elimination of existing disproportions between the country's regions, etc. In our opinion, such an approach to the concept of inclusive development attracts more attention. At the same time, in the first decade of the 21st century, some economists comment the concept of more inclusive growth in the scientific literature in a broader sense, that inclusive development is not only the growth of GDP, but also the overall development of human capital, increase their share in revenues, their active participation in the economic life of the country, access to education and health care for low-income groups, reduction of unit costs of products and services, as well as efficient use of natural resources and environmental protection. The possibility of the transition of individual countries to the concept of inclusive development and the analysis of the real situation show that the level of development of national economies as a whole and the chosen model of economic development have a significant impact on the speed and nature of this process. It should also be noted that in Post-Soviet Republics that have gained independence in recent years, as well as in countries involved in national conflicts, the possibility of inclusive development is more broadly influenced by economic, social and political factors. From this point of view, while assessing the possibility of Azerbaijan's transition to the concept of inclusive development, the new economic and social reality of the liberation of the Karabakh region as a result of the Patriotic War and its restoration, revival, resettlement of refugees and IDPs should not be overlooked. All of the above confirms the idea that the transition of our country to inclusive development should be carried out as a managed, regulated, systematic process. Because without eliminating the existing inequality in welfare, income and consumption in the country as a whole, but also the right to life for all members of society, the right to liberty, the right to decent work, economic, social environment and normative-legal the base must be created. Analysis of inclusive development concept of individual developed countries shows that although the fundamental principles are the same, but depending on the level of economic development of each country, the model of regulation of socio-economic-humanitarian processes, national mentality, as well as priorities for each specific period and there are mechanisms of realization. From this point of view, when preparing inclusive development concept in our country, it is necessary to take a differentiated approach to this problem, taking into account the existing economic and social realities of our country, global challenges, national, regional and local interests. When defining the inclusive development concept in our country and its priorities, the factors determining the level of the inclusive development index in the Republic of Azerbaijan must be taken into account.

Based on the existing economic literature and relevant government documents, we can identify the factors that ensure the inclusive development index in the Republic of Azerbaijan as follows:

- Multiple GDP growth in the last decade;
- multiple increase in GDP per capita;
- Sharp reduction in poverty;
- The country's external debt is less than 20% of GDP;
- Low level of demographic dependence;
- Low Gini coefficient compared to G7 countries;
- multiple reduction of CO_2 emissions per unit of GDP;
- Significant increase in median income, etc.

It is also true that the inclusive development concept should in fact be considered as part of a model of sustainable development. President of the Republic of Azerbaijan Ilham Aliyev said in his historic speech at the 90th anniversary of Baku State University on November 2, 2009 that "the transition period in our country's economy is over…., we must draw conclusions from the results of a process that has already been completed, to ensure the sustainable development of the country's economy, we must deeply analyze our achievements, put forward proposals that are relevant to our society, and think about new paradigms." In recent years, the necessity to strengthen the social and humanitarian aspects of sustainable development in the international sphere, as well as the practical implementation of these goals has become even more urgent. Thus, the need for a comprehensive institutional and economic approach to the problem should be emphasized in order to ensure the implementation of the sustainable development goals in accordance with the goals of sustainable development adopted at the UN summit in September 2015. In order to ensure the effective implementation of these goals, the National Coordination Council for Sustainable Development was established in Azerbaijan. It should be noted that today Azerbaijan has entered such a stage of economic development that its future inclusive development should be based not on the involvement of natural resources, but on the efficient and optimal use of all the country's resource potential, especially human capital. Today, our national economy has the opportunity to develop itself, increase its competitiveness, ensure security and most importantly, solve social problems. It is also a fact that in the current conditions of Azerbaijan's active integration into the world economy, it is impossible to move to inclusive development concept without the necessary systematic, logical reforms in all fields and directions. Taking into account the above-mentioned, a reform strategy has recently been developed in our country in accordance with the changing economic situation and economic realities and is being successfully implemented in practice. The reforms implemented in our country in recent years in connection with inclusive development can be grouped as follows: investment-innovation; improving the business environment; investment promotion; implementation of structural and institutional reforms; increasing the competitiveness of the national economy; stimulating the development of the non-oil sector and exports; state support for the development of profitable labor-intensive industries and productions; improving the system of salaries, pensions and social benefits; Promotion of "Made in Azerbaijan" brand, etc. It is a logical consequence of all this that in the "Doing Business 2019" report published by the World Bank, Azerbaijan was included in the list of 10 most reformist countries in the world and in 2019 was declared the most reformist country in the world. When assessing the directions and nature of reforms in our country, it is necessary to emphasize such a principled approach that the formation and implementation of all economic reform strategies, measures must be conditional on the security of the national economy, the protection of national interests.

3. OPPORTUNITIES, CHARACTERISTICS AND PRIORITIES OF AZERBAIJAN'S TRANSITION TO THE CONCEPT OF INCLUSIVE GROWTH

For the first time in the "Main Directions of the Strategic Roadmap for the National Economy and Key Sectors of the Economy" in the decree of the President of the Republic of Azerbaijan dated March 16, 2016, based on the fundamental provisions and priorities of the formation and development of the national economic development strategy. It set as a strategic task the harmonious solution of economic and social development, the unification of the interests of current and future generations, as well as increasing the inclusion of the economy. In the document, it takes into account the strengths, weaknesses, opportunities, possible dangers and threats of economic development on the basis of SWOT analysis and 360-degree diagnosis of the Azerbaijani economy, the competitive advantages of our country, the philosophy, paradigm and principles of inclusive economic development as a whole have been determined and the economic development strategy, action plan and main goals and objectives until 2025 and the system of views after 2025 have been reflected. At the same time, in order to ensure the implementation of the main strategic goals and objectives of the country in 12 strategic roadmaps for 11 sectors, approved by another presidential decree dated December 6, 2016, to improve the structure of the national economy in accordance with changing conditions and students. The expectation of an optimal balance between the financial sector, in particular, the effective application of fiscal and monetary mechanisms in the regulation of socio-economic processes, has been set as an important task. In general, over the past 15 years, Azerbaijan's economy has taken high place among the world countries in terms of development. Thus, over the years, Azerbaijan's gross domestic product has increased 3.7 times, the non-oil sector 3.6 times, non-oil exports 5.2 times, industrial potential 2.7 times, agricultural production 2.3 times, wages increased 7.5 times, pensions 9.2 times, unemployment fell to 5% and poverty fell to 5.1%, our foreign exchange reserves increased 24 times to $ 50 billion, $ 250 billion was invested in the country's economy, 2 million new jobs were created against the increase of 5 million people. In 2003-2020, more than 3,500 schools and 600 medical institutions were rebuilt or overhauled in our country. 48 olympic centers have been established, 18,000 kilometers of roads have been built. Gas supply to the population has reached 97%, numerous projects have been implemented to improve the supply of drinking water, especially in the regions, as a result, the supply of drinking water to the population is at 75%. In general, the results of the socio-economic development programs of the three regions implemented in 2004-2020 are more heavy. Suffice it to say that over the years, 54 billion manat has been spent on the implementation of these programs at the expense of all financial sources, as well as the state has provided more than 2.5 billion manat in soft loans to entrepreneurs through the National Fund for Entrepreneurship Support. The analysis also shows that due to the results achieved in all fields of socio-economic development in the last decade, macroeconomic stability was further strengthened in 2019, the stability of the national currency was maintained, inflation was reduced by 10% compared to the same period last year , the share of socially oriented expenditures from the state budget increased by 28.4% in 2020 compared to 2018 and reached 32%. Investment promotion programs implemented by the state are of special importance in ensuring inclusive development in Azerbaijan. Suffice it to say that 107 projects are being implemented in our country until January 1, 2019, and 332 projects are planned to be implemented this year. The implementation of all these projects will create 12,000 new jobs in our country. The role of the self-employment program which implemented successfully in our country is also draw attention in ensuring inclusive economic growth. This program will cover 7,000 people in 2019 and improve their employment. It is known that the small and medium business development is important in ensuring inclusive development in the country. For this purpose, the establishment of "Easy Support for Family Business" "ABAD" centers will contribute to raising the level of employment in our country.

The analysis shows that in modern times, the Azerbaijani economy is in the process of transition from quantitative to qualitative changes, to an economy based on efficiency. Thus, the share of intellectual capital in economic growth tends to increase due to the development of intensive factors in economic growth, especially scientific and skilled labor, the share of the non-oil sector in GDP increases, the structure of imports and exports improves, the competitiveness of the national economy rising gradually. A very important aspect of ensuring inclusive development in the context of our country's entry into the post-oil era is realted to the development and diversification of the non-oil sector. As a result of systematic measures and government programs implemented in this direction in recent years, the share of the non-oil sector in GDP has reached 65%. The analysis shows that the results achieved by our country in the field of economic development in recent years and the existing potential have significantly increased its competitiveness. According to the World Economic Forum's Global Competitiveness Report 2017-2018, the competitiveness of the Azerbaijani economy has doubled and ranked 35th among the world countries. World experience shows that in modern times, human capital has become a driving force in the development of national economies, increasing competitiveness, labor productivity, most importantly, ensuring the transition to the concept of inclusive development. The results achieved in the socio-economic development of our country in all directions and fields over the past 15 years have allowed the President to implement very serious social programs to increase the inclusion of economic development. Thus, the President issued a decree on February 25, 2019 "On additional measures to strengthen the social protection of the population" to provide social benefits to large groups, another decree on February 26, 2019 to provide "a single monthly allowance for IDPs and persons equated to them" sharply increased the amount of benefits. By another Presidential decree dated February 8, 2019 "On raising the minimum wage", the minimum wage was increased by 38.5% from 130 to 180 manat, thus , the level of the minimum wage was fully adjusted to the level of the subsistence level. On April 19, 2018, a lump sum payment of 11,000 manat, will be provided for the heirs of martyrs died before August 2, 1997, according to the order dated February 14, 2019 "On increasing scholarship for doctoral candidates, students and pupils of higher, secondary special and initial vocational education institutions", as well as master's degree students of the Azerbaijan National Academy of Sciences" to improve their social status, doctoral scholarships are 300 manat, for doctoral students in the amount of 180 manat, as well as with this order to increase the scholarships for masters and students. Access to health care for all groups in the country is important in ensuring inclusive development. Taking this into account, the Presidential Decree dated December 20, 2018 "On a some measures to ensure the introduction of compulsory health insurance in the Republic of Azerbaijan" is planned to be completed in 2020, for the completion and application of all activities related to the introduction of compulsory health insurance. Social and labor pensions were developed by another Presidential decree dated 27 February 2019 "On Labour Pensions". In general, in recent years, significant progress has been made in improving the social welfare of our country's population. COVID-19 pandemic as a whole has a strong negative impact on the socio-economic development of developed countries, including Azerbaijan, especially on inclusive development, dynamics, character, implementation mechanism, financial opportunities, employment, especially the social status of low-income families, small and medium business activity. To minimize the negative effects of the coronavirus pandemic, a comprehensive system of measures was established by the order of the President of the Republic of Azerbaijan, initially allocated 2.2 billion manat from the 2020 state budget for these purposes. Due to the nature of inclusive development and the level of people's incomes, appropriate measures have been taken to make education and health services accessible to low-income families. Thus, we would like to note that by the decision of the President No. 138 dated April 13, 2020, for the second semester of the 2019-2020 academic year and the first semester of the 2020-2021 academic year, respectively, tuition fees of 15.2

thousand and of 13,9 thousand students were paid from the state budget. Very serious measures have been taken to strengthen the material and technical base and infrastructure in this area in order to meet people's demand for health services in a pandemic. It should be noted that in order to ensure the realization of inclusive development in the country in the current realities, during the COVID-19 pandemic in our country began to implement strong measures to support employment and social welfare. Thus, 12 measures system was implemented in 4 fields, covering 4.8 million people, in other words, 48.1% of the country's population. These include, first of all, protection of unemployment risks and social protection of public sector employees, protection of unemployment risks of non-public sector employees, social protection, employment and social protection system of the unemployed and dismissed, strengthening social protection of vulnerable groups , including the provision of social services and social protection at home to persons over the age of 65, financial assistance, as well as significant discounts on energy and public utilities. In accordance with the tense social conditions of the post-pandemic period, qualitative changes have taken place in the nature of labor relations and demography in our country as a whole. Thus, on January 1, 2021, the salaries of employees increased by 2.7%. In general, 53.8% of these employees worked in the public sector and 46.2% in the private sector. During the last year, the living minimum for social demographic groups of the population was increased to 190 manat, including 201 manat for able-bodied people, 157 manat for pensioners and 170 manat for children. During this period, as a whole, targeted social assistance in the field of social protection and social security in our country increased by 5.1% compared to 2019, as well as social benefits and pensions increased by 4.1%. In the social policy pursued in our country after the war, strong social support measures are being implemented for the families of martyrs and war veterans. Thus, social support measures were provided to 7,000 people, including pensions and benefits to 3,600 martyrs' family members, and the needs of many people for housing and cars were met. According to the relevant instructions of the President, financial support and benefits will continue until the resettlement of refugees and IDPs in the liberated lands and the restoration of their normal life activities. The necessary institutional structures, including the Agency for Sustainable and Operational Social Security (DOST), was crated in our country to ensure inclusive development in the post-pandemic and post-conflict periods. It is known that the development and adoption of an effective economic development strategy is a initial condition for ensuring the inclusive development of the national economy. Because the success of the development concept, which is ultimately to be implemented, depends vitally on how effective and optimal the existing regulatory system in the country is. Thus, taking into account the existing financial and economic potential of the country and the multiplier effect should be considered as one of the most important conditions when developing an economic development strategy. Given the importance of an objective assessment of the legislation impact on the nature and dynamics of socio-economic development, the Azerbaijan state always tries to have a strong enough intellectual burden of all normative legal acts adopted in connection with socio-economic development.

4. CONCLUSION

In general, all the programs, projects, goals and measures adopted by the Azerbaijani government in connection with inclusive economic growth in recent years have been implemented in a timely and quality manner. In general, the assessment of the socio-economic development of the country over the past 15 years on the basis of SWOT analysis and 360-degree diagnostics highlights the main priorities of the inclusive development strategy: first, the formation and implementation of innovation-oriented investment policy to achieve inclusive development; second, the creation of appropriate infrastructure to ensure sustainable inclusive growth in our country, which is applied stable; third, the formation of a national

innovation system in Azerbaijan that meets world standards and criteria; fourth, a sharp increase in the share of intellectual capital in the country's gross domestic product; fifth, it defined the market as the necessary institutional change in response to changing conditions, demand and economic realities. All this gives us every reason to conclude that despite the above-mentioned problems, especially the difficulties caused by the coronavirus pandemic, the inclusive development strategy developed in the near future, taking into account the resources of our country in modern times and their potential for mobilization in the near future and will ensure sustainable development.

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COMPARATIVE ANALYSIS OF MORTGAGE LOAN IN INTERNATIONAL BUSINESS

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ABSTRACT

The existing problems of mortgage crediting in Azerbaijan are tried to be solved at different levels from Bank structures up to government: though the problems which solution is important and stand before mortgage mechanism and mortgage crediting in regard to real estate, housing market and those have many aspects, its mutual relation with other social-economic factors is drawn to the foreground. The mortgage of real estate always has been one of the most reliable methods to provide the fulfillment of obligations in a proper order. Mortgage mechanism is one of the important priorities of market economy system to buy an apartment and gives an opportunity for creation of efficient investment environment. So, there are significant problems in economic aspect of mortgage crediting. Solution of these problems is not so easy. But, it is impossible to increase the efficiency of mortgage crediting without trying their solution and attempting to it. All of these mentioned confirm the urgency of this research. Different types and models of mortgage crediting in Azerbaijan and in the world are considered in the article, they were compared from the standpoint of economic efficiency, profitability and social orientation and estimated. The establishment of organizations and importance of their development giving an opportunity to increase of crediting and financing systems of housing market by basing on analysis of the world practice is emphasized. It was concluded that, the application of different systems of saving in housing construction gave an opportunity to increase the level of guarantee in efficient and available apartments, all of these were accepted as important process, the importance of the use of mortgage model mechanisms basing on balancing was said. The selection of mortgage models in mortgage crediting systems depends on features of national economic development and development history of financial-mortgage system of the state. The comparative functional analysis of national models of mortgage formed during a long period gives opportunity to determine their priorities and negative sides. Also, the necessity of classification of means analyzed and investigated in terms of different priorities was emphasized to finance mortgage assignment apartment market as one of the research results. The use of the main elements of each model considered and their application put forward as suggestion to improve and develop the system of financing of apartment market and mortgage crediting in the article.
Keywords: mortgage, crediting, mortgage crediting system, apartment market, apartment construction, financing of apartment market

1. INTRODUCTION

At present, the provision of people with convenient apartment is one of the actual, social and economic problems. There are different mortgage crediting models in the world practice to solve this problem. The European and USA practice is very significant. Mortgage crediting - is an activity on crediting of apartment and other property purchasers. Mortgage systems of modern states have many specific features substantiated with different mortgage models. These models are basing on the process of implementation of certain mutual relations schemes between system participants. The modern world practice is urgent especially for Azerbaijan. The elements of existing mortgage systems may be coordinated by considering their features.

2. WORLD MORTGAGE CREDITING SYSTEM

The social-economic development strategy of the national economy of separate countries (concrete legislation, certain mortgage mechanisms, etc.) is determined especially with many internal features of modern systems of mortgage crediting. In this case, it is necessary to indicate the differences in legislative regulation in the countries where legal systems of Romano-German and Anglo-Saxon are available. The mortgage system almost is the same in all countries of the Continental Western Europe, except Denmark. In these countries, the confirmation of notary acts, cadastre or land cadastre, publication of information about mortgage transactions and other important documents has compulsory character (Aalbers, 2017). It is important to note that, compulsory notary confirmation of all documents is applied in transactions on mortgage crediting in our Republic. The mortgage system is more liberal in the countries where Anglo-Saxon legal system is available and low formalization is required. So, the documentation in Anglo-Saxon mortgage system also may not be confirmed under notary. It is important to note that, there are the circumstances for exact determination of mortgage subject (Black and Kohl, 2017). The Denmark mortgage system may substantiate to the first and second approach. The American mortgage system is one of the important mortgage systems. So, here securities market developed significantly and many debt liabilities are provided with mortgage. From this point of view, the changes occurred in the fund market exert strong influence to mortgage crediting. Because, as it seems from the world financial crisis, while many segments of the market decrease, including mortgage market, the development of mortgage influences to the financial market (Aalbers, 2008). The following models shall be noted especially according to their importance:

1) *Little open model* is available in Great Britain, Israel, Spain: bank's own capital, deposits and interbank credits − are the sources of money used for issue of mortgage credits. Its speed is determined with current business environment.
2) There is *enlarged open model* in USA: banks grant credit to client depending on income level and credit history (Bricker et al., 2017; Carragher and Webster, 2011).
3) There is *balanced autonomous (free) model* in Germany: citizens establish cooperatives and make investments during a certain period. While collecting the half of value of future residential real estate (apartment), the Cooperative's participants got a right to buy real estate (apartment) in consecutive order. They pay the remaining part during the following 10 years (Carragher and Webster, 2011).

The other kind of mortgage crediting systems covers the single-level and two-tiered mortgage models. The selection of this order or other model depends on features of national development and development history of financial and mortgage system of the state. The implementation of refinancing procedure of credit is an important process (Goodman and Woluchem, 2014). In accordance with those mentioned above, two-tiered model is applied in USA, but single-level model in the European countries. The two-level model of mortgage is formed for the reason of increase of need to credit transactions recorded historically in the national level (Smith, 2015). These measures have been applied in order to increase the liquidity of credit and to finance it again in future. Though mortgage has two-stage model, the transmission of the credits of initial mortgage market to open market by the help of State Mortgage Agency is expected (Vojtech et al., 2016). The Mortgage Agencies are obliged to form mortgage "money" (capitalist is one of the forms of monopolies, which income of all participants enters to the total fund and then it is distributed among them in the comparison considered in advance) on the basis of the same credits and to sell them (or their shares) to investors again. The obtained money may be transmitted immediately to the second investors. The funds obtained from such transactions also may be used for issue and placement of mortgage securities. It stipulates the development of fund market and transactions with mortgage securities.

These transactions provide continuous movement of financial flows in the world financial market. The single-level and two-tiered model showed existence of significant differences depending on their historical development. The analysis of processing of two-tiered mortgage crediting model in USA shows that, this mortgage crediting system is formed as effective (as one of the basis) model during a long period. But, its development became slower for the reason of wars and crisis (Leathers et. al., 2015). The analysis of the American mortgage crediting model gave an opportunity to us to select the main six stages of its development. At the first stage (30th years of XX century), the mortgage developed actively till great depression causing to collapse of apartment market. Finally, the percentage of unpaid mortgage credits increased distinctly. USA government took urgent measures for restoration of situation. The next important event was establishment of Federal Housing Administration in 1934. This step solved mortgage debt problems partially (Leathers et al., 2015). Let's analyze single-level model of mortgage crediting used especially in European countries. Its essence is issue of loan securities provided with mortgage credits issued by bank giving a mortgage credit on one hand and provided with real estate mortgaged on the other hand. Mortgage business is regulated under special legislation. The issuer (especially banks) indicated in the legislation may grant mortgage lists (Ross and Tootell, 2004). The state and bank control authorities supervise strictly over activity of mortgage bank. It is expected that, the state will support the participants of mortgage mechanism within this model, will determine game rules and will made mortgage as effective economic development tool (Leathers and 2015). Recently, macroprudential tools affecting to demands of capital for real estate objects are used on the basis of capital in several European countries. So, more strict criterions are determined for application of minimum 25% risk weights (RW) for Swedish mortgage credits and discounted RW for residential real estate of Croatia, Ireland and Great Britain, RW is increased for risks provided with commercial real estate in Ireland and Norway. For example, Romania and Sweden (Ferrari etc., 2017; Luque and Mello, 2017; Davis and Zhu, 2011). The main establishments of mortgage crediting are formed in the centuries of XVIII-XIX. The mortgage and maintenance concept emerged on this kind of credit at this period. At the next stage (50th years of XX century), special institutes have been established for organization of mortgage crediting transactions and repeated mortgage market with securities. The third stage (the end of XX century, the beginning of XXI century) has been in regard to improvement of indicators of mortgage market and existing market tools within the model. The world financial crisis slowed the development of this market: interest rates increased and the list of programs became shorter. For example, some European mortgage products decreased or their demands to potential debtors became strict. But, now we can speak about development of post-crisis model of Europe, restoration of market, expansion of crediting and expansion of opportunities of citizens to give subsidy to purchase of real estate (in some countries, for example, Austria). Interest rates change among 3-8% depending on country and credit terms (Davisand Zhu, 2011). The single-level model of mortgage crediting is applied in Hungary, Germany, Denmark, Poland, Slovakia, France , Czech and other European countries. The analysis of single-level mortgage model gives an opportunity to determine its priorities and negative sides in comparison with two-tiered model (Carr and Anacker, 2014).

Its priorities:
- low entry price.
- simplified legislative regulation.
- At the same time, two-tiered mortgage model has priorities which are considered the shortages of the same level model:
- credit risks not covered with insurance and guarantee are distributed among all credits as a result of formation of mortgage "money".

- public authorities give guarantee to certain type of mortgage and helps to get discounted mortgage to concrete categories of citizens.
- public authorities pursue concrete policy to stimulate the issue of insurance and guarantees by help of legislative and financial support for citizens and other model participants. At the same time, government develops regulation and control system to stabilize the influence of model.
- model gives an opportunity to enter the Fund market and to use of more transparent price mechanism. It gives an opportunity to market participants to estimate risks and benefits from investments to certain mortgage products.

Savings system for housing construction is more widespread in the single-stage model of mortgage crediting. Its period consists of several stages. In the first stage, money is collected: the depositor concludes with Construction Savings Bank, and the latter attracts the funds. So, the savings system in the housing construction is independent of the securities and Banking markets, change of interest rates and securities rates. Collecting money takes 5-10 years. As a result, the depositor collects 40-50% of the amount specified in the contract. The interest rate on the deposit is much lower than the market deposit. Mortgage is granted in consecutive order. Its interest rates are much lower than market prices. The construction savings system will operate at low interest rates when there is no public demand between citizens for mortgage credits. The German mortgage system has the most advanced state mortgage banks. They are only entitled to issue securities for valuable mortgage. Such banks may act as a mortgage. The Construction Savings System is also well developed in Germany. It is a prototype for similar systems in other countries that apply it. The German system has two additional advantages, other than general guarantees to reliability peculiar to the European model of mortgage banks:
- Bank control system conducts selective inspections from time to time.
- Mortgage bank manager is appointed as a supervisor for this concrete bank.

Giving of the credit in 100% (sometimes 98%) amount of the purchase and sale price of real estate is an important advantage of the German model. However, the credit amount does not exceed 80% of the value of the mortgaged property, and the interest rate is 4-7% per annum. The interest rate on the credit is fixed by the duration of the contract. However, it may be lower than the period intended for full payment of the credit. In this case, the creditor may offer a new rate at the end of the agreed period and the borrower will determine whether there is a need for its acceptance. When the mortgage credit bought, the paid deposit should also be taken into account. The conjuncture of the financial market influences the creation of a balanced autonomous (free) model in connection with the accumulation of debt resources (the principle of mutual aid fund) by attracting the deposits of future borrowers. This model may be interested for Azerbaijan. Because, in most cases, the value of the residential real estate (apartment) in the secondary market is lower than in new buildings. Moreover, the value of the apartment construction in Azerbaijan is much lower than market price of the real estate. Cooperatives were created during the Soviet era. However, this practice is not present at the moment, and it requires a more sophisticated multi-structured system to make structures more efficient.

3. DISCUSSION
Banks may play a decisive role in real estate financing through mortgage financing. They:
- give a credit for land acquisition and existing buildings for housing construction;
- financed the construction projects,
- credited the non-bank credits, credit and non-financial firms on the basis of the deposit of real estate (Davis & Zhu, 2011).

Thus, the housing construction in the USA especially depends on mortgage credits. Almost, all homes are bought for a family through mortgage credits and it had led to significant growth in the real estate sector in the country (Leathers and al., 2015). It should be noted that large companies established in 1935-1981s, such as Fannie Mae and Freddie Mac, was become to the most important financial organizations of the mortgage market for long years (Carr and Anacker, 2014; Shapiro and Kamarck, 2015). In the late 1980s, a new type of securities issued by mediators for mortgage investments emerged. They expanded the mortgage market and strengthened their positions. However, the situation was exacerbated by the 1998 and 2008 crises, especially when the "bubble" burst in the housing market in 2008 and the collapse of the USA mortgage market. However, the USA experience has shown that after serious crises, the mortgage system, which has been actively developing during the Great Depression, has transferred from a serious government regulatory mechanism to a self-regulated economic system. The mortgage system related to the necessity of provision of citizens with the favorable apartment is supported by the government. The American mortgage system is one of the fastest restoring and developing models. Despite a 20% decrease in apartment prices during the global financial crisis, American citizens became poor about USD 5 trillion. Reliable borrowers in the real estate market faced the problems of crediting very quickly. So, the mortgage crisis affected about 40% of the total volume of market credits. However, In the USA, the mortgage model works effectively. In 2016, the minimum interest rate on the credit was 2,81% compared to the previous minimum recorded in May 2013 (2.86% for a 15-year credit) (Bricker et al., 2017). Based on those aforementioned, despite the serious consequences of the crisis, the USA mortgage market has restored rapidly. But, we cannot say the same about the Azerbaijani market where there are still quite high rates of mortgage credits. The Azerbaijan experience is attempted to use savings model for housing construction. But, this system isn't widely used. The construction savings system is carried out through private cooperatives in the world experience. Despite a significant risk reduction and more liberal credit conditions, Azerbaijani citizens don't want to be part of such cooperatives. They consider that the mortgage system is safer and less risky in terms of interaction with constructors and building owners, as well as procedure for giving of the credit. However, the obtained information shows that housing construction savings system may lead to significant progress in providing citizens with the favorable apartment, and banks may be provided with additional resources, credit products, including mortgage credits with long-term money. So, two directions may be successfully implemented: mortgages crediting and housing construction savings system. Housing construction savings system may be offered to citizens who are not urgent the need of purchase of the real estate. Money obtained from depositors may bring them additional income and give additional money to creditors who can use these resources to obtain profit by offering them various credits (for example, consumer credits etc.) in a short period of time. Banks may place remaining moneys in the form of mortgage, but with more liberal credit conditions. Citizens who need urgent money can apply for a mortgage. Accordingly, the rate of urgency will cost them higher interest rates and harsh conditions. So, citizens who need a real estate will be divided into two groups for products that they can use. These measures may allow you to strengthen Azerbaijan's position in the global financial market, settle several social problems and reduce social tension by providing citizens with favorable apartment.

4. CONCLUSION

In order to summarize, almost national mortgage models (shorted open, expanded and balanced autonomous (free) models) have been formed for a long time. Comparative functional analysis allowed you to identify the advantages and disadvantages of each model. We also determined that balanced autonomous (free) models may be carried out in Azerbaijan. Because, prices in the initial housing market (new buildings) are lower than prices in the secondary market.

Moreover, the construction value is much lower from market prices of the real estate. The network of construction cooperatives should be expanded. Because, it will improve the financing system of housing market. We recommend that you use the elements of each model designed to improve the financing system of housing market. There are two main models of mortgage crediting, i.e single-tiered and two-tiered models. The two-tiered model is more widespread in the USA. The essence of this model is that mortgage credits available on the initial mortgage market are provided to government-backed agencies. As for the same-tiered model, the essence of this is that the Bank which gives mortgage credit independently issues loan securities. These models have differences in their evolution. In our opinion, the German housing construction savings system can be effective in Azerbaijan. This system allows you to collect gradually money that is necessary for purchase of the property. This system may serve as a tool of the housing market financing system. If the borrower doesn't need immediate purchase of real estate, it can join the savings system for construction and gradually save money by earning a small percentage from the amount of accumulation deposit. If a citizen needs immediate money, a mortgage application shall fill. However, the urgency will cost him/her a higher interest rate and harsh conditions.

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EFFECTIVE FINANCE, MONETARY AND FISCAL POLICY IN ENSURING ECONOMIC DEVELOPMENT IN AZERBAIJAN DURING THE PANDEMY

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ABSTRACT
COVID-19 aims to ensure the sustainable economic development of the Azerbaijani economy in the financial sector and to make certain changes in the regulation of fiscal and monetary policy in this sector. In the context of the implementation of economic reforms in the country, the implementation of economic policy in accordance with the relevant specific conditions is very important for this period. Stimulation of both national and regional economies through the introduction of fiscal and monetary policies in a country in a pandemic environment, the provision of local markets based on achieving a certain stability in the financial sector, depends largely on financial stability and fiscal and monetary policy . The development model aimed at ensuring sustainable development in the country has negative priorities: expecting optimal ratios of key and progressive factors in economic growth, economic security of the national economy, competitiveness, growth efficiency in terms of reproduction, social efficiency and the level of efficient use of one of these factors. The focus on the impact of fiscal policy should be improved. Even during a pandemic, the regulation of macroeconomic stability depends to a large extent on the optimal coordination of monetary, fiscal and fiscal policies. Coordination between fiscal and monetary policy in connection with the use of oil revenues in solving the problems of national development of the country's economy during the pandemic is of particular importance. Thus, this policy is the basis for a serious economic and social threat in accordance with the current level of inflation in the country. As a result of successful monetary, fiscal policy and other economic measures carried out in the country in 2020, successful responses to external and internal shocks were given and conditions were created for effective management of these shocks, which have a strong impact on all spheres of public life and economy. For 2021 and the medium term, the country faces challenges such as a return to a sustainable economic growth trajectory, a doubling of GDP over the next 10 years, macroeconomic stability in the light of realities, and the restoration of liberated territories.
Keywords: *sustainable economic development, development model, economic stability, fiscal-monetary policy, pandemic*

1. INTRODUCTION
The sharp decline in oil prices since 2014 and the economic crisis in trading partner countries have slowed growth in the country, the balance of payments and non-oil budget deficit, the processes in the financial and banking sector, as well as the global economy COVID-19 The pandemic has necessitated new approaches to economic development in Azerbaijan. This required the development of a new scientifically based economic development strategy. To this end, the country initially developed and adopted a strategic road map for key sectors of the economy. As we have noted, the announcement of a pandemic of a new strain of coronavirus infection that started in China in 2020 and continues to spread rapidly, the negative impact of these global quarantine conditions on the dynamics of important economic indicators, had a

negative impact on most economies in a short time. Uncertainty over the duration of the pandemic required all national economies and international organizations to adopt mechanisms, decisions, regulations, laws, as well as economic projects, programs, and programs that would affect this economic process, and to work together effectively. First of all, the leading countries and international organizations began to make predictions about the pandemic. However, these predictions differed from each other. From an economic point of view, the economic forecasts for the countries of the world can be considered useful for our analysis. International financial institutions have begun to forecast economic growth for the world and countries in the first place. Unfortunately, these figures were forecast with negative trends. Thus, in the "Economic Outlook of the World" prepared by the International Monetary Fund in June 2020, believing that the quarantine conditions will be relaxed, trade will gradually recover, the economy will gradually recover, and demand will recover. Forecasts for the end of 2020 were adjusted to improve, and the rate of economic decline was predicted to gradually decrease [1]. According to these forecasts, the global economic decline was projected at 4.4%. IMF experts attributed the weakening of the pandemic in 2021 to countries and regions of the world to the relative revival of aggregate demand determinants such as consumption and investment. However, due to the uncertainty of the pandemic, in some countries, on the contrary, the increase in the scale of the disease, the tightening of the pandemic regime in many countries, has resulted in a weakening of these positive forecasts. The World Bank said the pandemic would cause the deepest crisis since World War II. However, after the World Bank's analysis of the results of the pandemic, it was said that the forecasts would be possible due to the support from the fiscal and monetary sectors. The Asian Development Bank (ADB) said tensions over the pandemic would cause social unrest and tensions, with escalating trade tensions between the United States and China as an important risk factor, and predicted that they would ease during the pandemic. The impact of the pandemic on the economy of Azerbaijan The introduction of the quarantine regime in the country and the subsequent extension of this period, first of all, led to a decrease in the population and its income. This led to a decline in real purchasing power, as a result of which the consumer market began to shrink, as a result of which trade turnover decreased, services provided to the population decreased, and food prices rose. At the same time, there was a decrease in investments in fixed assets. However, during this period there was an increase in trade, which includes non-oil industry and agriculture, and is a key indicator of the country's export potential. In such circumstances, of course, the fiscal and monetary policy pursued in the economic sphere and its effective regulation were of special importance. It should be noted that during the pandemic, the role and responsibility of the state in the formation, improvement of the financial system in general and the application of its necessary mechanisms is growing. On the one hand, the ongoing global financial crisis, on the other hand, the COVID-19 pandemic, which has negatively affected the economic and social life of all countries, has made ensuring financial stability and security in national economies a major problem and task. From this point of view, the most important economic problem not only for Azerbaijan, but for the whole world economic system is the effective implementation of macroeconomic tax and monetary policy, first of all, the restructuring of the budget sector and the application of the most effective methods of budget planning, budget revenues and the effectiveness of cost control should be increased. In order to ensure the real effectiveness of these problems, there is a need to strengthen the institutional orientation, ie to develop and implement laws that will support the solution of these problems. Although I find it difficult to say how active it is, the country has passed laws that will support economic reforms. For example, the Financial Stability Board of the Republic of Azerbaijan, which is an integral part of structural reforms, should have had a positive impact on governance.

2. INTERACTIVE RELATIONSHIP BETWEEN MONITORIAL AND FISCAL POLICY IN PROVIDING FINANCIAL STABILITY DURING THE PANDEMID PERIOD

In the context of the COVID-19 pandemic, the transformation of the Azerbaijani economy into sustainable economic development necessitates changes in economic development. In this regard, the main interaction of fiscal and monetary policy with the state's monetary resources depends on the financing of the budget deficit and the effective management of the monetary sphere. The impact of fiscal-budget-tax-deficit on the level of inflation and the growth rate of production also depends to a large extent on how it is financed. As we know, the state budget deficit is mainly financed from 4 alternative sources:

1) By transferring funds from the Central Bank of the state;
2) By purchasing government debt bonds by the private sector in the domestic market;
3) By mandatory placement of government debt bonds;
4) Through external debt.

I would like to note that all four of these sources can be used. However, it should not be forgotten that the coordination of monetary and fiscal policies can be carried out in two directions: in the first direction, the Central Bank takes a leading position, regardless of the government's financial needs, the monetary authority can determine the growth of the monetary base. Thus, the government may be forced to determine the budget deficit in accordance with the financial capabilities of domestic and foreign financial markets, and the government will focus on reducing the budget deficit. This situation will create a danger of unsatisfactory calculation of cost priorities. Thus, the government will be more inclined to foreign financing and will place more debt bonds in the domestic market than necessary. The second direction is the position of the Ministry of Finance, which will determine the amount of the budget deficit without the consent of the monetary authority, while the financial capacity of the bond market will come to the fore, and the bank will provide the necessary funding from the monetary base. Given the level of market prices, inflation will begin to rise as demand for real money exceeds the growth rate. Of course, market instability and inflation will slow down the development of the domestic financial market. Both directions can improve the situation through the coordination of monetary and fiscal policies. As a result, the development of financial markets will have a mutually reinforcing effect on the unilateral development of monetary and public debt management procedures. This can help develop the national financial market with less damage to the economy as a result of effective coordination of fiscal and monetary policies. Effective management of fiscal and monetary policy in the country is of particular importance in macroeconomic regulation. The role of oil revenues in the formation of the budget makes the improvement of the relationship between fiscal policy and monetary policy especially relevant today, in the context of the coronavirus pandemic. The impact of measures taken to combat inflation in this period on economic and social processes must be taken into account. The success of the measures taken depends on the population's understanding of the nature of the problem. When the economic balance is disturbed, the government will focus primarily on maintaining consumer prices and possible stability of wages. The interaction of the two policies is also related to the transfer of the Central Bank's profits to the state budget. This amount is determined annually by the Milli Majlis when the budget is approved. This is somewhat dangerous for macroeconomic stability in the context of the economic situation, ie inflation, as in such a situation the Central Bank may make harmful decisions to perform its duties in accordance with the conditions. The Central Bank usually spends its money through the issuance of banknotes and deposit operations. In such circumstances, the Central Bank and the Ministry of Finance should act in joint consultations. As can be seen, the fiscal and monetary effectiveness of both policies is to finance the budget deficit with the state's monetary resources

and to manage the monetary sphere at all times, especially during periods of inflation in the economy. If the goals of both fiscal and monetary policies are properly coordinated, it is possible to create conditions for the development of the national financial market by allowing the economy to achieve these goals with minimal damage, taking into account the pandemic during this period [2]. Every activity carried out in the process of economic regulation of the national economy has a direct impact on the production costs of enterprises. Because all sectors of the economy interact with each other in the context of economic activity, a change in one area has an effect on all areas, either positively or negatively. Recalling the "resource-output" model, we can say that the matrix is relevant. By "inter-sectoral balance", both parts of the product are considered to be consumption and production. Proper regulation facilitates the regulation of intersectoral balance. In this context, the main instrument of government influence on the economy is the regulation of money supply or tax system, fiscal and monetary policy, which provides for the level of aggregate government spending. The socio-economic component of the policy pursued in Azerbaijan is tax policy. It should be noted that in accordance with the conditions of the pandemic, it is updated in accordance with today's challenges and requirements of both the global and national economies. However, fiscal policy in the country still has some delays in the proper management of budget revenues and expenditures, domestic and foreign public debt, which is its main goal. It also includes the creation and centralized use of centralized and decentralized monetary funds of the state. In our opinion, the optimal result of this policy should take into account the business activity of changes in tax rates, the impact of changes in budget expenditures on inflation and interest rates, and the budget deficit on macroeconomic equilibrium, because fiscal policy is not only monetary policy, but also the economic cycle. also depends on This can have both positive and negative sides. In our opinion, during the pandemic, if the "fiscal phase" applied by the Central Bank is used as a contour-cycle, it can be assessed as a positive situation in terms of macroeconomic stability. It is likely that the Central Bank will need to identify its non-inflationary sources in order to minimize the state budget deficit in Azerbaijan for the medium term. The International Monetary Fund's recent forecasts for economic growth have tended to be declining. At the same time, these cases mentioned in the introduction, ie trade wars and disintegration tendencies, were accompanied by a weakening of economic activity. The information on the average price of oil on the world market, which confirms the IMF's economic growth forecast, is a decrease of 12% from $ 72 in 2018 to $ 64 in 2019. During the coronavirus, the IMF also predicted that the global economy would shrink by 4.4%. The recession was forecast at 5.8% for developed countries, 3.3% for developing countries and 7.1% for Azerbaijan's trading partners. To mitigate the decline, some countries have announced fiscal stimulus packages and implemented expansionary monetary policy measures to support households and businesses. In 2020, world commodity prices will be as volatile as in Azerbaijan. The effects of the pandemic have led to a decline in trade and investment, especially foreign investment. However, in the report of the Central Bank of Azerbaijan for 2021, despite all this, in 2020, the current account of the balance of payments accounted for a deficit of 0.7% of GDP. The main component of the balance of payments - the foreign trade balance - was positive, although significantly reduced. The country's strategic foreign exchange reserves have remained stable, with foreign exchange reserves exceeding $ 50 billion. However, aggregate supply and demand declined, and the confidence index fell to a negative zone in 2020 [3]. Uncertainty in the economy decreased by 4% in 2020 compared to 2019. During this period, the economic downturn in the non-oil sector slowed, but aggregate output remained in the negative zone. During this period, the government and the Central Bank aimed to regulate anti-crisis measures by supporting contour-cyclical fiscal policy, soft monetary policy and macroprudential concessions, focusing on supporting areas affected by the crisis. In 2020, the Central Bank's monetary policy was mainly aimed at managing inflation, while monetary policy

was also aimed at preventing a sharp decline in aggregate supply by neutralizing the negative effects of external and internal environment on macroeconomic stability in a pandemic. The uncertainty created by the pandemic and the contraction in aggregate demand as a result of declining consumption and investment spending were the main anti-inflationary factors, as the rise in world market prices also affected the rise in consumer prices. Among these factors, inflation expectations in the non-oil refining industry, trade, services, as well as the construction sector also had an impact. At the same time, keeping inflation at the target level is aimed at maintaining stability in the foreign exchange market. In this regard, the Central Bank accelerated dollarization in the domestic market by holding auctions of currency sales of the State Oil Fund, which led to an increase in demand in the foreign exchange market. The ability of banks to work effectively in this area has created stability in the foreign exchange market. As a result of the relative recovery of oil prices on the world market and the stabilization of partner countries in the foreign exchange markets, it was possible to ensure stability in the foreign exchange market. Such a policy is aimed at easing the monetary situation at the expense of both the value of money and the quantity of money. The steps taken by the monetary authority in the country to ease monetary policy are aimed at increasing the role of banks in the process of promoting economic activity, making loans more accessible. [1] In this situation, the Central Bank mainly went to interest rates. In our opinion, this should be considered the right step for this period. Because interest rate cuts will have a positive impact on the stability of the dynamics of the manat, which in turn will have a positive impact on reducing inflation and a certain recovery in demand. The weakening of demand must be prevented from affecting the growth of the monetary base. World experience shows that both the regulation of the purchasing power of money and the regulation of budget revenues during periods of economic instability are of particular importance, as noted above. In our analysis, we noted the impact of fiscal policy in Azerbaijan during the pandemic on the implementation of revenue and expenditure targets, as well as the implementation of regulatory measures, which is one of the main priorities of the state. As we know, the profit tax is related to the processes of material production of the state budget. This fact creates conditions for the implementation of state regulation of the economy in all economic conditions. Unlike other taxes, such as VAT, the income tax has a regulatory nature, but it should be noted that the state must be careful in the context of the "principle of equal tax". Especially in today's conditions, taking into account the measures to be taken by the state in connection with the specifics of the field in which entrepreneurs are engaged in entrepreneurship and business. Theoretically, however, this principle is that when a single rate of income tax is set, companies with large profits will have a tax advantage, and the tax burden will fall on small businesses, so a progressive tax should be kept in focus. Because in this case, each high degree is limited to a sequence, but only to the lower and upper limits, and will be applied to a well-defined part of the income. In this case, government agencies, the Ministry of Finance and the Ministry of Economy, through our tax policy, in our opinion, should work the right mechanisms of concessions, and in this case, should not harm the stimulating function of the tax. This is because investment in both foreign and domestic investment, which has already declined worldwide during the pandemic, must be sensitive to tax credit. Even in times of pandemic, we must not forget that this loan provides equal potential for development for all sectors and enterprises of the economy. Tax breaks, even tax exemptions for some businesses during this period, actually reduce the amount of taxable profit, requiring a higher nominal tax rate. Our approach to income and consumption taxes during the pandemic would be more appropriate to shift more attention from income taxes to consumer spending taxes. This system will facilitate the transition of the regulatory cargo center to cash circulation, which can be better integrated with monetary policy instruments. Ironically, the state is interested in getting more money, the taxpayer is paying less, and some are even trying to use various methods to evade taxes.

This should be kept in mind as it is dangerous both socially and in terms of the shadow economy. The development of entrepreneurship and further improvement of business activity, which is a key factor in the economy during the pandemic, the fight against corruption in the country, minimizing the level of the shadow economy, increasing the effectiveness of tax incentives are still in focus. I would also like to note that today in Azerbaijan, in order to minimize the rate of decline in all sectors of the economy, monetary and fiscal policy should be aimed at using international experience and standards in order to improve the lives of society. The goal is to develop innovative areas in the country in the future, stimulate investment, increase revenues in these areas, and, accordingly, increase budget revenues to increase budget revenues. It should be noted that domestic investment in the country has a significant share in the structure of total investment, 64.0%. Therefore, against the background of a significant increase in foreign investment, there was no increase in total investment [1].

3. IMPLEMENTATION OF BUDGET TAX POLICY IN THE COUNTRY ON INCOME AND EXPENDITURE IMPLEMENTATION IN 2021 DIRECTIONS AND DIRECTIONS

The period of transition to a market economy was a period of intense economic decline for Azerbaijan. There were two ways to get the country's economy out of this tense economic situation: either by effective management of available resources, economic reforms, especially privatization, denationalization, comprehensive development of all forms of private property, development of entrepreneurship in all sectors of the economy at least 14-15 He had to get out of this situation and achieve economic development for a year, or to achieve economic development of the country by relying on the energy sector and providing foreign exchange inflows to the country by exporting the most valuable oil and gas resources to the world market. Of course, the "Contract of the Century" was signed because the most efficient way was the second way. As a result, the inflow of foreign currency into the country was ensured, and in a period of 30 years, the country's economy became a developed independent state of the region. The country has been successfully integrating into the world economic system within a market economy with successful development until the pre-pandemic period, which is consistent with sustainable development. In accordance with our relevant analysis, in this section we would like to make some analysis of the problems that need to be implemented in the priority areas of fiscal monetary policy and the work to be done in this direction. In this analysis, we will refer to the forthcoming budget and tax policy, referring to the measures, decisions and orders envisaged by the state for this period. First of all, the state specifically envisages revenue targets for 2021, during which 48.8% of budget revenues will come from the non-oil sector, ie 5674.0 thousand manat through the tax authorities, 33.5%, ie 3900.0 thousand manat through customs authorities, 7.6% or 880.0 thousand manat transfers from the Guarantee Fund of public debt and guarantees, 2.1% or 250.0 million manat from the Central Bank's profit, 8.1 % or 947.0 million manat will be other revenues [1]. In our opinion, in order to achieve this priority, the state should focus its fiscal policy on stabilizing the economy by mitigating the existing fluctuations during the pandemic, maintaining the current level of GDP and creating conditions for its possible growth, achieving full employment of all resources. and make effective use of all possible mechanisms to ensure price stability in order to regulate supply. At the same time, public procurement, taxes and transfers should be directed to the future economic situation. Pandemic payments, unemployment benefits, etc. from internal regulators. social payments should be indicated, ways of providing export goods and services should be sought. The boundary between production and tax revenues should be regulated. To this end, investment programs should be developed to expand production within possible opportunities, sources should be identified, internal and external sources should be identified, a tax environment should be created to create conditions conducive to investment-innovation development

through the application of new technologies. Those who implement high-value investment projects through tax incentives that stimulate entrepreneurship's investment and innovation activity should be exempted from taxes, either in full or in part, within a specified period, and the costs associated with borrowing should be reimbursed.

4. CONCLUSION

In our opinion, in accordance with the fiscal monetary policy pursued in the country during the pandemic, taking into account the provision of financial stability, the following should be done:

1) The activity of all sectors of the economy must be ensured, the existing natural, labor, capital, land, intellectual, innovative, etc. Efficient management of resources should create conditions for the development of the private sector, entrepreneurship in the ratio between the development of the private sector and the public sector, and ensure its superior development. In this regard, in order to reduce the dependence of the economy on the oil sector, the increase in non-oil budget revenues should be continued in the coming years, specifically in 2021. In our opinion, this can facilitate more effective coordination of fiscal and monetary policies and more effective regulation of both economic policies by the State Central Bank, the Ministry of Finance, the Customs Committee, the Ministry of Economy to ensure financial stability, dynamic economic development and economic growth. In this regard, it will first of all minimize the dependence of payers operating in the non-oil sector on shocks in the oil sector, which has a high share in the formation of budget revenues, and expand the geography and range of non-oil exports.

2) In order for the country to have positive results not only in fiscal and monetary, but also in all economic mechanisms, economic and social policies, the fight against corruption and the shadow economy must be carried out consistently and purposefully to eliminate this economic and political situation that directly affects budget levels.

3) To develop relations between taxpayers and tax authorities based on mutual trust, to expand the application of a single control mechanism for budget revenues, as well as to create favorable conditions for the payment of tax debts, to ensure transparency in the field of tax administration.

4) Achieving an increase in tax revenues by reducing the shadow economy, corruption, the application of more advanced cooperative management methods in public enterprises, each economic entity should focus on developing mutual trust between taxpayers and tax authorities, ensuring timely and full payment of financial obligations.

5) Improving the institutional environment for digital payments, and improving legislation in the field of e-commerce. To use the services of this sector effectively during the pandemic.

6) To pay attention to the provision of socially oriented budget expenditures and the financing of programs and measures to be implemented in this direction at the expense of the state budget and to ensure its transparency.

7) In order to reliably protect the health of the population in the fight against the constantly evolving coronavirus pandemic, special attention should be paid to the health sector, the allocation of appropriate budget funds for the implementation of government programs in this sector. The sanitary-epidemiological situation in the country should be controlled by the state and its relevant bodies, the social protection of medical workers involved in measures to combat coronavirus infection should be strengthened, necessary medical equipment to prevent pandemics, effective organization and operation of modular hospitals in relevant regions.

8) Taking into account the current economic situation in Azerbaijan, in our opinion, the main goal of fiscal policy is to eliminate the shocks of oil prices, as well as the consequences of coronavirus - COVID-19 infection, not only with the current, but also in the next few years (about 2-3 years) to ensure budget balance and sustainability by supporting conservation

measures. Of course, the state should focus on reducing the share of oil sector revenues in budget revenues at the expense of revenues from the non-oil sector.

9) In order to maintain macroeconomic stability, in our opinion, strengthening the coordination of fiscal and monetary policies in order to maintain stability in the exchange rate of the national currency, taking into account economic reforms, slowdown in dollarization and other factors to keep the national currency - manat against the dollar regulation, to ensure a positive impact on social welfare indicators of the population. In our opinion, the easing of monetary policy at the expense of both money and money supply should continue in the context of pandemic and inflation.

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THE CONCEPT OF SUSTAINABLE DEVELOPMENT AND THE PROBLEM OF SOCIO-ECONOMIC DEVELOPMENT OF REGIONS

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ABSTRACT

The article reflects the achievements of recent socio-economic reforms in Azerbaijan, as well as issues such as ensuring sustainable development of the regions, the formation of an innovation-oriented economy in line with modern conditions. We must keep in mind that sustainable development combines economic, environmental and social components in the selection and implementation of human development indicators. The most important goal here is to move resolutely towards sustainable development and to achieve the development of a concept of sustainable development of the country, region and city. Thus, the current stage of development based on market relations presupposes the formation of the economy and its effective integration into the world economic system and, above all, ensuring the competitiveness of the country's economy. At the current stage of reforms that can ensure sustainable economic development of the country, a systematic approach to the economy, the development of innovation-investment and structural policies require the implementation of targeted programs that can stimulate the comprehensive development of the country's economy. The essence and purpose of economic reforms in our country is to create an innovative economy in the country and regions, to successfully implement socio-economic problems, to achieve economic growth in the development of innovative entrepreneurship. Effective use of the economic potential of the regions, ensuring its sustainable socio-economic development, more successful implementation of the adopted programs and the development of new programs in this direction require a study of the essence of such concepts as region, region and economic region. From this point of view, back in the 70s of the last century, the main focus in the country's economy was on the study of theoretical views on regional reproduction and distribution of wealth by regions, as well as the practical application of scientific and theoretical views. At the same time, the issues of using the development potential of new forms of self-government remain insufficiently studied and discussed in the development of models of sustainable socio-economic development of the efficient use of local resources. Such issues include effective management of the economic potential of the regions, formation of local and regional markets, as well as their infrastructure, implementation of appropriate investment policies, proper use of property of various forms of ownership, ensuring efficient use of local resources, intensification of full and efficient use of existing potential.
Keywords: *sustainable development, innovation, investment, reforms, regions, socio-economic*

1. INTRODUCTION

Regulation of socio-economic and sustainable development of all sectors of the economy, including the regions that are one of its components, has been and continues to be one of the main strategic directions of the state's economic policy at all stages of the historical development of society. The modern concept of the mechanism of implementation of Azerbaijan's economic relations with other countries should be based on the fact that our national economy is an integral part of the world economic system. The formation and level of development of the national economy depends on the level of competitiveness of the country's economy. The experience of developed countries shows that the basis of sustainable socio-economic development in the country depends on modern scientific and technological progress and the application of advanced technologies in production.

The competitiveness of the national economy in the country must be established and developed on the basis of ensuring the economic security of the state, the economic policy of the state. From this point of view, ensuring economic efficiency in the regions in the conditions of market relations, development of scientific and technical progress, formation of free enterprise, further improvement of production and economic relations, activation of investment activity, production of high quality competitive products are all key tasks of sustainable development. It should be noted that during 2000-2015, Azerbaijan was at the forefront of the world in terms of the pace of socio-economic development. Infrastructure has been modernized, the basis for the development of the non-oil sector has been created, social welfare has been improved, strategic foreign exchange reserves have been created at a level comparable to the state's assets and GDP. Weakening of economic growth in the country as a result of the sharp decline in oil prices and the economic crisis in trading partner countries since 2014, institutional and structural challenges, balance of payments and non-oil budget deficit, new developments in the financial and banking sector There is a need to move to an economic development approach. Taking into account this need, in accordance with the Decree of the President of the Republic of Azerbaijan dated March 16, 2016 on approval of the main directions of the "Strategic Road Map for the national economy and key sectors of the economy" and related issues, a total of 12 strategic The road map was prepared and approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016 "On approval of the Strategic Road Maps for the national economy and key sectors of the economy". The strategic roadmaps cover the short, medium and long term, the development strategy and action plan until 2020, the long-term vision for the period up to 2025, and the target vision for the period after 2025. Strategic roadmaps state that the goals and objectives set and adopted in the strategy, program and other documents adopted in connection with the country's development will be implemented on the basis of a qualitatively new development model, taking into account modern world and regional processes, global regional challenges and their impact on the country. which are policy documents. These documents emphasize the transition to a post-oil development model based on the concept of sustainable development in the country in the long run. Thus, the "Strategic Roadmap for the National Economic Perspective of the Republic of Azerbaijan" stipulates that by focusing on new "avant-garde" sectors that will ensure sustainable development in the long run, the structure of the economy is more private than state-owned. It will be rebalanced through the superior growth of entrepreneurship, high-skilled labor-intensive sectors compared to low-tech sectors, high-income markets relative to low-income markets, and high-value sectors relative to low-value sectors. It should be noted that the main goal of social policy in the country is to further improve the living conditions of the population, including citizens living in the regions. In general, regional governance should operate in both tactical and strategic modes. Strategic plans for socio-economic development of the region are of great importance. Let's look at these plans:

- the strategic plan identifies the region's strengths and weaknesses, identifies the region's competitive advantages by developing business and improving people's living conditions, and engages it in development;
- the strategic plan reflects the principles that guide producers of goods and services, governments, investors and the population, based on vision.
- strategic plan is a combination of short-term and long-term foresight;
- the strategic plan is the result of the joint efforts of all regional forces as a result of mutual partnership activities.

It should be noted that the planning of socio-economic development of the region is a continuous process. As the world experience shows, the main condition for achieving sustainable economic and social development in a country is to achieve regional development

in that country. Organization of production with efficient use of local resources, natural and human resources in the regions during regional development, creation of new enterprises and jobs, reduction or elimination of disproportions between socio-economic development between regions, reduction of inefficient interregional labor force establishment, establishment and development of education, health, science, cultural centers and other similar activities and measures. In general, in order to achieve sustainable development of the regions, special attention should be paid to the following principles:

- productive forces in the regions should be placed proportionally and their dynamic development should be ensured;
- different production areas should be closer to the sources of raw materials;
- differences between cities and villages in the regions should be eliminated, socio-economic development should be brought closer to each other;
- natural resources in the region must be used efficiently and nature must be protected;
- labor resources should be effectively allocated and used in the regions.

It should be noted that in Azerbaijan, as in developed countries today, special attention is paid to regional development. Thus, since 2004, the State Programs on socio-economic development of the regions (2004-2008, 2009-2013, 2014-2018) have been consistently approved in this direction. Despite all this, a decree of the President of the Republic of Azerbaijan on the approval of the "State Program of socio-economic development of the regions of the Republic of Azerbaijan in 2019-2023" was signed recently. The main goal of the program is to ensure the sustainable and balanced development of the regions in the Republic of Azerbaijan, including the creation of a competitive economy based on the principles of sustainable development, social welfare that meets high standards, efficient use of natural resources and environmental protection. consists of.

2. THE CONCEPT OF SUSTAINABLE DEVELOPMENT

One of the most characteristic features of the economic policy pursued in our country in recent years has been the correct definition of priorities. It is no coincidence that over the years, taking into account the absolute advantages of Azerbaijan, the country's oil strategy has been formed, the basis for socio-economic development of the regions has been created, accelerating entrepreneurship, developing the non-oil sector, ensuring food and energy security. Since the end of the twentieth century, the deepening social inequality between people has led to problems arising from the mismatch of economic and social factors, the inefficient use of natural resources, which could pose a serious threat to the future. That is why the principle of "development without destruction" was created, and it is gratifying that the concept of sustainable development has emerged. The term sustainable development was first used by Gru Harlem Bruntland in a 1983 report by the International Commission on Environmental Protection. Today, the concept of sustainable development is supported by the world scientific community and society in general, and the principles of sustainable development are widely applied in practice and in business. The concept emphasizes the importance of a holistic approach based on three fundamental principles of sustainable development: economic growth, social progress and environmental sustainability, and overcoming existing barriers to development. What is the concept of sustainable development? The concept of sustainable development is understood as development that can meet modern requirements, the level of application of environmentally friendly technologies, the quality and structure of total capital (natural, human, material, cultural, etc.), the use and export of environmentally sound products. The essence of this concept is to "meet the needs of current generations in a socio-economic and ecologically normal way without endangering the lives of future generations."

The report, entitled "Our Common Future," prepared under the direction of G.H.Bruntland, was distributed in various countries at the initiative of the UN General Assembly [1]. It should be noted that the main logic of the Sustainable Development Concept is the efficient and economical use of the planet's natural resources, the preservation of the natural environment, the proper satisfaction of human needs and the social, economic and environmental development of world and future generations. holds. The concept of sustainable development mainly includes the following factors: socio-economic aspects; efficient use and protection of natural resources in order to ensure sustainable development; strengthening the role of key human groups; means of implementation of issues related to sustainable development, etc. The practical implementation of sustainable development in the concrete example of any country is a logical sequence: a systematic analysis of the level of development of the national economy; definition of goals; requires that the existing system of economic relations meet the national interests, as well as to determine and evaluate the form, method, scale and means of its regulation. It should be noted that in addition to the aspects mentioned in the development of the concept of sustainable development, the factors of civilization, economic thinking, the policy of forming an effective economic policy of the state should not be overlooked [2]. In the mid-1990s, under the leadership of National Leader Heydar Aliyev, many necessary measures were taken to ensure the country's transition to sustainable development. Based on the recommendations of the UN Development Program, national leader Heydar Aliyev made many important contributions to the development of our country in order to fulfill the commitments made at the UN Conference on Rio de Janeiro (1992), the Millennium Forum (2000) and the Johannesburg Summit (2002). made decisions. Let's look at these decisions: 1. By the order of the national leader H.Aliyev dated March 2, 2001, the "State Program on Poverty Reduction and Economic Development" was prepared. 2. By the order of H.Aliyev, the Cabinet of Ministers of the Republic signed a decree dated October 30, 2001 on the preparation of the "Strategy for Sustainable Human Development in Azerbaijan". 3. On July 18, 2002, the National Report on Sustainable Development was presented to the public by the order of H.Aliyev. 4. By the order of H.Aliyev dated February 19, 2003, "National program on ecologically sustainable socio-economic development in the Republic of Azerbaijan" and "National program on restoration and increase of forests in the Republic of Azerbaijan" were approved. [3] The first steps towards sustainable development are:

- development of the concept of sustainable development of the country, region, city and analysis of the situation (environment, investment attractiveness, etc.);
- preparation of the country taking into account the normative leading world experience in the field of sustainable development of the country, region, city;
- development of a strategy for the gradual application of the principles of sustainable development;
- preparation of a detailed plan for application, level of infrastructure development, analysis of social and environmental normative-legal base.

Ensuring sustainable development is one of the important challenges facing and successfully implemented by Azerbaijan. Apparently, this implies a comprehensive, diversified, all-encompassing development of the country's economy. The Sustainable Development Goals, reflected in the "Agenda for Sustainable Development 2030" adopted by world leaders at the important UN summit in September 2015, officially entered into force on January 1, 2016. Azerbaijan Sustainable Development Report - 2020 "ranked 54th among 166 countries on the" Sustainable Development Goals Index " [4]. In 2019, under the leadership and initiative of the President of the Republic of Azerbaijan and the First Vice President of Azerbaijan, two social packages were introduced, which gave impetus to further strengthen the social security of citizens.

These packages resulted in an increase in both the minimum wage and the average monthly amount by about 2 times. The average monthly salary and minimum pension increased by more than 93%. The reason for Azerbaijan's success is based on the consistent, multifaceted and complementary branches since 2003. Of course, the main reason for this development is the implementation of correct, transparent and purposeful reforms and achievements. The fact that the Gini coefficient, which represents inequality between people, is 38.6 in Azerbaijan, indicates the success of social policies in our country [5]. At present, the achievements of our country in the field of sustainable development allow us to speak about the Azerbaijani model of development. The strategic directions of this model, based on the logic of sustainable, dynamic development, can be characterized as follows:

- formation of a whole socially oriented economic system based on free market relations - an independent national economy;
- active involvement of the existing natural-economic, technical-production and scientific-technical potential in the country in the economic turnover;
- effective integration of the national economy into the world economic system;

This model currently promotes the sustainable and rapid development of the Azerbaijani economy. Here, the most important features of the tactics of economic policy implementation in the priority areas - it is very important to carry out activities in each of these areas on a coordinated program implemented in parallel. It is important to note that the strategic directions of the Azerbaijani model of sustainable development - the strategy of "turning black gold into human capital", the strategy of "green development", the strategy of "using the energy of youth and women" should form the basis of our state policy. The formation of a balanced society, a welfare society, an information society, an ecological society based on social equality within the framework of the Millennium Program should be a priority for the development of Azerbaijan. One of the global features of the concept of sustainable development is the efficient and economical use of the planet's resources, the preservation of the natural environment, the intelligent satisfaction of human needs and the maintenance of world peace, as well as socio-economic and environmental development.

2.1. Basic principles of the concept of sustainable development
Sustainable development is a way to grow the economy, keep it at an optimal level, manage human activity in a way that meets the needs of modern generations, and does not create barriers for future generations to meet their own needs. Increasing the use of renewable resources, including energy sources, their constant share in the total energy and raw material turnover meets the following requirements.

Sustainable development includes two key interrelated concepts:
1) The concept of needs, as well as priority needs (those necessary for the existence of the poor);
2) The concept of constraints on the environment that will meet the current and future needs of mankind (conditioned by the state of technology and the organization of society).

The reasons for the emergence of the concept of sustainable development are environmental, economic, social, demographic, global and regional problems. Another reason for the concept of sustainable development is the attempt to create a kind of regulation for the development of human civilization. The main task of sustainable development is to meet human needs and initiatives. Because sustainable development requires that the most important needs of all people be met and that everyone be given the opportunity to live a prosperous life on an equal footing.

The concept of sustainable development is the result of combining three areas:

1) Economic sphere - Thus, the concept of economic efficiency is considered from a completely different perspective.
2) Ecological field - Consideration of ecological resources can lead to the destruction of the environment and endanger the existence of all mankind.
3) Social sphere - This concept can play an important role in solving social problems aimed at reducing the number of conflicts that contribute to the preservation of cultural and social stability.

Speaking about the exceptional services of President Ilham Aliyev in the sustainable development of Azerbaijan, academician R. Mehdiyev writes: The successful implementation of reforms in all areas depends on the definition of specific goals for the development of the country. Azerbaijan has already defined its long-term development path. This is reflected in the adopted state programs and strategic roadmaps. These documents, in addition to characterizing program management in our country, also contain the goals of President Ilham Aliyev on political, socio-economic and institutional development [10]. Observations show that as society continues to develop, most people want to live healthier, longer and more comfortable lives. People want to see their children better educated, taking into account the needs of the social environment, and at the same time try to improve their living standards by using more products and services. In this regard, as production expands, so does consumption. At the same time, as people's financial situation, level of education and outlook increase, their political consciousness expands, all of which has a positive effect on the expansion of people's political freedoms.

3. THE PROBLEM OF SOCIO-ECONOMIC DEVELOPMENT OF REGIONS IN SUSTAINABLE DEVELOPMENT

Ensuring the comprehensive development of the country's regions in modern times is one of the main goals of the economic policy of the Azerbaijani state. It is clear from the experience of recent years of the Azerbaijani economy that in accordance with the requirements of sustainable development, it is necessary to determine the direction of improving the structure of the regional economy, identify their socio-economic problems, develop state mechanisms to ensure economic security and sustainable development. Regional development depends on the material and spiritual progress of the people living in the regions, as well as on the further improvement of material well-being in the formation of society by changing the economic, social, cultural, social and political characteristics of many countries. Although the implementation of certain processes in the regions is regulated by the state, the implementation of economic reforms, the study of the problems of the regions, affects the formation of their governance structures.

It is also regulated within certain targets as follows:
• socio-economic development of the regions;
• effective use of the potential of the regions;
• increasing the role of regions in the national economy;
• improving the living standards of the population.

The implementation of these goals in the regions is actualized by the directions of these multi-regional policies:
1) Establishment and integration of a single national market in all regions;
2) Elimination of problems between regional differences and development of economy in backward agrarian regions;

3) regulation of the urbanization process;
4) assessment of human and natural resources;
5) Implementation of new industrial projects.

Effective use of the economic potential of the regions, ensuring its sustainable socio-economic development, more successful implementation of the adopted programs and the development of new programs in this direction require a study of the essence of concepts such as region-region and economic region. From this point of view, back in the 70s of the last century, the main focus in the country's economy was on the study of theoretical views on regional reproduction and distribution of wealth by regions, as well as the practical application of scientific and theoretical views. Also, the use of the development potential of new forms of self-government remains insufficiently studied and discussed in the development of models of sustainable socio-economic development of the efficient use of local resources. Such issues include effective management of the economic potential of the regions, formation of local and regional markets, as well as their infrastructure, implementation of appropriate investment policies, proper use of property of various forms of ownership, ensuring efficient use of local resources, intensification of full and efficient use of existing potential. In order to increase the production of agricultural products, increase the level of employment of non-oil industries, including processing industry services and other infrastructure facilities and further improve the living standards of the population in the Republic of Azerbaijan, "Socio-economic development of the regions of the Republic of Azerbaijan The State Program for 2004-2008 "was approved. The State Program "Socio-economic development of the regions of the Republic of Azerbaijan" (2004-2008) identifies the factors accelerating the development of the economy in different regions, the main directions of state policy and state support in this regard. In order to achieve this goal, the following tasks are envisaged: to increase the efficiency of the use of local resources; to establish various service centers in the regions to assist farmers and other agricultural workers in order to further accelerate reforms in the agricultural sector, to expand the seed base, and to improve the supply of machinery; to improve the provision of the population with public utilities; to encourage the creation of new jobs; to ensure the creation of the necessary infrastructure for the rapid development of the regions, etc. [6]. Not content with the successes achieved, our government has continued to take consistent and effective measures for the development of the regions. Thus, the State Programs approved by the regions of Azerbaijan in 2009-2013, as well as in 2014-2018 will accelerate economic development and increase the quality, increase the share of the middle class in society, further improve the living standards of the population, reduce poverty. , aimed at minimizing the budget deficit, rebuilding production and infrastructure in accordance with modern requirements, further improving the development of entrepreneurship, has played an important role in ensuring sustainable socio-economic development. It is also important to maintain macroeconomic stability in the country in order to achieve the above goals. The successfully implemented oil strategy has led to the integration of Azerbaijan into the international economic system, the maintenance of macroeconomic stability as a result of the efficient use of oil and gas revenues, and has created favorable conditions for the continued implementation of measures in this area. Taking into account macroeconomic stability, maintaining the average annual inflation rate and the national currency, which is one of the main conditions for the development of the economy as a whole, including the regions, in the coming years, setting optimal tax rates, increasing incentives for agricultural producers. The policy of stimulating the creation of new jobs, maintaining customs rates at an optimal level, and effective management of foreign debt is being successfully continued. Comprehensive implementation of measures aimed at the development of the non-oil sector in Azerbaijan will be possible through the application of appropriate economic mechanisms that accelerate the production of export-oriented products.

The development of the country's export potential, the export of Azerbaijani goods and services to foreign markets, the creation of favorable conditions for this, the implementation of measures to ensure the effective integration of the country's economy into the world economy will be a priority in the coming years. In order to effectively realize the country's export potential, create a healthy competitive environment in the domestic market, ensure consumer protection, bring standardization and meteorology in line with international requirements, the following measures will be implemented: stimulating exports in the private sector and increasing the range of exports; strengthening the position of national producers in foreign markets; to further increase the level of services in trade, catering and household services and to implement measures to protect the domestic market within the framework of WTO principles; strengthening measures to combat unfair competition and implementation of measures related to the development of competition, involvement of entrepreneurship and consumers; strengthening control over the quality and safety of consumer goods; It is no coincidence that as a result of the high attention and care paid to the socio-economic development of the regions, our republic is recognized as one of the countries carrying out multifaceted reforms in all spheres of public life and maintaining investment attractiveness. At the panel meeting on "Strategic Vision Eurasia" held on January 22, 2020 within the framework of the Davos Forum, which is considered the world's "brain center", President Ilham Aliyev said: "... We will try to keep poverty below 5% at today's level. . We also have a long-term strategy to reduce foreign direct debt. Today, this debt is very low, accounting for 17% of GDP. However, our goal is to reduce it to 10 percent of GDP. Of course, we will work to keep inflation at a low level of 2.5 percent, as it was last year. People's incomes must always exceed inflation, and job creation must be more than demographic growth ... The country is stable, development is sustainable. We have on our agenda a wide range of reforms that we are implementing and that create great opportunities for our people" [7]. The "State Program of Socio-Economic Development of the Regions of the Republic of Azerbaijan for 2019-2023" was approved on January 29, 2019 to further increase the economic activity of the regions. As a result of continuing the measures started in 2004 to accelerate the development of the non-oil sector, diversify the economy, achieve balanced regional and sustainable socio-economic development and the successful implementation of these reforms, the country has achieved high growth in macroeconomic indicators, socio-economic The implementation of development measures has played an important role in further improving the living standards of the population. Today, the development of entrepreneurship in the regions, further improvement of the business environment is one of the priorities of the economic development strategy of the President of the Republic of Azerbaijan. Azerbaijan's achievements are also reflected in the reports of international organizations and financial institutions. It is no coincidence that according to the World Bank's Doing Business 2019 report, Azerbaijan has risen 32 places from 57th to 25th place in the ranking compared to the previous year, and Azerbaijan has improved its position on 8 out of 10 indicators, according to the document. was included in the list and declared the most reformist country in the world. [8] The advanced world experience shows that flexible and effective management mechanisms, application of innovative solutions play an important role in the socio-economic development of each country, its regions, cities and villages. The main task now is to increase the efficiency achieved through the application of the best economic mechanisms approved in international practice. The independent and sovereign state of Azerbaijan is entering a strategic stage in the post-pandemic period, which is qualitatively new and covers the years 2021-2030. Global economic realities, as well as the goals set at the new stage of development, require the definition of the corresponding national priorities of the main directions of socio-economic development of the country's long-term development vector. Strengthening the successful link between society, business and the trinity for the long-term sustainable and rapid development of our country, effective and efficient management of the

role of the state in the economy through market-oriented reforms, strengthening private property institutions, business-friendly governance and further liberalization of trade regimes will be the main factors of economic growth. The development of private initiatives in the country on a creative and innovative basis will ensure that economic resources are directed to areas that create higher added value. Achieving these goals requires an effective macroeconomic policy that serves sustainable macroeconomic stability, the formation of frameworks, strengthening the medium and long-term "drivers" of economic development, expanding the digital economy, effective development of innovative economies in the regions and full economic sovereignty.

4. CONCLUSION

In recent years, the efficient use of oil revenues in Azerbaijan has led to the diversification of the economy and the development of the non-oil sector. The diversification of the economy, like all other areas, has created favorable conditions for the development of the agricultural sector in the regions. It should be noted that the opinions and suggestions of stakeholders and civil society institutions were taken into account during the preparation of draft strategic road maps in our country, which created favorable conditions for a broad approach to priority areas. The main goal in the implementation of strategic roadmaps is to ensure the competitiveness, inclusiveness and increase of social welfare of the economy on the basis of sustainable economic development in Azerbaijan. The planned projects cover oil and gas, agriculture, consumer goods production, heavy industry and engineering, specialized tourism, logistics and trade, affordable housing, vocational training, financial services, telecommunications and utilities [9]. According to our analysis, in our opinion, it is important to increase the general, socio-economic level of the regions, along with the agricultural sector, through the effective use of material, labor and financial resources of other sectors. It is also necessary to further expand the production of quality and competitive local products, increase the level of meeting the needs of the population, minimize food dependence on foreign countries and effectively address food security, develop entrepreneurship, eliminate inter-regional and intra-regional conflicts and inconsistencies. Finally, it is important to ensure economic security in the field of agricultural production of the country and its regions. Thus, future socio-economic measures in the regions of the country, mechanisms of state regulation of regional development and their improvement will contribute to the diversification of the national economy, balanced regional and sustainable socio-economic development, further improvement of living standards and Azerbaijan's international will create conditions for increasing socio-economic prestige.

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ORGANIZATIONAL CONFLICT MANAGEMENT DURING COVID 19

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ABSTRACT

Covid19 has a significant impact on the organizational life all around the world. Due to the restrictions from the governments based on the social distancing, employees have to work from home and accept new reality in every aspect of life. It has changed not only work, but families and their social life. This has caused changes in their behavior related to the work and daily activities. Due to this fact, managers and leaders of the organizations faced even more difficulties. They have to win on their own feelings and attitudes, adapt to the new reality very fast and manage new organizational reality effectively. Business continuity approaches show its vital need for the organizations. As the organizations who did not have business continuity plan found themselves in front of the high risks. Many of them had difficulties with financial issues, resource shortages and staff well-being. Due to this factors, peoples' behavior and attitude has changed. Their emotional level increased due to the uncertainty which continues even nowadays. As people vary by nature, personality, life-style, family conditions and other factors, they had dissimilar approaches to the new reality which had different impact in the behavior at work. Nature of the organizational conflicts has changed as well and its management has become more challengeable for managers and organizational leaders.
Keywords: Covid19, Current challanges, Management, Organizational confilct

1. INTRODUCTION

COVID-19 has shifted a significant portion of business around the world into a phase of economic uncertainty. (Paresashvili N., et al, 2021). This can change the nature of the conflict. Recognizing employee complaints and perceptions is critical to resolving future organizational disputes concerning coronavirus prevention strategies.Conflicts related to COVID-19 are likely to emerge from two causes: employees not following new guidelines or employers not responding quickly enough to employee concerns. Both causes can be addressed by strategizing to have office policies work hand-in-hand with maintaining good workplace relationships (Zurchhub, 2020). How to manage and how to solve conflicts are vital topics in the organization behavior research process. According to this fact, Covid19 will be focused on creating continuity in the organizational life. The purpose of organizational conflict management is to reduce adverse consequences of conflict on both individual and organizational level.

As a result of conflicts, there are at least three possible consequences: an individual or an organization may suffer from an emotional crisis, and it can lead to a lower productivity and satisfaction. On the other hand, conflict can enhance creativity in solutions or cause growth in cooperation between employees or organizations involved in the conflict. Conflict is defined as a gap between stakeholders' expectations which does not match their needs. By better understanding what may be causing the conflict, warning signs of aggression, and practicing self-management techniques, employees can feel better equipped to engage with others safely. To assist businesses and organizations as they navigate this difficult time, Michigan State university offered a course "Communicating through conflict during COVID-19" free of charge.(Gardner L, 2020)

2. REVIEW OF THE STUDIES
Numerus studies are conducting concerning the impact of Covid19 on different aspects of organizational life, including conflict managements. Employees face a variety of economic, social-psychological, and health relatedrisks as either a direct result of COVID-19 or indirectly as a result of economic shutdowns associated with COVID-19 (Kniffin K.M, et al., 2021). In 2020, by Vaziri H, et al., have conducted a study in USA. Participants were recruited through Amazon Mechanical Turk (MTurk), who were required to work at least 32 hrs. per week. Total 379 complete responses were received. Aim of the study was impact of the Covid19 on the work-family conflict and enrichment, also, its implications for work attitudes (job satisfaction, commitment, and turnover intentions) and job performance (organizational citizenship behaviors and in-role performance). They have studied active, passive and beneficial profile transitions during Covid19. As a result, studies have shown, that employees who transition to a more negative WF profile during such events have more negative job attitudes and report fewer positive work behaviors. As such, employers have good reason to help workers manage work and home during societal turmoil. Those that offer emotional support from compassionate supervisors and instrumental support for new technology may ease WF transitions and benefit with committedemployees who remain long after societal turmoil passes. Schieman S., et al, 2021, has conducted study on the Canadian workers from the C-QWELS. The first online survey was fielded from September 19 to September 24, 2019 (n = 2,524), secondwith these same study participants from April 17 to April 23, 2020, and then once again from June 17 to June 23, 2020. All study participants are members of the Angus Reid Forum (ARF), a built and managed panel of Canadians who have agreed to participate in research. Panel participants are recruited through a variety of online and offline channels, extensively profiled, and measured to ensure accurate representation of the diversity across Canada's adult population. According to the authors, those without children at home had less work-life conflict. Those who had children at home, on the other hand, had tendencies that varied depending on the youngest child's age. There were no decreases in work-life conflict among parents with children younger than 6 or between 6 and 12. Those who had adolescents, on the other hand, were no different from those who did not have them.

2.1. Case of Georgia
While discussing Covid19 impact on the individuals in context of organizational conflict, first thing comes to mind is the emotional resilience and inner state of the employees. People has different perceptions of the stressors and accordingly their response and behavior in conflict is different. Thus, to understand and respect of each other's diverse nature is vital. In Georgia, we conducted a study on conflict management in 2020. Respondents were from private and public organizations. Total 550 valid responses were received. As per this study, 76% of the respondents respect each other in spite of diversity. 9% disagrees and 16% partially agrees this view. 76% is not big part in the context of respect in the pandemic reality.

Today, more than ever, people need to understand one another and respect.This can lead to a positive psychological-emotional environment in organizations. From respondents of the study, 47% of them considers their psycho-social environment in the organization is positive, 43% - natural and 1% thinks it is negative(Diagram 1). Low number of the negative answers was predictable, as due to the Covid19, in every organization, at least few employees work remotely. The less is number of the employees in the organization, the lower is probability conflict person to be among them.
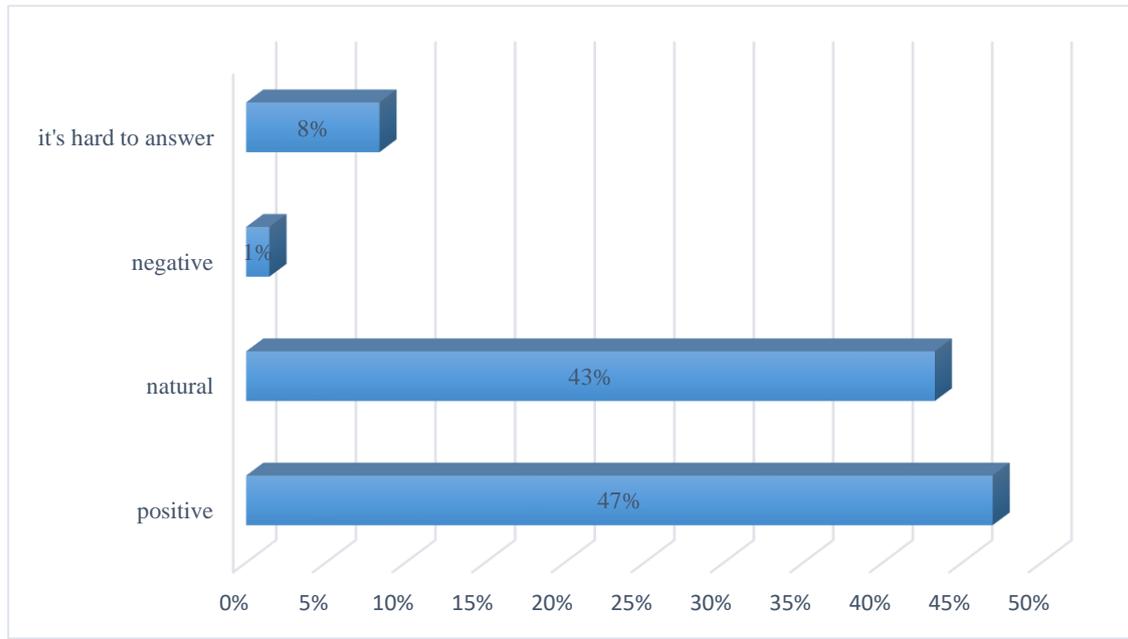
Diagram 1: Psycho-social environment in Organizations

94% of respondents do not consider themselves a conflicted person. It should also be noted that being a conflicted person does not evoke a positive association in people, and the answer to this question would most likely be the same. However, despite this answer, when asked how often they become involved in the conflict, 25% of respondents answered that periodically, 69% - almost never, and 6% finds it difficult to answer. The nature of the conflict in the Georgian organization is quite peculiar, its management requires a special approach from managers and in-depth analysis. The current events in the environment are the same, people's attitudes towards them are different. The study has shown that 78% of the respondents have negative attitude towards the conflict, 20%- natural and only 2% has positive (Diagram 2). Reason of it can be low level of knowledge and education. As in Georgia, there is a significant mismatch between the needs of the employer and the skills offered by the potential employee (Paresashvili N., Okruashvili N, Nikvashvili M, 2021).

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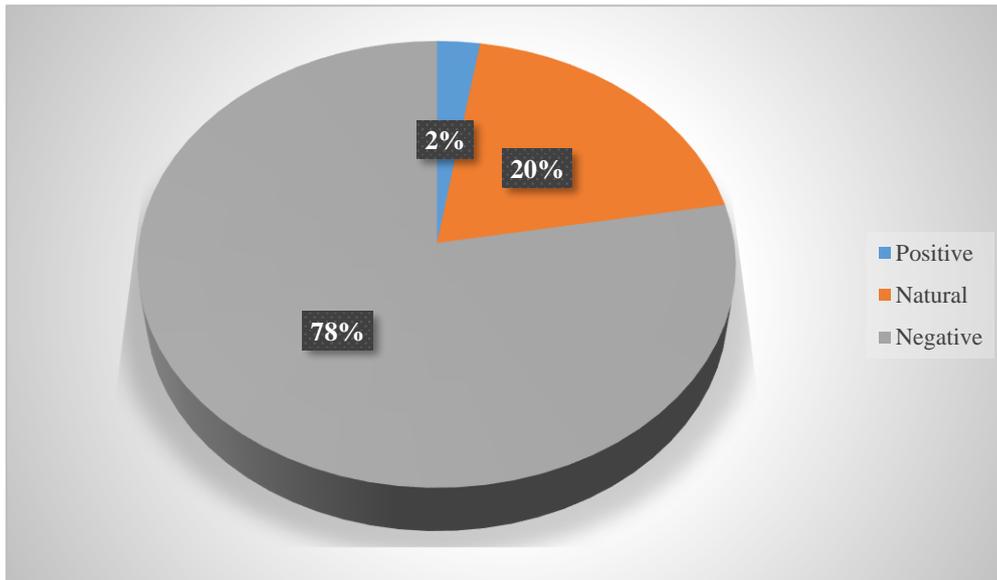
Diagram 2: Attitudes towards the conflict

As Covid19 has empact on every aspect of organizational life, including conflict management, let us go deeper and compare conflict resolution methods before Covid19 and recently. In 2018, about conflict management study results was published in 2017 by Paresashvili N, Maisuradze T.Comparison is given in Table 1. In 2017 studies total 120 respondents were interviewed.

Conflict resolution method	2017	2020
Collaborate	48.3 %	82%
Dominate	10 %	0%
Avoid	16.7 %	5%
Accommodate	1.7 %	4%
Compromise	23.3 %	8%

Table 1: Conflict resolution methods in Georgia in 2017 and 2020

We can see that method of domination is least used method in conditions of Covid19 is around. It has decreased from 10% to 0%. Also, the same tendency is with the avoiding method, from 16.7% to 5%; with the compromise – same, from 23.3% to 8%. The conflict methods which use has increased is accommodating (from 1.7% to 4%) and Collaboration with the biggest increment from 48.3% to 82%. If we remind the evaluations of Covid19 by the researchers from the organization science and from the medicine, these changes and tendencies can be easily explained. As per everyone claims and each of us have experienced on ourselves, Covid19 made us think about the sense of the life, reviewed goals and steps towards the achieving it, we have valued humanity and much more. In June 2020, Relyea G. andCloke K., described lessons of Covid19 following way: "We have learned from the pandemic that we are all facing death, and are therefore one, connected by crisis and undivided by conflict. And we have also learned that we are facing it differently, and are therefore many, separated by race, gender, nationality, age, religion, wealth, occupation, social class, political beliefs, emotional vulnerability, and physical well-being, and divided by conflict". Thus, people realize more, that instead of competing, it is better to collaborate. It seems, they realize context of the conflict and the view of opponent so, that feel more empathy and they choose collaboration. They don't feel like they are compromising or avoiding anything. Another issue is how all these will turn into the habits and people did not go back to pre-Covid19 life habits.

For understanding Covid19 influence on the organizational conflicts, let us observe how the frequency of the conflict has changed. Comparison of conflict frequency before and after Covid19 is given in Table 2.

Conflict frequency	2017	2020
Very seldom	71.7%	70%
frequently	25%	5%
Not happens	3.3%	25%

Table 2: Conflict frequency comparison in 2017 and 2020

This result also confirms the above mentioned view and can be explained by same logic, that the priorities has changed and together with the reason of remote working frequency of conflict has decreased. What has stayed unchanged is the main reason of conflicts. In 2017 study, the main reason of the conflict was working roles (56.7%) and in 2020 it is improper distribution of functions and duties (29%). Difference between years can be easily explained by looking at the second reason of conflict in 2020 – salary (20%). Seems, the pandemic, economic decline, high level of inflation (in March 2017-2.1%, in March 2020 – 5.8%. www.geostat.ge) and unemployment increases the importance of salary for everyone in Georgia. Lack ofjobs is a more important issue for the population than territorial integrity, protection of humanrights, accessibility to medical care, education, etc (Paresashvili N., et al, 2020). Nowadays, communication has become more meaningful for employees and organizations. As HR managers of the Georgian organizations discuss on the webinars, communication was the key factor which helped them in adapting new reality successfully. Remote working made it clear for everyone, even for the people who could not work remotely due to the specific of their works. They have to communicate remotely to the colleagues working distance. This factor is vital also for conflict management. While asking respondents of 2020 study who the managers could manage conflict effectively, their answer was also communication (56%). Other options were creating proper organizational culture (25%) and gathering full information about conflict (12%) (Diagram 3).
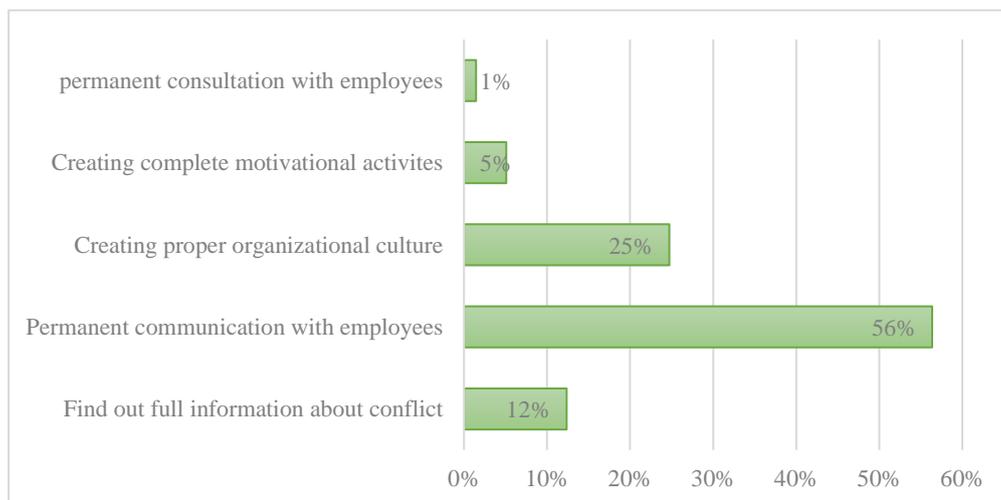
Diagram 3: What can managers do for managing conflict effectively?

Here should be mentioned, that these studies have limitations as well. Respondents from the study 2017 can be different from 2020 study. Main tendencies would be stayed same, but it cannot be as accurate as it would be in case of the same respondents.

2.2. New tendencies
Besides the positive tendencies in overall conflict management mentioned above, due to the Covid19, new types of Conflicts arisen. In September 2020, on the website of SHRM - Society for Human Resource Management, has published article by Nagele-Piazza L., about resolving co-worker conflicts over coping with Covid10. She discusses about the conflicts which arisen after reopening workplaces. Employees have to protect recommendations from national health institutes and internal policies about preventing the spread of Covid19. As employees have different perceptions of the pandemic and its results, some of them is frightened and strictly protects all rules and make angry when see someone next to them not behaving like this. This causes conflict between these two persons. Besides, HR professionals struggle a lot as they are the persons watching and controlling the rule protection process and make disciplinary sanctions. The same ideas are given in the article of Coronavirus (COVID-19) resource hub by Zurich in October 2020. They note, that people always bring their day-to-day problems into the office with them and Covid19 can escalate those concerns.

3. CONCLUSION
As Covid19 is around us besides the vaccination and whole world struggles by its negative outcomes on the economic stability, it is uncertain how the current, newly visible trends will transform or what kind of new ones will arrive. Thus, its impact on the organizational conflicts will continue being attractive topic for the researchers. Of course, our study is limited due to the number of respondents and the time passed since Covid19 and due to the lack of researches around the world about Covid19. In Conclusion, based on the comparison of different studies, we have seen that the nature of conflicts has changed. Total number of conflict cases has decreased as work nature has changed. People are working remotely or partly remotely till now. They have meet each other rarely, which decreases probability of appearing stressors and develop conflict. As we know, for happening conflict it is must to have stressor, one party who has the reason for conflict and the opponent who reacts on the first party's reaction. Also, as discussed in the paper, people has realized that we are all together in the pandemic reality, what touches one person, touches another too. This made them be more empathetic, think that collaboration is best option for resolving conflict other than "battle" to win. But here should be mentioned that because of diversity of people and their unique personality, they perceive variously the same reality. It makes new types of workplace conflicts, such is conflict between employees or between employees and manager. Recommendation from the authors can be more communication with the employees despite the distance. By communication, organizational trust can be achieved. Guzzo F.R, at al., have conducted study on this topic and found out thatEmployees' gratitude and fear toward the organization affected organizational trust; through fear, trust declined when the message focused on business bottom-line and through gratitude, both focuses had positive effects on organizational trust. Trust will help employee job satisfaction. Job satisfaction affects a number of organizational behaviors and can greatly determine employee well-being (Paresashvili N, et al, 2021). Furthermore, HR professionals together with management should make more effort to feel employees involved in organizational processes again, to strengthen their organizational culture and adaptation motivational systems. Every organization has specific style, specific rules, policy and situations which can not be combine in general rules (Maisuradze T., 2017). So, they should be considered as well. Also, it should not be left beyond attention that stimulation of conflict can be very effective mechanism for organizational development with its constructive outcomes. The reasons, decreasing organizational conflicts, can be not as positive as it seems at this stage. May there are hidden stressors which needs a lot of attention from managers, as it is hard to see it and predict the conflict in case of remote working. This may manifest itself in the future, when everyone will return the workplaces. But all these needs further and continues research.

We should observe and analyze trends but should not forget about future. Also, as Zurich advises, employers can help relieve anxieties and grievances within their workers by having required knowledge, resources, and direct contact, and may be best able to effectively settle conflicts as they arise. Mindfulness can be future goal for the Management and HR professionals, as supportive association between fear of COVID-19 and work uncertainty can balance by mindfulness and connection between work uncertainty and emotional fatigue was reinforced by perceived organizational support (Chen H., Eyon K, 2021).

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ASSESSMENT OF THE IMPACT OF THE LEADING PROCYCLICAL INDICATORS ON THE SOCIO – ECONOMIC DEVELOPMENT OF THE COUNTRY

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ABSTRACT

The purpose of this article is to assess the impact of procyclical indicators on the main macroeconomic fundamentals of the development of the Azerbaijani economy. As a result, 11 different economic indicators were reviewed and analyzed based on the annual data of the State Statistical Committee from 2000 to 2020 inclusive. Method and methodology of the work. The methodology of the work is comprised of correlation - regression and graphical analysis, as well as fundamental works of foreign scientists and research by experts from the IMF and the National Bureau of Economic Research (NBER) of the United States. The article investigated and evaluated autocorrelation coefficients for the presence of lagged independent variables and their impact on macroeconomic variables with some delay. The versatile econometric tests carried out in the course of the research showed that the constructed econometric models meet all the basic postulates of econometric analysis, that is, they meet the conditions of specification, parameterization and verification and are sufficiently adequate to the real economic situation in the country. Consequently, the conclusions obtained in the study can be successfully applied to predict cyclical development during the period of diversification of the Azerbaijani economy. The novelty of the research lies in the uniqueness of the work. The study revealed a system of procyclical macroeconomic indicators that allow monitoring economic fluctuations in the Azerbaijani economy. The identified various groups of indicators, leading indicators, which, with a certain degree of reliability, make it possible to identify the phases of expansion and contraction of the economic system, to determine negative trends in the economy and to allow taking measures to eliminate them. Also, false procyclical indicators were highlighted, which in fact do not have any effect on macroeconomic indicators. As a result of the study, three multivariate linear and logarithmic regression models were assessed, the features of the influence of countercyclical indicators on Azerbaijan's GDP were revealed, and their significance was determined. The research results can be used both for monitoring the development of the Azerbaijani economy, and for forecasting, predicting the onset of the corresponding phases of the economic cycle, in order to adapt and reduce the negative impact of crises at the micro and macro levels.
Keywords: *indicators, factors, economic cycle, procyclical factors, correlation analysis, GDP*

1. INTRODUCTION

When studying fluctuations in the values of economic indicators during the economic cycle, pro-cyclical indicators come to the fore. Procyclical indicators move in the same direction as the economy. If everything is good in the economy, the economy expands - these indicators usually increase; if the economy is in a recession, it shrinks - procyclical indicators decrease. Gross Domestic Product is an example of a pro-cyclical economic indicator. The relationship between macroeconomic performance and financial indicators on the example of numerous currency crises in developed and developing economies was deeply studied by Aziz J., Caramazza F., Salgado R. [Zenkova 2009]. The IMF experts were also involved in identifying the leading indicators for identifying currency crises [Aziz 2000]. Herein, the work analyzes the crises of 50 developed and developing countries (1975 - 1997).

The 2019 IMF Report on Global Financial Stability provides an analysis of the impact of various macroeconomic indicators on financial stability. [Issue Report 2019]. According to the classification of the National Bureau of Economic Research of the United States and Western Europe, three groups of factors are distinguished:

- outstripping, or leading: reaching the maximum (minimum) before hitting the rise (decline) [Snieska 2019];
- lagging: reaching the maximum (minimum) after hitting a rise (decline) [Hansen 1997; McConnell 2003];
- coincident or corresponding: moving along with economies [Keane 1988; Zenkova 2005;].

It should be noted that economic performances are analyzed and published by many national and international organizations.

2. ECONOMIC ANALYSIS

So, the article presents an analysis of 11 indicators reflecting the cyclical development of the Azerbaijani economy in the period from 1998 to 2020. Symbols of indicators used in the study to analyze various types of indicators of the economic cycle are presented in Appendix 1.
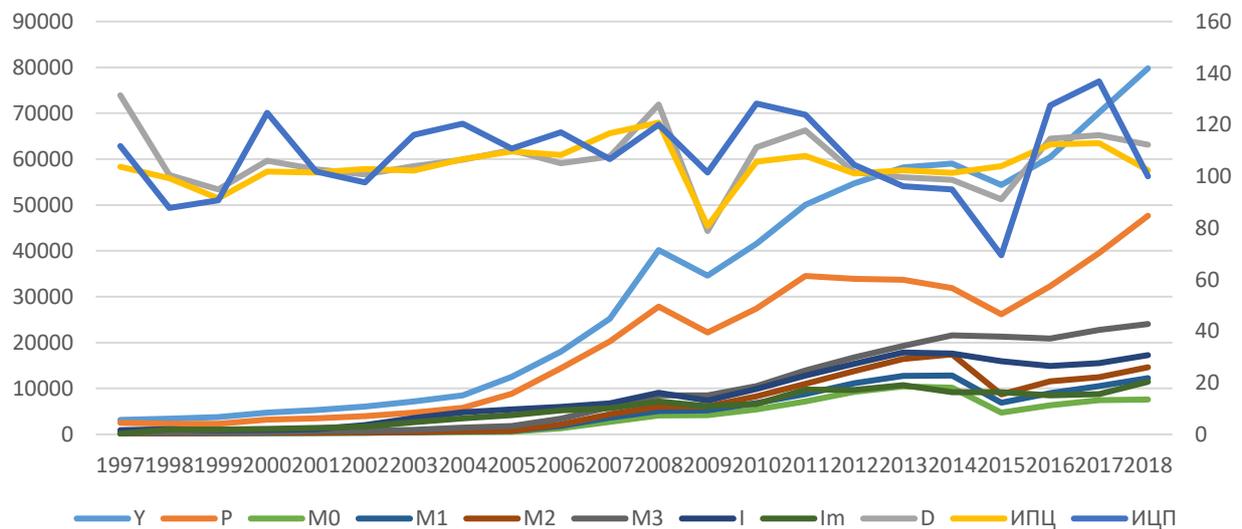
Figure 1: Dynamics of GDP and procyclical indicators of Azerbaijan (in comparable prices) (Source: Statistical Bulletins of the State Committee; Statistical Bulletins of the Central Bank)

Figure following on the next page
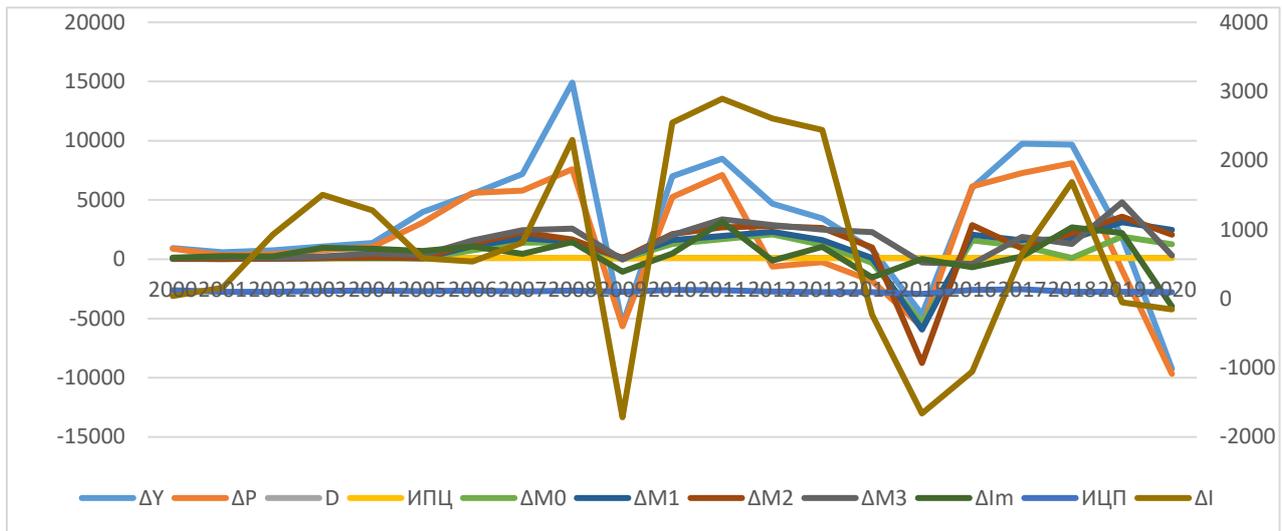
Figure 2: Dynamics of increments of GDP and procyclical indicators of Azerbaijan
(Source: Statistical Bulletins of the State Committee; Statistical Bulletins of the Central Bank)

According to fig. 1 and fig. 2., procyclical indicators rise in the recovery phase and shrink in the recession phase of the short and medium term economic cycles. In addition, the volume of industrial production, monetary aggregates, industrial production price index, deflator, consumer price index of the Azerbaijani economy are not only procyclical, but also coinciding indicators, since they change almost simultaneously, in accordance with changes in economic activity. We tested our assumptions using statistical methods of correlation analysis and studying the lag component in time series. The results of the pairwise correlation analysis of Azerbaijan's GDP and its growth with procyclical indicators showed the presence of a close positive relationship between these indicators (Table 1.)

	ΔY	ΔP	D	ИПЦ	ИЦП	$\Delta M0$	$\Delta M1$	$\Delta M2$	$\Delta M3$	ΔI	ΔIm
ΔY	1										
ΔP	0,941808	1									
D	0,892806	0,869935	1								
IPC	0,676835	0,633575	0,830231	1							
ICP	0,602092	0,666653	0,686892	0,473823	1						
$\Delta M0$	0,455042	0,400585	0,426062	0,238622	0,58999	1					
$\Delta M1$	0,420142	0,368925	0,393619	0,216224	0,519396	0,972109	1				
$\Delta M2$	0,439439	0,396985	0,389384	0,17996	0,506605	0,967642	0,981485	1			
$\Delta M3$	0,502383	0,315706	0,363278	0,318774	0,209929	0,536587	0,563606	0,553936	1		
ΔI	0,634543	0,523234	0,593107	0,387032	0,396652	0,519058	0,474897	0,499606	0,54102964	1	
ΔIm	0,64592	0,662157	0,532971	0,254889	0,227013	0,110197	0,1016	0,140562	0,43656023	0,519943	1

Table 1: Correlation analysis of GDP (Y), increment of GDP (ΔY) and procyclical indicators
of Azerbaijan
(Source: Author's calculations)

Factorial influences on the macroeconomic dynamics of the economic system may not appear immediately. This is due to the characteristics of the indicator: leading, coinciding, or lagging. In the course of the study, the time lag arising between the involvement of the indicator in the cyclical dynamics and its influence on the output and increment of the output is estimated.

Any factorial influences on macrodynamics may not appear immediately; accordingly, the reaction of the economic system is delayed by a certain period. As a result of the analysis of the table of pairwise linear correlation coefficients of the annual increments of the regressors with the increase in the volume of GDP, the position (condition) was adopted that there can be no growth on expectations (negative lag). Thus, a lag was found, with a period of 6 years. It should be noted that the duration and time of turning points and periods depends on the intensity of the factor's impact on the economic cycle and the duration of the reaction of the economic system to this factor. This phenomenon is confirmed by statistical methods of analysis. In particular, the calculation of pairwise correlation coefficients with lagged explanatory variables is presented in Tables 1 and 2.

Lags (years)	Y			ΔY						
	Indicators			Indicators' increment						
	P	**I**	**Im**	**ΔP**	**$\Delta M0$**	**$\Delta M1$**	**$\Delta M2$**	**$\Delta M3$**	**ΔI**	**ΔIm**
0	0,972	0,944	0,945	0,922	0,633	0,897	0,850	0,974	0,664	0,572
1	0,950	0,905	0,903	0,218	0,053	0,148	0,118	-0,094	0,263	0,054
2	0,914	0,894	0,909	-0,028	-0,338	0,035	-0,077	-0,018	0,503	0,156
3	0,896	0,910	0,925	-0,162	-0,407	0,097	0,107	-0,405	0,299	0,178
4	0,914	0,923	0,931	-0,297	-0,134	-0,871	-0,884	-0,322	0,071	0,320
5	0,909	0,925	0,948	-0,036	0,113	-0,178	0,016	0,226	0,157	0,181
6	0,888	0,927	0,9471	0,237	0,211	0,299	0,414	0,328	0,362	0,188

Table 2: Linear pairwise correlation of GDP and GDP increment in Azerbaijan with some procyclical indicators and their increment
(Source: Author's calculations)

3. ECONOMETRIC ANALYSIS

As a result of econometric modeling in order to find dependencies and the influence of indicators on socio - economic performances, the following three multiple regression models were obtained by the OLS method, the econometric characteristics of which are presented in the Table. The volume of industrial production in Azerbaijan in million manat and the Gross Domestic Product of Azerbaijan for the period from 1997 to 2020 inclusive were taken as dependent variables. All the above – mentioned procyclical indicators were taken as independent variables. On grounds of the analysis, it was revealed that the data represents a time series. In order to avoid confusion and find false dependencies, the first differences were taken as the initial data for modeling. Using the differences allows turning non-stationary time series into stationary ones and avoiding high multicollinearity in the model.

Table following on the next page

	Model 1	Model 2	Model 3
	Dependent variable: ΔP	Dependent variable: ln $\varDelta Y$	Dependent variable: $\varDelta Y$
	Coefficient	*Coefficient*	*Coefficient*
const	-	−11.7444 ** (−2.462)	1643.89 ** (2.188)
$\Delta M0$	1.06783 ** (2.642)	-	1.36307 *** (3.886)
ΔIm	2.09522 *** (4.353)	-	2.28390 *** (3.785)
ln ΔP	-	0.810304 *** (13.73)	-
ln D	-	2.87641 ** (2.644)	-
R-squared	0,60	0.981606	0.575340
Adjusted R-squared	0.57	0.978262	0.528155
F(2, 19) P-value(F)	11.61345 0.000507	293.5179 2.86e-10	12.04821 0.000478
Schwarz criterion	404.5376	−6.468886	412.0495
Akaike criterion	402.4486	−8.386058	408.9160
Breusch-Pagan test for heteroskedasticity Test statistic: LM p-value	3.31867 0.190265	0.956796 0.619776	2.14952 0.341379
Test for normality of residual Test statistic: Chi-square(2)	1.26291 with p-value = 0.531816	2.3232 with p-value = 0.312985	0.997525 with p-value = 0.607282
RESET test Test statistic: F(2, 17)	0.938021 with p-value = 0.410746	2.00591 with p-value = 0.190357	1.16486 with p-value = 0.337064
Variance Inflation Factors	1.013 1.013	2.344 2.344	1.013 1.013
* in brackets are standard errors (t-ratio)			

Table 3: Econometric characteristics of models 1, 2 and 3. OLS, using observations 1-21
(Heteroskedasticity-robust standard errors, variant HC1)
(Source: author's calculations in the Gretl program)

So, as a result of econometric analysis of the influence of procyclical factors on the dynamics of the volume of industrial production in Azerbaijan, a multiple regression linear model 1 was obtained. According to this model, it was determined that the volume of industrial production is most influenced by the monetary aggregate M0, i.e. the amount of cash in circulation, and import. Both independent variables are statistically significant at the 5% and 1% levels, respectively. Thus, with an increase in imports by 1 million US dollars, the volume of industrial production in Azerbaijan increases by 2.0952 million manat. An increase in the money supply by 1 million manat leads to an increase in the volume of money supply by 1.0678 million manat. Model 1 is generally adequate because the Fisher statistic of this model is greater than the critical value of 7.09347 with a probability of 1%. Also, model 1 is a model without a constant (const), therefore, the interpretation of the coefficient of determination will be incorrect.

According to the multivariate logarithmic model 2, procyclical factors such as the volume of industrial production and the deflator affect GDP growth. The volume Industrial production is a statistically significant parameter in the model at all levels of significance. Thus, with an increase in industrial production by 1%, it leads to an increase in GDP by 0.81%. An increase in the deflator by 1% leads to an increase in Azerbaijan's GDP by 2.87%. The proportion of variance explained is 98%. According to model 3, the change in GDP is affected by the monetary aggregate M0 and imports. Both coefficients of the independent variables are statistically significant. This suggests that with an increase in the money supply by 1 million manat, Azerbaijan's GDP will increase by 1.36 million manat. With an increase in imports by US $ 1 million, GDP increases by 2.28 million manat (1.34 million US dollars). All three models are adequate and significant. According to the econometric characteristics presented in the table, there is no multicollinearity in the models. All Variance Inflation Factors of all explanatory variables included in the models are less than 10. According to the Ramsey test, the null hypothesis of the correct model specification is accepted in all three models with a p-value greater than 0.05. When testing the models for the normality of the residuals, we also accept the null hypothesis of the normality of the residuals with a p-value greater than 0.05. The Breusch-Pagan test for heteroskedasticity also shows that we accept the null hypothesis that there is no heteroskedasticity in the model at a probability greater than 5%. Along with the independent variables included in the model, other procyclical indicators were also tested for functional linkages. But these indicators were statistically insignificant in regression models, in view of which they were excluded from further modeling. These include investments in fixed assets, consumer price indexes, industrial production price index, monetary aggregates M1, M2 and M3.

4. CONCLUSION

The study revealed a system of procyclical macroeconomic indicators that allow monitoring economic fluctuations in the Azerbaijani economy. Various groups of indicators, precursor indicators have been identified, which, with a certain degree of reliability, make it possible to identify in advance the phases of expansion and contraction of the economic system, to determine negative trends in the economy and to allow taking measures to eliminate them. Among the procyclical indicators, the factors that affect the GDP and industrial production of Azerbaijan and factors that are related but do not affect these macroeconomic indicators were identified. The indicators that directly affect GDP include the M0 monetary aggregate, deflator, imports and the volume of industrial production. The volume of industrial production is influenced by imports and the monetary aggregate M0. Thus, in the period of economic recession, a decrease in these indicators will lead to a decrease in the country's GDP, and during the growth and expansion phase, these indicators will increase and accordingly affect the GDP. Finally, the article carried out a qualitative correlation analysis, regression and graphical analysis. The dynamics of economic indicators during the period of economic recession, before the financial crisis and during the period of economic expansion is presented. On the basis of a qualitative analysis, hypotheses were put forward, tested in the course of further research using statistical and econometric methods. As a result of the study, three econometric models of multiple linear regression were obtained. All three models satisfy the Gauss-Markov conditions, are adequate and can be used for practical purposes.

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APPENDIX

Application 1: Symbols of indicators used in the research to analyze various types of indicators of the economic cycle

Symbols of indicator	Indicators, unit of mesure
Y	Gross Domestic Product (GDP), million manats
Δ Y	Increment Y
P	Azerbaijan industrial production, million manats
Δ P	Increment P
I	Fixed investment, million manats
D	Deflator, %
CPI	Consumer Price Index,% to the previous year
IPI	Industrial production price index, % to the previous year
M0	M0 money supply, million manats
M1	M1 money supply, million manats
M2	M2 money supply, million manats
M3	M3 money supply, million manats
Δ	Increment of relevant indicators
IM	Import, in millions of US dollars

EVALUATION OF THE BANKING SECTOR SERVICES INTENDED FOR THE KARABAKH REGION

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ABSTRACT

Since the collapse of the Soviet Union in 1988, the Karabakh issue has been on the agenda of the world public opinion. This conflict has been experienced between Azerbaijan and Armenia in the Nagorno-Karabakh Autonomous Region, which has been a Turkish territory throughout history. This problem reached its peak when Armenia occupied 20% of Azerbaijani territories in 1992-1994. The Second Karabakh War, which took place after a long silence, was the most intense and longest war since the ceasefire agreement signed in 1994. This war resulted in the recovery of Azerbaijan's occupied territories with the contract signed on 10 November 2020 after the liberation of Shusha, the second largest city of Nagorno-Karabakh. Following the long-awaited victory for the development of the banking sector, PASHA Bank, one of the leading banks in Azerbaijan, opened a PASHA Bank branch in Shusha, using all its experience and knowledge to support government initiatives and reintegration into the liberated regions, as well as to develop entrepreneurship. He emphasized that it is ready to establish relations with partners both within and abroad. Purpose of the research: The liberated Azerbaijani lands, agriculture, precious metals, transport and logistics, tourism and hospitality, have a unique economic potential in many other parts of the real sector of the economy. In this study, the services of the banking sector for the Karabakh region, which has an effective economic potential, have been examined and evaluated. Research method: Both qualitative and quantitative methods were used in the study.In other words, secondary data such as reports, news, domestic and external academic publications published by state and private institutions were used. In addition, the opinions of the powers of some banks were taken and primary sources were applied.
Keywords: Banking, Nagorno-Karabakh, Integration, Economy, Development

1. INTRODUCTION

Humans are the most advanced creatures in nature and have diverse personalities. While some are happy to have their own property, others are always willing to annoy others by getting caught up in their ambition to have more. The "Karabakh" issue, which has led to debates about the borders in the South Caucasus for nearly 200 years and caused interim wars, is one such event. The most important factor causing this problem is the Armenians' dream of a "Great Armenia". Considering the geographical features of the Nagorno-Karabakh region, it has a very important position. It has been the sovereign area of many states from the past to the present and many states have fought for these lands. Throughout history, countries such as the Ottoman Empire, Iran, the Russian Tsar, and the Soviet Union have tried to influence this region. According to the 1970 list, the population of the Nagorno-Karabakh Autonomous Province was determined as 150.313 people. It is connected to the province of Khankenti, Asgeran, Hadrut, Agdere, Hocavent and Shusha. The Nagorno-Karabakh issue was brought up by the Russian Empire nearly two centuries ago for geostrategic reasons. At the beginning of the 19th century, Armenians were in the minority, while Turks, mainly Azerbaijanis, were in the majority in the lands that correspond to today's Armenia and Karabakh region. Most of the Armenians lived in the lands of the Ottoman Empire and Iran, while Karabakh is a Khanate, where the majority of

Azerbaijani Turks were formed. After the Russian Empire invaded the Caucasus, believing that it would benefit the administration of the region, it adopted a policy of increasing the population of Armenia. Therefore, Armenians who tried to live in Iran and the eastern part of the Ottoman Empire were settled in the Caucasus. While Armenians settled in the region, a part of the Muslim population, especially Karabakh, migrated to other regions of Azerbaijan and the lands of the Ottoman Empire. Since 1905, Armenians have committed extensive genocide against Azerbaijanis. The Armenian genocide against Azerbaijanis started to take a more disastrous shape in Karabakh. The genocides they committed in 1905-1906 were not enough. Doomed to bad luck in the rebellions they started against the Ottoman Empire in 1915, the Armenians began to continue the genocide against the Azerbaijani Turks by gathering their main forces in the South Caucasus and taking shelter under the auspices of Tsar Russia. This problem, which has been on the agenda of the world public opinion since the collapse of the Soviet Union in 1988, reached its peak when Armenia occupied 20% of the Azerbaijani territories in 1992-1994. Armenians killed a total of 613 people, including 83 children, 106 women and more than 70 elderly people, in the town of Khojaly, where they first closed their entry and exit with the support of the 366th Regiment in the region on the night of February 25, 1992, and seriously injured 487 people in total. 1275 people were taken hostage and 150 people disappeared. In the examinations made, it was seen that many of the corpses were cremated, their eyes gouged, and their heads beheaded. It has been found that pregnant women and children are also exposed to this savagery. The Azerbaijani Turks, who migrated to other regions since 1992, were obliged to live far from the lands where they were born and raised. The Second Karabakh War, experienced after a long silence, was the most intense and longest war since the ceasefire agreement signed in 1994. This war resulted in the recovery of Azerbaijan's occupied territories with the contract signed on 10 November 2020 after the liberation of Shusha, the second largest city of Nagorno-Karabakh.

2. SOCIAL AND ECONOMIC PERSPECTIVES OF THE KARABAKH REGION

Karabakh has maintained its feature of being an important center in almost every period of history. The fact that the Azikh and Taglar caves, which are among the oldest settlements in the world, are also in Karabakh indicates the importance of the region. Various studies show that the material and spiritual civilization of Karabakh is within the material and spiritual civilization of Azerbaijan. Karabakh is rich in natural resources; It has been the scene of wars in every period of history from past to present due to reasons such as being at an important crossing point, the importance of its geographical location, and the constant struggle of the forces in the Caucasus region to take over this region. Nowadays, the reason in question and the strategies of the great states regarding the region seem to be an important factor in the problem of Karabakh. Located in the southeastern part of the Lesser Caucasus, this region includes Jabrail, Fuzuli, Hocavend, Aghdam, Khojaly, Terter, Shusha, Khankendi provinces. Its nature is generally mountainous. The northern part of the economic geographical region of Upper Karabakh is the northeastern foothills of the Karabakh mountain range and the southern slopes of the Murovdag mountain range (the highest peak of the Lesser Caucasus, Kamis Mountain (3724 m)), the central, western and southern parts of the Karabakh mountain range (Kizkule Mountain). (2843 m), Kırkkız Mountain (2827 m), Büyük Kirs Mountain (2725 m), the northeast and eastern parts are covered by the western coasts of the Karabakh and Mil plains. It borders with the Islamic Republic of Iran in the south and southeast. The Murovdağ and Karabakh mountain range is divided into several side branches that descend towards the Garabagh and Mil plains. As a result of the fragmentation of the series and its tributaries by rivers, deep and steep valleys were formed. There are intermount pits in the areas where the middle mountain stream creeks expand. Forests in the region are 187.7 thousand ha.

At the same time, 4 mammals, 8 birds, 1 fish, 3 amphibians and reptilians, 8 insects and 27 plants were protected in these regions. It is possible to find more than 2,000 plant species in the region, which has rich vegetation. In the plains there are wormwood, steppe, semi-field, rocky, shibye, barren, gallows steppe and semi-steppe plants on the mountain slopes, bushes on the mountain slopes, broad-leaved forests (beech, oak, etc.). There are sub-alpine and alpine meadows above 2000-2300 m above sea level.

2.1. Social perspective

Before the USSR, at the beginning of the 20th century, winemaking, sericulture and cotton farming dominated the economy of Karabakh, where there were mostly agricultural and agricultural businesses: winemaking enterprises in Shusha of Garabagh were more than other cities. Karabakh sericulture was mainly Shusha and He was settled in Jabrayil. Cotton growing started to occupy an important place in the agricultural sector of Azerbaijan and hence Karabakh starting from the end of the 19th century and the beginning of the 20th century and it has developed from year to year. It is noteworthy that a significant amount of agricultural land has been allocated in the city of Shusha in order to create the necessary raw material potential for the cotton processing industry. Carpet weaving had an important place in the economy of Karabakh at the beginning of the 20th century. Carpet weaving in Karabakh has been centralized and developed in Shusha since the second half of the 18th century. The carpets belonging to the group of Karabakh carpets differed in their name and embroidery. Carpets woven in the towns of Shusha, Javanshir and Jabrayil in Karabakh had an important value in foreign markets. Especially there was a significant demand for Karabakh carpets in British and American markets. The industrial areas related to animal husbandry in Karabakh had a more primitive character. Examples of these industrial areas are leather and leather products, woolen cloth, oil and cheese. These areas were occupied in all the towns of Karabakh.[18] In general and briefly evaluated, it is understood that the economy of Karabakh was developing at the beginning of the twentieth century, although it was not fast, and that this development was gradually capitalist.

2.2. Economic perspective (aboveground and underground resources)

The Nagorno-Karabakh Autonomous Region was established on June 7, 1923. When it was founded, it had an area of 4.4 thousand square kilometers.[19] The fact that the Nagorno-Kara-Bagh was included in the composition of Azerbaijan on the one hand, and its status as an autonomous region on the other, provided great opportunities for the economic development of the region. The economic development day by day increased the interest of Armenians in the region. Electricity stations and railways connect Karabakh to Azerbaijan, thus Karabakh was in a central position. Compared to other regions of Azerbaijan, the richness of Karabakh's natural resources and the opportunities provided by its geographical location played an important role in the development of the region. With these features, Karabakh assumed the function of locomotive power in the country's economy. During the Soviet Union period, the economy of Nagorno-Karabakh was mostly based on the agricultural sector, including grapevine, sericulture and animal husbandry. Its industry, on the other hand, focused on electronics, machinery production, weaving, wood products production, and furniture. The annual increase in industrial products production in Nagorno-Karabakh was generally higher than the rate of increase in the country. After 40 years (1923-1963) after the establishment of the Nagorno-Karabakh Autonomous Region, there have been great developments in the socio-economic indicators of the region. The 1.4 thousand tractors and 670 freight trucks that existed in the region in 1963 can be cited as an example of significant developments in the agricultural sector. In terms of expressing the level of development in the industrial sector, when compared to 1940, the increase in industrial production by 341% in 1963 and electricity energy production by

945% can be given as an example. The richest natural resources in Azerbaijan are generally in the Karabakh region. These; 5 gold, 6 mercury, 2 copper, 1 lead-zinc, 19 coating stones, 10 emery stones, 4 cement raw materials, 13 stone chips, 1 raw material for soda production, 21 pumice-volcano ash, 10 clay, 9 sand-gravel, 5 construction sand, 9 gypsum-anhydride, 1 perlite, 1 obsidian, 3 vermiculite, 14 ornamental stones (agate, jade, onyx, jad, pephritoid, etc.), There are 11 fresh ground water places and 10 mineral water deposits, which are important for the economic potential of the Republic of Azerbaijan. In addition, there are Shusha paving stone, Keçeldağ (Lisokor) clay, Shusa underground fresh water, Şirlan and Turşsu villages mineral water deposits in Shusa district. According to the economists, it can be said with pleasure that the lands liberated from the occupation have rich economic potential and the new economic value to be created on the basis of the integration of these lands into the country's economy as a whole will repeatedly exceed all financial costs of the Azerbaijani state for the restoration of the liberated lands. The favorable business environment to be created in the rescued regions, the formation of micro, small and medium-sized enterprises will accelerate the dynamic development of the non-oil sector, and as a result, the production of export-oriented products will increase with the increase in the volume and variety of imported substitute products through domestic production. The material basis for this trust will be the natural resources of the liberated lands, and the socio-economic base will be the selfless and proud people who return to their land. According to the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan, there are 167 different mineral deposits in the liberated areas. 5 of these are cement and soda raw materials, 42 facades, cut and various building stones, 19 gypsum and clay, 14 colored and decorative stones, 14 sand-gravel and construction sand, 21 pumice stone and are volcanic ash deposits. According to preliminary estimates, there are 132.6 tons of gold, 37.3 thousand tons of lead, 129.8 million cubic meters of limestone, 147.1 million tons of cement, 2.1 million cubic meters of pumice in these fields, which are raw materials that play an important role in the development of the country's economy. The liberated areas are rich in various types of materials important for industrial and construction. The regions also have rich water resources that are exceptionally important for our country's industry and agriculture. There are approximately 120 mineral water deposits of different composition in the region of great therapeutic value. Overall, about 40% of the total geological reserves of Azerbaijan's mineral waters fall on the liberated areas. The energy resources of the region (hydro-energy, solar, wind and thermal energy potential) will play an important role in meeting the daily energy needs of the population as well as all sectors of the economy.

3. BANKS' INITIATIVES FOR THE REGION

Completing its 6th year in Turkey, Pasha Bank contributes to the development of trade between Turkey-Azerbaijan-Georgia. Pasha Bank, which wants to play an active role in the restructuring of the upper carabag after the liberation of Azerbaijan from the 30-year-long occupation of Armenia and provides private financing to every investor, points out that the investments in Azerbaijan will accelerate with the preferential trade agreement that will enter the country on March 1, 2021. Preferential trade agreement, which was signed for the development of commercial relations between Turkey and Azerbaijan, enters the country as of March 1, 2021. Turkey has an investment of 12 billion dollars in azerbaijan and 19.5 billion dollars in azerbaijan in turkey. The goal is to increase the trade volume between preferential trade agreement and Azerbaijan and Turkey. At the Azerbaijan Business Forum, which took place on February 18th, 11 agreements and memoranda of understanding exceeding $ 100 million were signed between the institutions of 2 countries, non-governmental organizations and the business world. After the 30-year-long armenian occupation of the upper carabag region, a restructuring in many areas such as construction, agriculture, tourism and energy has begun in the region, the process will accelerate as of March 1, 2021.

Especially if Turkish contracting companies have undertaken 436 projects worth 15 billion dollars in azerbaijan and when the Baku-Tbilisi-Kars railway line is taken into consideration, it becomes clear what an opportunity the region offers for investors. In spite of the pandemic, pasha bank, which has grown by 26% compared to 2019, has increased its active size to 2,179 million TL and its cash loans to 1,493 million TL by 37%, has been contributing to the development of trade between Turkey-Azerbaijan-Georgia since the 6 years it has been operating in Turkey. . Serving with investment banking and corporate banking products in order to provide resources and guidance to businesses investing in the region, pasha bank is ready to play an active role in the development of the blackbag region as Azerbaijan regains its lands that have been occupied by Armenia for 30 years. Pasha bank general manager h. Cenk Eynehan said, "We want to be the first bank that comes to mind in the region for those who want to do business with turkey, azerbaijan and georgia, and finance large projects in the region. We are able to finance trade and transfer money in the currencies of all three countries. There is a trade corridor here. We are now trying to grow by using new opportunities such as the iron silk road and the energy corridor. We are especially with the investors to play an active role in the reconstruction of the caravan. We are a boutique bank and we offer special financing alternatives to every company. " He's in his explanations. PASHA Bank, the leading corporate bank of Azerbaijan, announced that it is ready to open a new branch in Shusha, which was liberated from the Armenian occupation. The relevant decision will be reflected in PASHA Bank's new Development Strategy for 2021-2023. According to Taleh Kazimov, Chairman of the Board of PASHA Bank, the liberation of the Azerbaijani land is a turning point in the modern history of our country. This was possible thanks to the strong political will of the President, the unity of the Azerbaijani people and the President's trust.The liberated regions have unmatched economic potential in agriculture, precious metals, transport and logistics, tourism and hospitality, IT and many other parts of the real sector of the economy.Following the long-awaited victory for the development of the banking sector, PASHA Bank, one of the leading banks in Azerbaijan, opened a PASHA Bank branch in Shusha, using all its experience and knowledge to support government initiatives and reintegration into the liberated regions, as well as to develop entrepreneurship. emphasized that it is ready to establish relations with partners both within and abroad.

3.1. About Pasha Bank

Pasha Investment Bank, 25 December 1987, Investment Bank a.s. was established in Istanbul with the title. Pasha Bank continues its activities in two main areas, corporate and investment banking. The bank, which has been serving in the management of different capital groups until 2015, has a capital share of 99.92 percent as of December 2015, transferred to pasha bank ojsc, a baku-based regional finance institution. As of May 2018, the shareholding structure of the bank has changed to 51 percent pasha bank ojsc and 49 percent pasha holding llc. There is no branch of Yuruten Pasha Bank, which operates in the general head office in Istanbul from March 2015 until today. Kapital Bank, one of the leading banks in Azerbaijan, made a statement on the intervention in the liberated territories: "According to the Decree of the President of the Republic of Azerbaijan Ilham Aliyev dated October 29, 2020 Work has begun. Almost all government agencies say that new projects will be implemented in the liberated areas, cities and settlements. We have always been sure that our branches in Shusha, Lachin, Gubadli, Aghdam, Fizuli and Jabrayil will return to Karabakh. Of course, we will move these branches to the regions where they bear their names as soon as possible. In addition, it is planned to open new branches in the Kalbajar and Zangilan districts around Karabakh, as well as in other important cities and settlements in Karabakh. In this regard, preparations have already begun at the bank's head office, and the opening of branches will be carried out as planned as soon as the conditions are created by the relevant authorities.

Our citizens, who were expelled from their lands as a result of Armenia's aggressive policy, will be able to use the bank's products and services in Kapital Bank's branches to meet their banking needs after returning to their native lands. The new branches will create all the necessary conditions and opportunities to provide a high level of customer service. At the same time, Avni Demirci, General Manager of Ziraat Bank Azerbaijan, also mentioned that the branch of Ziraat Bank Azerbaijan will be opened in Shusha, which was liberated from the Armenian occupation. He stated that he solved the problem and closed the bleeding wound. Demirci said, "The war is now over. We have entered a period when that region will be developed and integrated into the economy of Azerbaijan. In this period, as Ziraat Bank, we decided to do what we did since the first day we came to Azerbaijan in that region. " Expressing that they want to take part in Shusha as an indication of Turkey's support, Demirci said, "We decided to open a branch in Shusha. We are completing our internal procedures regarding this. After obtaining the necessary permissions from the relevant institutions of the state, we will open our branch there. We are ready to open in a few months. But when we go and open up depends on the decision of the state. " he spoke.

4. EVALUATION OF THE LEADING SECTORS THAT BANKS SHOULD SUPPORT

Banks are at the center of the country's economy, mediate between production and trade, agriculture and society. Commercial banks play a special role in the economic transformation process. The success of the country in developing the real sector depends on the effective operation of commercial banks. In general, the development of the banking system is one of the important conditions for the development of the country's economy, and the development of the banking system depends on the efficient operation of each commercial bank. The purpose of the banks is to make profit. A bank is more likely to make a profit if it follows the right policy, has enough resources, and moves them in the right direction, gaining the sympathy and trust of customers. Work has begun to restore infrastructure in the liberated areas, according to presidential decree. Domestic and foreign investments will be made to restore the lands liberated in Karabakh. Some countries want to support these investments. Banks also play an important role in all restoration work. Ziraat Bank plans to open a branch in Shusha and provide light loans to entrepreneurs in the region, both through government agencies and to cover their expenses. The Caspian Energy Club, represented by the Chairman of the Board of Ziraat Bank, will work to attract investments from Karabakh and Black Sea countries to Karabakh through its representation in Turkey. New bank branches are planned to be opened in these regions for our displaced citizens to benefit from the products and services of the banks. The branches opened will create all conditions for high quality customer service and will improve ATM and terminal networks. Kapital Bank, one of the banks that work as partners in social projects of state importance, will primarily send border guards, soldiers and other employees to these regions, while ATMs will be installed to receive their salaries with Kapital Bank cards. It is planned to establish new payment terminals in the future. According to the cooperation agreement signed between Ziraat Bank Azerbaijan OJSC and the Agricultural Credit and Development Agency of the Ministry of Agriculture of the Republic of Azerbaijan for support to agriculture, the bank currently offers privileged loans to real and legal persons engaged in entrepreneurship activities in the regions. In cooperation with the Agricultural Credit and Development Agency (AKIA), loans provided by the agency for the development of the agricultural sector will be provided at a rate of 7% per year and the use of innovative methods in the agricultural sector will be encouraged. to support entrepreneurial initiatives. It should be noted that the loan term is 3 years for breeding animals, 5 years for small and medium-sized loans, purchase of other agricultural production tools and large loans under concessional terms. In addition, we would like to point out that the maximum loan amount is 1,000,000 manats and credits over 200,000 manats are given only for the purchase of agricultural production tools.

The grace period for loans is up to 18 months for small and medium size loans and up to 24 months for large loans. During the grace period, the business entity only pays the interest debt and does not make any payments for the principal debt. Entrepreneurs pay loan and principal interest in equal installments every month, starting from the month after the grace period, according to the loan agreement.

5. CONCLUSION

Armenians had to withdraw step by step in the face of the successes of the Azerbaijani army in the conflict that continued for 44 days in the Karabakh lands of Azerbaijan, which has been under Armenian occupation for nearly 30 years. With the intervention of Russia, the Armistice Agreement signed between Azerbaijan and Armenia on November 9, 2020 by "accepting the defeat of Armenia" entered into force a day later and the occupied Azerbaijani territories (except for the Nagorno-Karabakh region, which includes Khojaly and Khojavend, Khankendi and Aghdere territories.) most of it was saved. A number of factors are of special importance for the efficient operation of banks, from which we can show liquidity, profitability, solvency and profitability. Profitability indicators are understood as the ratio of profit to expenses, and in this sense are characterized as an indicator of the efficiency of banking. The general economic meaning of profitability indicators is explained by the fact that profitability is measured by profit for every 1 manat spent by the bank. The overall level of the bank's profitability allows us to assess its overall profitability, as well as the profit generated by 1 manat of income. In general, the development of the banking system is one of the important conditions for the development of the country's economy, and the development of the banking system itself depends on the effective operation of each commercial bank. Being at the heart of the country's economy, banks mediate between production and trade, agriculture and society. Banks play a special role in the process of economic transformation. The country's success in developing the real sector depends on commercial banks operating effectively. It is impossible to imagine modern economic activity without the banking system. Improving the efficiency of banking is one of the most important issues for the Republic of Azerbaijan, which integrates into the world economy. The role of the country's banking system in the liberated lands is quite effective. The state should provide full support for the advancement of this sector.

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THE ROLE OF THE DIGITAL ECONOMY IN THE FORMATION AND DEVELOPMENT OF AN INNOVATIVE ECONOMY: AZERBAIJAN CASE

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ABSTRACT
In the article, the authors considered some issues of the development of the digital economy and the introduction of innovations in Azerbaijan. Based on the analysis of the State Programs and Decrees of the President of the Republic of Azerbaijan, the authors of the article noted the need to prepare measures to create legal, technical, organizational and financial conditions for the development of the digital economy in our country; revealed the concept and advantages of the digital economy and emphasized the impact of ICT technologies on the development of innovative economy of Azerbaijan. The coronavirus pandemic has forced humanity to expand the capabilities of information technology in practice and created the need for innovation in all areas of the economy. The authors of the article come to the following conclusions: the implementation of key government programs, the introduction of new technologies and business models requires a quick response to technological and economic failures and crises; the need to develop digital skills, since any technological breakthrough requires a highly skilled workforce. To accomplish all of this, the authors note that it is essential to invest in educational platforms, achieve rapid development of digital economy skills across the country, train and upgrade the skills of the workforce, implementing a model such as lifelong learning.
Keywords: *Digitalization of the economy, Information technology, Introduction of innovations, Newest technologies*

1. INTRODUCTION

Despite the presence of some problems, work on the introduction of innovations and digitalization of the economy continues successfully in Azerbaijan. In most sectors of the economy, digital technologies are being actively introduced, contributing to innovative solutions to existing problems. For the purpose of appropriate measures envisaged in connection with the expansion of digital payments in the "Strategic Card for the Development of Telecommunication and Information Technologies in the Republic of Azerbaijan", approved by Decree No. 1138 of the President of the Republic of Azerbaijan dated December 6, 2016 [8], a "State Program for the Expansion of digital payments in the Republic of Azerbaijan for 2018-2020 "[10]. The strategic goal of the State Program is to significantly expand the non-cash payment environment between business entities and government agencies, to reduce to a minimum the volume of cash turnover. The goal of the Digital Economy program is to introduce and develop digital technologies in all areas of our life. This especially applies to such areas as the economy, to such a field of social activity as entrepreneurship, public administration, social sphere and urban economy. In general, the transition of the economy to digital is a matter of our global competitiveness and a matter of national security [5]. Today, at all forums, and even at the World Economic Forum taking place in Davos (in the report of Klaus Schwab) [6], the

need for the transition to the fourth industrial revolution (Industry 4.0) [11] is noted, the main goal of which is to ensure the transition to the Digital Economy. The economy of the Republic of Azerbaijan must be ready for these challenges. The Digital Economy program may be the first systematic look at this topic. The transition to the digital economy is a global project and affects various aspects of our life. Objective difficulties are possible at all stages of its implementation. Today, Azerbaijan cannot remain on the periphery of the processes taking place in the world, therefore it is necessary to launch this project. It should be noted that the Digital Economy program will provide an opportunity to prepare measures to create legal, technical, organizational and financial conditions for the development of the digital economy and will pave the way for integration into the digital economy of the region. At this critical moment in the context of the coronavirus pandemic, the problems of ensuring the security and stability of the development of society, socialization of people through the use of Internet technologies have become even more urgent. The global coronavirus epidemic has highlighted the enormous importance of the development of such areas as distance education, e-science, and online commerce. In this situation, there is a great demand for online applications, digital technologies, which increases the need to create a sustainable infrastructure in our country. In this study, the goal is to consider some issues of the development of the digital economy and the introduction of innovations in Azerbaijan.

2. ENHANCING OF THE ROLE AND ADVANTAGES OF THE DIGITAL ECONOMY IN MODERN SOCIETY

Of late years, a number of successful economic reforms have been carried out in Azerbaijan. Restructuring, development of the non-oil sector, etc. led to positive results. The necessary measures are being taken for the socio-economic development of the regions, and the improvement of the social status of citizens. One of the main directions of state policy is consistent activities for the development of the scientific sphere, education and culture. This also includes the protection of scientific and technical potential, the training of highly qualified personnel in the field of science and education, as well as the adoption of a number of important decisions to increase the authority of scientists in the country. All this is due to global changes in the world economy, the emergence and development of a new information society, the creation of a digital economy and the special influence of this economy on the development of the world's population. The basis for creating a digital environment is the formation of effective relations between government agencies, citizens and business structures. Thus, the provision of basic services to citizens in the online form, namely, services for the issuance of identity documents, various certificates, including the amount of income tax, and other labor services, will help government bodies to provide citizens with these services more efficiently. In addition, online business registration, social security services, corporate tax, as well as online property-related services will also help government agencies in providing quality and responsive services to citizens. In accordance with the Presidential Decree No. 685 of July 13, 2012, "ASAN xidmət" centers were established under the President of the Republic of Azerbaijan under the State Agency for Citizens Service and Social Innovation. "ASAN xidmət" centers are structures that ensure the implementation of services provided by state bodies in a unified and coordinated form. During the period of economic reform, government agencies should be able to work more efficiently and maintain stable relations with citizens and business structures. As a rule, the investment made in innovation in online services always pays off. Thus, e-government bodies will be able to reduce administrative costs by 15-20%. The digital economy is considered to be an area of the economy based on digital technologies. It is sometimes referred to as the Internet Economy or New Economy. The term "Digital Economy" appeared in 1995 (by Nicholas Negroponte) [1,p.17].

In 1997, this term was used by Don Tapscott in the book "Digital Economy: Advantages and Disadvantages of Network Intelligence" [7, p. 6]. This book has shown how the Internet can transform commerce. Thomas Mesenburg believes [4] that the concept of the "Digital Economy" can be identified by three components:

- infrastructure support (computer hardware, software, telecommunications, network, etc.);
- E-business (the organization carries out all work through computer networks);
- E-commerce (transfer of goods, for example, the sale of books, etc.) [4, p. 24].

However, in the comments of Bill Imlah [13], these boundaries are further expanded. It complicates this concept and adds other components to it, such as searching on social media networks and the Internet. This allows you to deliver new strategies to people and organizations through a global platform, collaborate, communicate, search for information, etc. A clearer definition of the characteristics of the digital economy is linked to the traditional economy. Thus, the digital economy is the main instrument underlying the "new economy", "information economy" and the information society. The emergence and rapid development of the digital economy has led to many changes and innovations in the traditional economy. The benefits of the digital economy are based on the benefits of digital technologies. For example, digital technology provides a large amount of information during the execution of information processes based on specific rules of encoding, exchange and use, that is, high speed, efficiency and memory during storage, transportation and transmission of data. In the process of information processing, digital technologies allow the use of precise mathematical methods, as well as various manipulations with information. As noted, the emergence of the digital economy has brought about significant changes in the traditional economy. In the classical, that is, traditional economy, capital takes on material form. This usually includes machines, buildings and structures, land, etc. Over time, the role of money in the economy strengthened even more and capital began to be accepted in the form of money. As a result, it was with the help of the mass of money that it became possible to acquire tools and means of labor. As a result of the emergence of the digital economy, the main defining role, function was assigned to information. Thus, information capital appeared. Capital efficiency analysis made it possible to distinguish between different types of assets. This includes current assets (working capital), fixed assets, investments (shares), intangible assets (trademarks, patents, copyrights, employee creativity, and other assets). Nowadays, information capital can be perceived as an asset that predicts the needs with purchasing power in the future, plans the financial and organizational structure of enterprises and ensures profitability. Without digital technologies, it is impossible to ensure the creation, distribution and use of information capital, the processes of its assessment and analysis. The use of digital technologies ensures the efficient use of this capital. The digital economy has advantages and disadvantages compared to the traditional economy. The most important advantage is that the product here, or rather the information product, that is, capital, is more active in movement and circulation. The use of high technologies and the presence of global connections ensure the production of products in the shortest possible time. In other words, you can search and select a market for a product, immediately make sales, as well as identify new products and assortments to offer to the buyer and constantly monitor the process of competition. Despite the fact that the digital economy is costly in terms of technological security and building large-scale connections, it has a very large area of activity. In the traditional economy, today there are such basic problems as: storage, packaging of products, proper marketing, organization of advertising, timely delivery of products to the customer, etc. Compared to the traditional economy, in the digital economy, most of these problems are at a very low level. Thus, in the digital economy, it is possible to more effectively carry out the development processes, the processes of preparing new projects, the processes of creating direct links with the consumer, the conformity of the qualitative and quantitative indicators of

products to the customer's requests [2, p. 94]. Despite all these advantages, the digital economy is not as widespread in the world. The main reason for this lies in the differences in the level of ICT development in different countries, which play an important role in the creation of the digital economy. On the other hand, a number of disadvantages of the digital economy also impede its widespread worldwide distribution. The digital economy also plays an important role in the development of the information economy based on the interconnected development of various sectors of the economy. Thus, the formation of just this kind of interaction is the basis for the development of the modern information society. The digital economy also plays an important role in ordinary household processes and the provision of various services in developed countries. This includes the retail sale of goods and services, etc. In addition, this includes buying goods in large markets and shopping centers, delivering them to customers, making payments, providing various utilities, medical and health services, education and training, job search, access to various information, etc. If the current advantages and opportunities of digital technologies are used properly, it will contribute to the emergence of a comprehensive balance in society. The expansion of the scale of the digital economy, covering more and more countries, depends on the use of the digital space [3, p. 7]. Digital capabilities play an important role in the implementation of the latest innovations in production, in the modern film industry, in organizing various festivals, gatherings, organizing major sporting events, holding conferences, international meetings, solving global problems and transferring information around the world. Thus, the use of these technologies in the economy, sports, art, tourism, etc. creates conditions for the emergence of new areas that generate income, large-scale investments, including in the organization of advertising, which also brings significant income.

3. INFLUENCE OF ICT ON THE DEVELOPMENT OF AZERBAIJAN'S INNOVATIVE ECONOMY

The restructuring of socio-economic relations in the republic, the democratization of the way of life require a radical change in the structure of information support in all spheres of society. The emergence of new state and public organizations, the change in existing or the emergence of new functions - all this indicates an increase in the need for information, a change in the direction of information flows and their composition. The processes taking place in the world economy pose for Azerbaijan the tasks of priority building and accelerated development of the digital economy, the introduction of innovative ICT technologies in all spheres of life. Today, the Republic of Azerbaijan has all the conditions for the digitalization of the economy and its sustainable development. Our country has a unique geographical location, rich in natural and human resources. A huge work has been done in the republic to develop the legal and economic foundations for digitalization of all spheres of the economy, the "Strategic Map for the Development of Telecommunication and Information Technologies in the Republic of Azerbaijan" [12] was approved and the "State Program for the Expansion of Digital Payments in the Republic of Azerbaijan for 2018-2020 was adopted. "[10]. In recent years, some work has been carried out in Azerbaijan in the field of introducing innovative ICT technologies. Significant progress has been achieved in the application of these technologies in some areas, more precisely, this area has become one of the priorities of the country's policy. In our country, serious work is underway to modernize the telecommunications infrastructure, introduce the latest technologies. As a result of cooperation of local companies with ICT companies from around the world, the experience and professionalism of our companies in this area is growing in Azerbaijan. Today Azerbaijani companies are participants in both regional and global ICT markets. At the same time, the geographical location of our country makes it possible for Azerbaijan to form as a center of innovative production and export, information resources and transit.

Building a digital economy directly depends on the prospects for the development of ICT technologies in the infrastructure of various sectors of the economy. The use of ICT technologies and the production of digital goods based on digital technologies are impossible without a stable and secure infrastructure. It is the modern technological infrastructure that is the main component of digitalization and the digital economy. Without a stable and stable infrastructure, it is impossible to provide communication services, both between countries and within the country, in accordance with advanced world standards. Currently, global communications services are growing rapidly. The number of users, both mobile and broadband Internet users, is also growing. Operators face the challenge of investing in infrastructure every year. For example, according to data from Analysys Mason, a telecommunications, media and technology consultancy, operators have invested more than US $ 300 billion since 2014 in Internet infrastructure. Research shows that the number of devices connected to the Internet will also increase. For example, according to the Mobile Economy 2019 report by GSMA, the Association of Mobile Operators, between 2018 and 2025, global Internet connectivity (IoT) will triple to $ 25 billion. The amount of profit received during this period from the Internet of Things will quadruple and amount to 101 trillion. US dollars. Digitalization and infrastructure development will result in an increase in the number of mobile Internet users. According to the report, from 2018 to 2025, the number of mobile Internet users will grow from 3.6 billion to 5 billion [13]. It should be noted that digitalization and building a digital economy raise the issue of forming a sustainable ICT infrastructure in Azerbaijan. The formation of a new technological infrastructure and the improvement of international relations services, the improvement of a stable technological base for the use of it by an even larger number of people is of great importance. Currently, the start of the implementation of the "Azerbaijan Digital HUB" program, which in the future will turn into the Regional Digital Center of Azerbaijan. It is based on the same idea. The Azerbaijan Digital HUB program, the main focus of which is the formation of a sustainable infrastructure, is carried out by AzerTelecom, which is the backbone Internet provider and a subsidiary of the first mobile operator of Azerbaijan, Bakcell. In this direction, work is underway to create a technological infrastructure both within the country and abroad. For example, jointly with Azərbaycan Dəmir Yolları CJSC, a project is being implemented to lay a fiber-optic cable along the main line of the protective strip of railways. Thus, the creation of a network connection with telecom operators of neighboring countries will be provided in the North-South and East-West directions. Within the framework of the Digital HUB program, it is planned to build a digital silk road on the historical silk road between Europe and Asia. For this, the Trans-Caspian Highway line will be built along the bottom of the Caspian Sea between Azerbaijan and the countries of Central Asia, which is an integral part of the main infrastructure project outside the borders of our country. The implementation of all of the above will ensure the formation of a stable technological base in the country that meets modern requirements, as well as the transit of excess Internet and content to the countries of the Asian region. At the next stage, the transformation of Baku into an Internet Exchange Center and the creation of a Regional Data Center in Azerbaijan will be ensured. Let's consider some statistics. (see Table 1) According to the State Statistics Committee, the number of Internet users per 100 people in Azerbaijan was 75 people in 2014, and 80 people in 2018, i.e. every 80 out of 100 people use the Internet. The number of broadband Internet users per 100 people is 75 people. In 2014, this figure was 65 people. The volume of international Internet channels per capita in Azerbaijan in 2014 was 35.1 kbps, and in 2018 - 83.5 kbps.

Table following on the next page

	2014	2015	2016	2017	2018
ICT Usage Rates in Enterprises					
Share of enterprises using computers in the total number of enterprises in%	58,6	63,1	65,3	66,9	67,2
The ratio of the number of employees using computers, in%	23,2	28,0	29,6	30,7	33,4
Share of enterprises with Internet access,%	45,7	48,0	51,6	52,5	52,9
The ratio of the number of employees using the Internet to the listed number of employees employed at all enterprises, in%	16,5	20,4	21,9	23,1	25,3
Share of enterprises with a web page (web page, web site)	10,4	11,9	11,9	12,2	12,3
Output of products and volume of services provided by ICT enterprises					
Production volume of electronic parts, thousand manats	758,8	242,9	258,2	264,0	181,5
Production volume of computers and peripheral equipment, thousand manats	93,1	12,0	468,7	1680,3	1199,2
Production of devices for recording sounds and displaying images, thousand manats	34427,4	23902,7	14655,0	14999,7	16620,8
Manufacture of household electronic equipment, thousand manats	215,3	35,9	22,5	20,3	-
Wholesale of computers, computer peripheral equipment and software, thousand manats	25045,6	27245,3	16909,5	22350,2	33332,6
Manufacture of electronic and telecommunication equipment and wholesale of their parts, thousand manats	238,1	428,9	179,0	41,0	44,1
Production volume in the field of wireless telecommunications, thousand manats	10,8	17,4	26,5	22,7	25,5
The volume of services in the field of satellite radio communications, thousand manats	10787,3	17360,4	26510,3	22751	25458,2
Volume of services in the field of software development, thousand manats	27191,8	35040,5	40008,1	57681,9	73443,6
Scope of work on activities in the field of design and production of information security means, thousand manats	133,4	257,7	850,3	1559,6	1353,0
Foreign economic activity of ICT enterprises					
Import of ICT products, thousand manats	214,4	268,6	371,1	565,1	883,8
import of computer and peripheral equipment thousand manats	74,6	60,0	99,2	168,4	315,8
telecommunication equipment, thousand, manat	92,5	99,8	160,5	244,0	328,6
electronic equipment, thousand, manat	19,6	34,0	74,9	99,8	145,9
import of other ICT products, thousand, manat	27,7	74,8	36,5	52,9	93,5
The share of imports of ICT products in the total value of all types of imported products in the country, in%	3,0	2,8	2,7	3,7	4,5

Table 1: Economic indicators of ICT enterprises [9. 93]
(Source: www.stat.gov.az/information_society/)

If in 2014 the proportion of the population living in the territory covered by mobile communications was 99.9%, then in 2018 - 100% of the population lives in the territories covered by mobile communications. The average tariff for using the Internet for 20 hours was 1.3 manat in 2014, and 1.2 manat in 2018. The average tariff for mobile communication for 100 minutes during the month was: in 2014 - 6.9 manats; in 2018 - 6.4 manats. The Internet Development Index in Azerbaijan increased from 5.79 to 6.33 from 2014 to 2018. According to the State Statistics Committee of the Republic of Azerbaijan, over the period from 2014 to 2018, the share of enterprises using computers in the total number of all enterprises operating in the country has steadily increased from 58.6% in 2014 to 67.2% in 2018, t .e. by 8.6%. Over the same period, the ratio of the number of employees using computers to the payroll number of employees employed in all operating enterprises increased from 23.3% to 3.4%, i.e. by 10.2%. Over the same period, the share of enterprises with Internet access in the total number of all enterprises also steadily increased from 45.7% to 52.9%, i.e. by 7.2%. The ratio of the number of employees using the Internet to the payroll number of employees employed at all enterprises in the same period increased from 16.5% to 25.3%, i.e. by 8.8%. The share of enterprises with a Web page (Web Page, Web Site) in the total number of all operating enterprises for the period from 2014 to 2018 also increased, albeit insignificantly: from 10.4% to 12.3%, i.e. by 1.9%. However, the volume of production of computers and peripheral equipment increased during the study period from 93.1 thousand manats to 1199.2 thousand manats. The production of devices for recording sounds and displaying images decreased from 34427.4 thousand manats to 16620.8 thousand manats, i.e. 2 times. The production of consumer electronic equipment decreased between 2014 and 2017. from 215.3 thousand manats to 20.3 thousand manats, i.e. 10.6 times. And in 2018, these products were not produced. Wholesale sales of computers, computer peripheral equipment and software increased over the same period from 24,045.6 thousand manats to 33,332.6 thousand manats, i.e. by 9287.0 thousand manats. The production of electronic and telecommunications equipment and the wholesale of their parts decreased from 158.5 thousand manats to 44.1 thousand manats, i.e. 3.6 times. All this suggests that there are still many reserves in this area in Azerbaijan. However, over the period under study, the volume of production in the field of wireless telecommunications has steadily increased and increased from 1,078.3 thousand manats in 2014 to 25,458.2 thousand manats in 2018. Consistently high performance in the provision of mobile telephony services. The volume of services in the field of satellite radio communication has grown more than 3 times. The volume of services in the field of software development increased from 27,191.8 thousand manats to 73,443.6 thousand manats, i.e. 2.7 times. The volume of work on activities in the field of design and production of information security products increased from 133.4 thousand manat in 2014 to 1353.0 thousand manat in 2018. It should be noted that it is impossible to overestimate the role of the digital economy in the formation and development of the innovative economy of Azerbaijan. Innovation encompasses the processes of introducing any new product, service, or manufacturing process. That is, innovation can be a commodity. This includes significant advances in technical specifications, components and materials, software, usability, and other functional features of a product or service. If we consider innovation as a process of developing the digital economy, then innovative processes come to the fore, making it possible to create new products that increase labor productivity (for example, automation of manual work, quality control mechanisms, the introduction of new software for managing product residues). The purchase of new equipment in order to start the production of new products can be attributed to both commodity and process innovation. Process innovation can involve producing and selling an existing product more efficiently and at less cost. Innovation does not always embrace new technologies. Organizational innovation can act as a new approach to business experience, organization of the production process and foreign economic relations.

Organizational innovations include improving the efficiency of a company by reducing administrative or operating costs, acquiring non-profit assets, or reducing procurement costs (for example, decentralizing decision-making and electronizing supply chain management). Today, as the corona virus pandemic has swept all countries of the world, hundreds of millions of people have begun to use digital platforms more actively, and the role and importance of information and communication technologies has grown globally. Naturally, all this will contribute to the fact that the level of development of science and technology in our time will allow us to find the necessary means to solve the problem of coronavirus in the near future.

4. CONCLUSION

It is becoming clear that the digitalization of the economy is the main condition for the formation of an innovative climate in Azerbaijan. The article indicates that Azerbaijan, which has the status of a Regional Energy and Transport Center, now has the opportunity to build a digital economy and, in the short term, become the Digital Center of the Region, using available resources and world best practices. Today digitalization covers all areas of our life. Active work is underway to form a digital economy in our country, create a digital government, and develop an information society. Through the introduction of innovation and high technology, we can accelerate the diversification of the economy.

The findings of the study are as follows:

- in order to increase the role of the digital economy in the formation and development of Azerbaijan's innovative economy, it is necessary to develop and implement more detailed road maps in accordance with key strategic goals and identify the most priority projects in order to identify areas where "quick wins" are possible, as well as to outline long-term strategic initiatives.
- to accelerate the pace of implementation of digital computer technologies, it is necessary to master new management mechanisms that would unite all the main stakeholders in participation in the decision-making and management process.
- it is necessary to securely fix the budgets and determine the financing mechanisms for all these processes.
- the government needs further in-depth investment in large-scale, smart and secure infrastructure capable of proactively driving digital explosive growth.
- the implementation of key government programs, the introduction of new technologies and business models requires a quick response to technological and economic failures and crises.
- it is necessary to develop digital skills, since any technological breakthrough requires a highly qualified workforce to modernize the economy.
- despite the traditional advantages in theoretical science, the republican education system lacks flexibility to meet the requirements of digital transformation in all spheres of the economy, including coordination between enterprises and educational institutions in the field of higher education and R&D.
- it is necessary to invest in educational platforms, achieve the rapid development of digital economy skills throughout the country, train and improve the skills of the workforce, introducing a model such as lifelong learning.

The practical significance of the study lies in the fact that ICT offers an approach to determining the competitive position of Azerbaijan in terms of telecommunications, computer and information services. At the end of the study, recommendations were made to enhance the role of the digital economy in the formation and development of the country's innovative economy.

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PLACE AND ROLE OF INNOVATIVE DEVELOPMENT IN ENTREPRENEURSHIP

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ABSTRACT

The article focuses on the development of innovation-oriented economy, the creation of new technological processes, the effective use of scientific and technical potential in our country, entrepreneurship in new technologies and management and the emergence of new sales markets in a market economy. Building the country's economy through innovation depends on the creation and operation of a national innovation system. The role of innovation in achieving sustainable development of the national economy is very large. It is also important to note that in modern times, innovative entrepreneurship is very widespread in market economies. Innovative entrepreneurship is the discovery and implementation of innovations. Entrepreneurship in Azerbaijan has a long history of development. The various natural resources owned by our country have created invaluable conditions for the arrival of foreign businessmen in the country, as well as for the development of local entrepreneurship. Entrepreneurial activity is constantly supported by the state and creates conditions for improving the living standards of the population as one of the main directions of the state's economic policy. It should be noted that entrepreneurial activity is an independent, enterprising economic activity of members of the society, aimed at obtaining personal income or profit, carried out at their own risk and responsibility for their own property. One of the most widespread forms of entrepreneurship in modern market economies is innovative entrepreneurship. Innovative entrepreneurship is associated with the creation, acquisition of services, as well as their commercial use. Because in this process, it is important to come up with new ideas, evaluate ideas, develop a business plan, search for the necessary resources, create prototypes, conduct tests, research the sales market and introduce goods to the market. The role of entrepreneurship is mainly related to the creation of innovations, unpredictable products and a new combination of traditional factors of the economy (labor, land, capital). The task of entrepreneurs is to reform and revolutionize the method of production through the application of inventions, in other words, to reorganize the previous branch of industry and create conditions for the opening of a new field, using new technologies to produce new goods and new sources of raw materials or new markets. It is an object used in production as a result of innovation-scientific research or service discovery and differs from the previous analogue.
Keywords: *market economy, innovation, innovation entrepreneurship, entrepreneurship*

1. INTRODUCTION

The formation of a modern market economy, scientific and technological progress and the development of economic relations against the background of international legal aspects have led to the emergence of new organizational and legal forms of entrepreneurial activity. Entrepreneurial activity determines the principles of entrepreneurship, the rights and responsibilities of business entities, its methods of protection by the state, the entrepreneur's interaction with government agencies. Entrepreneurial activity is also an independent entrepreneurial activity carried out by individuals, their knowledge and skills, as well as legal entities in the form of their responsibility for profit or personal income, including in the form of production, sale and provision of services. Entrepreneurial relations are governed by international legal obligations, regardless of the form of ownership, type and field of activity.

An entrepreneur is a person who appreciates the usefulness of work, who can take risks and responsibilities related to the establishment of new enterprises or the development of a new idea (product) or service. Because entrepreneurship is a person who is able to assess the profitability of the work and responsibly implement the ability to more efficiently allocate available resources. Today, the development of entrepreneurship in the country is one of the priorities of economic policy. In this regard, it is consistently implementing comprehensive measures such as the development of state-entrepreneur relations, improvement of legislation and administrative procedures on the business environment, education, development of business relations of entrepreneurs and the provision of various services. One of the main problems facing the development of entrepreneurship in Azerbaijan is related to the provision of business activities with the necessary financial resources. The solution to this problem largely depends on the scale and effectiveness of the state's investment policy. As noted in the economic literature, only the implementation of an effective investment policy by the state can ensure high development of entrepreneurship and the economy as a whole in the near future [1]. At the same time, in this process, it is expedient to conduct an in-depth and comprehensive analysis of alternative profitability issues, risk assessment, and to focus investment on priority areas of the economy. Entrepreneurship development is one of the leading directions of the measures taken to diversify the country's economy, which is based on increasing the level of normative-legal, organizational and financial support in increasing business activity, activity in all priority areas of economic development. In order to ensure sustainable economic development, it is planned to accelerate the integration of entrepreneurship into the world economy, increase export potential and solve social problems, optimize the structure of entrepreneurship in terms of industry, region and technology, and expand ties between enterprises. It should be noted that recently, taking into account the further improvement of the business environment and the development of entrepreneurship as a key priority, the potential of the regions has been re-analyzed in terms of innovation orientation, support measures have been identified to meet their needs. More than 200 events were held in the field of consumer protection, covering all administrative districts. For the successful development of entrepreneurial activity, first of all, an appropriate socio-economic environment must be formed. Despite the specifics of individual countries, there are many conditions for creating a business environment:

1) Stable economic and social policy of the state aimed at protection of entrepreneurship;
2) Preferential tax system that creates incentives for the creation and expansion of new enterprises;
3) Existence of perfect infrastructure to protect entrepreneurship (existence of innovation and application centers financed by public and private business, specialized firms providing financial assistance to start-up entrepreneurs - new business "institutions", consulting centers on management, marketing and advertising).[2]

In order to ensure sustainable development, entrepreneurship development measures should be aimed at eliminating inequality in regional development at the current stage of economic development, the formation of an efficient sector structure of the economy, accelerating technological development, ensuring the optimal level of employment and accelerating the formation of the middle class. In our opinion, in order to achieve these priorities, first of all, the regulatory framework for the development of entrepreneurship should be improved on the basis of regular analysis, this policy should be aimed at limiting the economic functions of the state and increasing the efficiency of regulation. Secondly, the financial provision of entrepreneurship should be strengthened, along with targeted state funding in this direction, the necessary environment should be created for further activation of alternative financial sources, this activity should be stimulated, and opportunities for start-up capital formation should be expanded.

Thirdly, the scope of organizational measures aimed at the development of entrepreneurship should be expanded, and institutions providing continuous and systematic services in various directions should be established. In particular, in order to effectively realize the country's export potential, the effective operation of the Export and Investment Promotion Fund, which will support the production of products in export-oriented areas, their delivery to world markets and measures to increase competitiveness, must be ensured. It should be noted that the development trends of the private sector are observed in all sectors of the economy - industry, construction, agriculture, trade and services, transport, communications and social services. With the exception of the social sphere, the share of the private sector in all other areas is more than 80%, which indicates the high role of entrepreneurship in the country's economy. The experience of countries with developed market economies shows that their economic development is based on the effective interaction of public and private entrepreneurship. This is reflected in the state's creation of a favorable legal and economic environment for the development of various forms of the private sector, encouraging the development of business and individual initiative by various economic methods. This, in turn, helps the state in solving the tasks facing private entrepreneurship, socio-economic problems, financing and development of key sectors of the economy. The radical reforms carried out in Azerbaijan and the accumulated experience prove once again that better results are achieved when the regulation of state-entrepreneur relations is based on the principles of a modern market economy, and entrepreneurship becomes a major driving force of socio-economic development in the country. Entrepreneurship development in the country is considered not only as a profit, business activity, but also as a basis for economic growth, a social factor of socio-economic development and the creation of new jobs, as a result of population settlement. Taking into account these important factors, Azerbaijan continues to pursue a policy of economic reforms and improvement of the business environment for the development of entrepreneurship. World experience shows that it is more widespread and rapidly developing in countries where the liberalization of entrepreneurial activity is organically linked with the effective work of government agencies, active state support for small and medium enterprises and fair competition in the domestic market. It is also important to ensure the development of entrepreneurial resources and their efficient use for the development of the national economy. It is clear that further economic growth in the country depends on the application of modern technologies, increasing tax revenues from the private sector, solving food security problems, reducing unemployment, eradicating poverty, as well as the development of entrepreneurship and the formation of national entrepreneurship. In general, the development of the non-oil sector is possible due to the development of entrepreneurship. The business activity inherent in market relations is manifested in this area of activity. Entrepreneurship development is a key condition for the formation of a healthy competitive environment, which is an important element of the market mechanism. For this, the policy of free enterprise and liberal economy must be expanded. Thus, developing entrepreneurship - further development of employment in the private sector, the release of competitive products, services, payment of taxes to the state budget, improving the quality of services, etc. includes solutions to such problems. Today, as a result of economic reforms in Azerbaijan, entrepreneurship is developing in the country, the state promotes the development of the private sector through various means, various programs are adopted, infrastructure problems are solved, and so on.

2. MECHANISMS OF INNOVATIVE ENTREPRENEURSHIP IN MODERN PERIOD

In order to ensure the sustainability of socio-economic development in modern times, it is possible to achieve effective integration into the world economic system by increasing the competitiveness of the national economy based on the principles of economic efficiency, social justice and environmental security.

The concept of entrepreneurship policy development in the country will lead to sustainable development of the private sector in 2020 and beyond, continuous improvement of living standards and socio-economic situation of the population. According to the decree of the President "On additional measures in connection with the underdevelopment of entrepreneurial activity", a broader regulatory framework has been created by continuing targeted services to develop this type of activity and create a favorable business environment in the country. The state supports the registration of entrepreneurs in electronic form, mutual trade operations with foreign countries, the improvement of the cooperative management system, the protection of the interests of investment entities making investments. In his speech on the implementation of the State Program for different years, President Ilham Aliyev reiterated that "the state fulfills all its responsibilities, provides political support and protection to entrepreneurs, and provides them with about $ 100 million in soft loans each year. separates. It implements infrastructure projects and takes an active part in strengthening social infrastructure in the regions so that people do not come to the cities from the regions. " This strategic goal set by the President gave impetus to the development of entrepreneurship, new production areas began to develop in the regions, processing plants were opened, production and social infrastructure systems were established, and the migration of the population to cities gradually decreased. The high level of development of the market economy has given impetus to the development of an innovative business environment, the preservation of "entrepreneurship and trade" traditions in the country, laid the foundation for a new stage in the development of entrepreneurship, the production of competitive, import-substituting and export-oriented products. , as well as accelerated the development of innovative investment. The State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan for 2004-2008, 2009-2013, 2014-2018 has been developed in accordance with the purposeful policy launched in 2004 and is aimed at expanding entrepreneurial activity in the regions, creating new enterprises and jobs, large-scale infrastructure. It has played an exceptional role in the implementation of projects, raising the level of utilities, and most importantly, further improving the welfare of the population and reducing poverty. In recent years, the state's financial support for the development of entrepreneurship has further improved, and the volume of soft loans has increased significantly. During the implementation of regional development programs with the support of entrepreneurship and increasing state care for this area, the National Fund for Entrepreneurship Support of the Republic of Azerbaijan provided AZN 1.2 billion in soft loans to 19.1 thousand businesses across the country, resulting in 110,000 jobs. [3] It is also important to note that the development of scientific and technological progress in developed market economies is associated with innovative entrepreneurship. In general, it is necessary to distinguish between two forms of entrepreneurship: the first is the discovery and implementation of innovations, which is called innovative entrepreneurship, and the second is pure market entrepreneurship, which is also called marketing. Innovation activity is the process of improving equipment, forms of production organization of labor objects, management using advanced technology and scientific and technical achievements. The modernization of enterprises, the application of modern and advanced technology, the production of products that can withstand fierce competition in the market depend on innovative entrepreneurship. First of all, the innovation process considers the following factors important:

- development of new products, modernization of the released product;
- involvement of new means of production in the production process;
- effective use of new technologies and production methods;
- more advanced forms of organization and management of production.

It should be noted that in a market economy, each company must produce new products and constantly modernize existing products in order to maintain its position in a competitive

environment. This can be achieved only by expanding innovation. The implementation of innovation in the enterprise in modern conditions should be based on the forms and methods of strategic management. An integral part of the latter is the innovation policy, the implementation of which includes the development of appropriate plans and programs for the current and future period of innovation activities; establishment of a working group; control over the development of new types of products and their application; implementation of a unified innovation policy in the field (enterprise); providing the sector's investment activity program with material and financial resources; providing innovative activities with qualified personnel; implementation of innovation measures in production. The formation of an effective innovation strategy involves an accurate assessment of the existing forms of innovation activity, which is reflected in all innovations in the field. Innovative entrepreneurship means the process of creation and commercial use of innovations in various fields. The task of entrepreneurs is to reform and revolutionize the method of production by applying inventions, to be more precise, to discover new goods or new sources of raw materials or new markets, to use new technologies to produce old goods in a new way, to reorganize the old industry and open new ones. is to discover new business prospects that are up to. There are many opinions about innovation. For example: innovations (changes) are changes in the original structure of the production organism, ie its transition to a new state of the structure; innovation is a complex process of creation, dissemination and use of new practical means (innovations to better meet the known needs of people); innovation - practical application, implementation and use of new ideas, proposals, people, scientific and technical decisions; innovation - a profitable expression of innovations in the form of new technologies, new types of products and services, organizational, technical, socio-economic decisions of production, financial, commercial administrative nature; Innovation - entrepreneurship is associated with the creation, development and commercial use of new products and services. This process includes new ideas, evaluation of ideas, development of a business plan, search for the necessary resources, creation of a prototype, testing, introduction to the sales market and the market, and so on. It should be noted that the adaptation of innovation entities to market relations, the development of the national economy, first of all, the launch of science-based, competitive industries - all this is the basis of entrepreneurial activity. Thus, this is primarily due to the fact that innovative entrepreneurship is usually associated with high risk. The state regulatory mechanism is one of the important issues, including the creation of innovative businesses that can adapt to market conditions, the restructuring of production and purposeful, adequate changes in the activities of scientific organizations and the reconstruction of organizational structures of the scientific and technical complex. Today, the development of innovative entrepreneurship in the country is one of the priorities of economic policy. Comprehensive measures have been taken in this direction, such as the development of state-entrepreneur relations, improvement of legislation and administrative procedures on the business environment, expansion of state support for entrepreneurship, education, development of business relations and provision of various services. [4] Accordingly, a conference on "Mutual trust in consumer and entrepreneurial relations" was held on March 15, 2021. In his speech, President of the National Confederation of Entrepreneurs of the Republic of Azerbaijan M.Musayev noted the high share of innovative entrepreneurship in providing the consumer market with relevant goods and services, in this regard, the importance of proper establishment and regulation of state-entrepreneur relations in the general market. He went on to say that today, if an entrepreneur receives the most complete information about his product directly from the consumer, it means that he can see more clearly the development trends of innovation in this development [5]. Today, in order to achieve the goals set for the development of innovative entrepreneurship, it can be considered expedient to fulfill these tasks: to determine the place, role, importance and development of innovative entrepreneurship in a market economy, to further identify innovative entrepreneurship and its

development stages in Azerbaijan removal; to study the impact of innovative entrepreneurship on employment as a modern form of economy; further improvement of the formation of a competitive environment in the conditions of innovative entrepreneurship; analysis of the current state of development of innovative entrepreneurship in the regions and the formation of a system of self-regulation; Increasing the role of innovative entrepreneurship in ensuring sustainable and sustainable development in Azerbaijan, etc. It should be noted that the priority of reforms in the country is competitiveness, the creation and development of a national innovation system, and the acceleration of the efficiency of economic and social development in the country is set as a key priority. Along with the production and application of new knowledge and technologies, innovation policy is reflected in Azerbaijan, where science and education, the sustainable development of a scientific society, the formation of universities as scientific centers, entrepreneurship institutions and the establishment of education on the basis of scientific innovations, the creation of entrepreneurship university model.

2.1. Efficiency of innovative entrepreneurship and its role in agriculture

It is known that the stable development of the country's economy in modern times, including the agricultural sector, is closely linked with the private sector and entrepreneurship. This type of activity plays an exceptional role in the formation and dynamic development of the market economy, enrichment of the domestic market based on local raw materials, creating a free competitive environment, creating new jobs and increasing employment, as well as improving their living standards and other social and economic problems. The experience of developed countries shows that the increase of innovation and investment attractiveness in the agricultural sector depends primarily on the renewal of production capacity, the application of the latest scientific and technological advances, as well as increasing the economic efficiency of agricultural production through the implementation of resource-saving technologies. The effectiveness of innovation development in each country is conditioned by the innovation policy implemented in the agricultural sector - the right choice of scientific and technical directions, the availability of the necessary economic, including financial support for agriculture. The innovation system in the agricultural sector is determined by the availability of material and technical resources and scientific and technical potential. The purpose of innovation policy is to create conditions for profitable production, and at the macro level to increase innovation activity, the formation of scientific mechanisms. The process of organizational, economic, technical and technological renewal of production is carried out with the help of these mechanisms. It is important to take into account a number of important factors in the formation of innovation entrepreneurship policy: forecasting strategic changes in the innovative market, economy, range of products and technologies; to express an appropriate attitude to the decisions made on innovative entrepreneurship and to prepare necessary measures to support them; identification of the initial conditions of innovation dynamics. The level of innovation activity depends on the education of personnel, the level of scientific and technological training, the availability of basic specialties. This factor also ensures the perception of innovation and a preliminary assessment of the expected efficiency of its use in production. When determining the conceptual directions of formation and development of innovative entrepreneurship in the agricultural sector, first of all, the following points are taken into account:

- Entrepreneur is a locomotive of economic activity, as well as an entity that is ready to respond quickly and adequately to the opportunities for activities that are expanding and innovative in rural areas;
- Entrepreneurial network with strong internal motivation can provide productive and efficient labor, strong incentives to influence production activities and on this basis promote progressive structural changes in the economy;

- Entrepreneurs are free to create purposeful and mobile associations to realize their potential in terms of mastering the relevant market segments, etc.

The modern market system requires entrepreneurs to constantly innovate in their economic activities. It is important to maintain this innovation so that economic activity cannot be imitated by competition. In order to be directly selected and to gain an advantage, it is first necessary to ensure the interests of consumers. Creating and improving innovation requires an abundance of information and an information environment. The policy pursued in connection with the development of entrepreneurship in Azerbaijan, the work done is also highly valued by influential international organizations. According to the World Bank's Doing Business report, the Republic of Azerbaijan has risen from 63rd place in 2016 to 25th place in 2019. According to the report of the Davos Economic Forum, the Azerbaijani economy ranked 35th among 188 countries in terms of competitiveness in 2018 and is the first among the CIS countries for 8 consecutive years [7]. The peculiarity of the regulation of the agricultural sector in the context of modern economic relations is characterized by the independence of innovative business entities and their activity. The laws adopted for the development of the agrarian sector and the laws that ensure the interests of entrepreneurs create conditions for the protection of their rights, customs tariffs, state registration, simplification of tax rules, the expansion of entrepreneurship. It is necessary to take the following measures for the effective development of innovative entrepreneurship in the agricultural sector and increase the role of international projects in this direction:

- creation of flexible organizational and economic structures that ensure the participation of all stakeholders in agriculture and their interests and allow to study the requirements of the market;
- formation of new economic relations in the agricultural sector, covering various stages of technological processes and aimed at obtaining the final finished product that meets international standards;
- establishment of cooperation bodies for production, supply and sale of agricultural producers in accordance with the voluntary pooling of their resources;
- proper formation and development of material and technical resources (means of production) and maintenance market in the agricultural sector;
- creation of a mechanism for uninterrupted supply of agricultural raw materials with minimal losses, ensuring equal conditions for different economic entities, etc.

In general, in order to determine the economic efficiency of production in the agricultural sector a system of indicators is used such as: gross output, final product, net product, net income (profit) per agricultural land, labor resources, production funds or fixed assets, current production costs, cost of goods sold separately), household income, etc. In the conditions of market relations, the increase in economic efficiency in the agricultural sector is associated with an increase in the volume of output, a decrease in labor and capital costs per unit of output, an increase in product quality and an increase in sales prices. Measures to develop innovative entrepreneurship and increase agricultural production continue in the agricultural sector. The innovation policy of the state bodies on agrarian management should be reflected in the creation of a favorable innovative business environment, the development and maintenance of scientific and technical potential, as well as the formation of a new system of mastering innovations.

3. DEVELOPMENT DIRECTIONS OF INNOVATIVE ENTREPRENEURSHIP IN AZERBAIJAN

Today, Azerbaijan is one of the leading countries in the world in terms of economic development. Numerous reforms implemented in our country have strengthened the pillars of

the state, formed a solid basis for further improving the welfare of citizens, and strengthened the position of our republic in the system of international relations. The complex measures taken in the country for the sustainable development of the regions, the reconstruction of social infrastructure, the elimination of the dependence of the national economy on the oil factor through the development of the non-oil sector have accelerated the country's success. Reforms in the country's governance structures and economic spheres have been considered an important step for the development of all economic sectors, including entrepreneurship. Expansion of entrepreneurial activity for the successful and sustainable development of the present and future development of Azerbaijan is always a priority. Scientific and technological progress in Azerbaijan, whose economy is developing at a high pace, is closely linked with innovative entrepreneurship. In general, great importance is attached to the discovery and application of various innovations in our country, the development of new innovative entrepreneurship. Today we can say with confidence that along with pure market entrepreneurship, new marketing and production entrepreneurship, innovative entrepreneurship, which is typical of the most developed countries, is on the path of sustainable development in our country. It is no secret that the innovation process requires, first of all, the development of new products, modernization of products, the involvement of new means of production in the production process, the use of new technologies and methods of production, the application of more advanced forms of production organization and management. Due to this, the quality of products produced in Azerbaijan is rapidly regulated, competitiveness and production efficiency are increased, limited resources are used sparingly, profits are increased by reducing production costs, innovations are also characterized by successful results in the social sphere. Our country attaches great importance to innovative technologies, rich natural resources and the proper organization of enterprises as a driving force in the development of both industries and the economy as a whole. Because the ultimate goal of the innovation process is to increase the commercial viability of the new product and the organization of mass production. The main stages of the innovation process are as follows: systematization of incoming ideas, development of new product ideas; analysis of economic efficiency of the same product; decision-making on the introduction of a new product in production; conducting testing in the market. As for the results of innovation, as a rule, the range of products is renewed, competitiveness increases, the needs of the population are met, and so on. Everyone who wants to become an entrepreneur in our country, in addition to making a profit, should contribute to public welfare, apply new technologies in Azerbaijan in their field of activity, create a firm or company based on innovative management methods, operate freely, achieve self-affirmation in society. can do. Today, there are small, medium and large business activities in our country. President of the Republic of Azerbaijan Ilham Aliyev said: "Along with the development of innovative entrepreneurship in Azerbaijan, there is a process of stimulating small and medium enterprises, both through the National Fund for Entrepreneurship Support and other lines, as well as the establishment of large enterprises and state support. is important" [8]. The Law of the Republic of Azerbaijan "On Entrepreneurial Activity" states: "Entrepreneurial activity is the activity of individuals, as well as legal entities for the purpose of gaining profit or personal income under their own responsibility and labor responsibility or on behalf of other legal entities or individuals. in particular, their independent entrepreneurial activities in the form of production, sale and provision of services" [9]. It should be noted that as a shining example of innovative entrepreneurship in Azerbaijan, on January 14-15, 2021, the Azerbaijan Youth Achievement Public Union organized an Entrepreneurship Seminar at the initiative of the UN Children's Fund. The seminar was held within the framework of the "Youth Leadership and Professional Development" program implemented with the financial support of the European Union, in cooperation with the Ministry of Youth and Sports of the Republic of Azerbaijan and the Youth Foundation [10].

The main purpose of the seminar was to stimulate the creative and innovative thinking of our youth without borders and increase their knowledge and skills in the field of entrepreneurship. Entrepreneurship is a key component for the successful careers of future leaders and innovators. It is very important for young people and students of all ages not to develop new projects for the further development of innovative entrepreneurship, but also to have creative thinking, risk-taking, coping with failure, as well as high technical knowledge, skills and talents. The tendency to continue to compete in the Azerbaijani economy and to strive for development by overcoming the difficulties here creates the basis for the search for and active use of new management tools that help innovative entrepreneurship and the rapid and productive solution of its problems. Important measures have been taken and are being taken to develop entrepreneurship in Azerbaijan. "National Fund for Entrepreneurship Support", "Small and Medium Entrepreneurship Development Agency" and "Entrepreneurship Development" centers have been established in the regions. In general, the laws "On Entrepreneurship", "On Enterprises", "On Joint Stock Companies" and other laws providing for the establishment of a legal mechanism of a market economy, which are important for the formation of the business environment in Azerbaijan, have been adopted. Also, the Innovation Agency was established under the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.

4. CONCLUSION

The main goal of Azerbaijan, which is in a modern and dynamic stage of development, is to form and expand a diversified, efficient and innovation-oriented economy, to bring the welfare of the population to the level of international standards. Most countries of the world pay much attention to the innovation of economic processes and, in this connection, to the significant improvement of the state's innovation policy. It should be noted that the exchange of modern international technology and information is impossible without the appropriate legal, financial, organizational, innovation and technical support. The protection of the rights of users of intellectual property is a very important achievement in the development of information technology and law in the modern world. Thus, it plays an important role in the development of economic relations and the further spread of information technology. At present, it is possible to classify several areas of public policy to further improve the development of entrepreneurship in the activation of innovation activities: the formation of tax incentives; reduction of the tax burden on innovation enterprises; determination of the list of the main state innovation projects in the next few years and formation of the mechanism of their realization; lowering bank interest rates; creation of favorable conditions for the development of small and medium innovative entrepreneurship; providing comprehensive assistance to innovation-oriented enterprises; creation of conditions for attracting investments to the private sector by strengthening the investment activity of the state; creation of conditions for the formation of market infrastructure of innovative entrepreneurship and implementation of market-oriented institutional changes on scientific and technical development of the private sector; determination of priorities of the state innovation policy, etc. It should be noted that today efforts are being intensified to improve the business environment in the country, more comprehensive measures are being taken to diversify the economy and develop entrepreneurship in the non-oil sector. The development of entrepreneurship, the improvement of legislation to improve the business environment, stimulates the development of innovative entrepreneurship. All this shows that Azerbaijan's position in the World Bank's international rating "Doing Business" is growing. The sustainability of the reforms suggests that these ratings will continue to improve in the coming years.

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THE IMPACT OF PANDEMIC ON AZERBAIJAN BALANCE OF PAYMENTS

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ABSTRACT
Azerbaijan has one of the most stable economies among the countries of the region, thanks to a number of fundamental factors, such as rich natural resources, economic reforms and the trust demonstrated by international financial institutions. The global economic slowdown caused by the pandemic also affected the balance of payments of Azerbaijan. During 2020, both the export and import experienced a tightening, and the transactions associated with "Tourist services", a sector that was one of the most actively growing industries, has practically ceased. This article analyzes the consequences of the pandemic for the current and the capital accounts of the balance of payments, and possible scenarios necessary to overcome them. The authors concluded that, despite the overall deterioration of the economic situation, the reserves accumulated in the previous years' made it possible to maintain the stability in the balance of payments. And the attractive investment-enabling environment in Azerbaijan and the ongoing reforms will help overcome the negative consequences of the pandemic.
Keywords: *Balance of Payments, Current Account, Exports, Financial Account, Imports*

1. INTRODUCTION
Each year, a large number of countries are involved in the foreign economic relations of Azerbaijan. In 2020, over 200 countries were involved in the foreign economic relations of the country [1]. Over the past 15 years (other than 2020, due to the pandemic), Azerbaijan recorded a positive balance of payments, a result that facilitated increase in the foreign currency reserves. Azerbaijan's foreign exchange reserves at the end of 2020 amounted to about USD 50 billion; covering more than three years of imports of goods and services (with the international adequacy ratio equal to 4 month). A current account surplus indicates that the country has significant savings, sufficient for both domestic and foreign investment. However, it is possible that the global recession and contingencies such as devaluation, fluctuations in world prices, and the pandemic, will lead to reduced imports and exports transactions. This is exactly the situation faced in Azerbaijan in 2020.

2. CURRENT ACCOUNT
The country's balance of payments, including the current account, the capital account, and the financial account, reflects the results of economic transactions between that country and the rest of the world. The current account balance shows the ratio of savings to investments in the economy. When a country runs a current account deficit, it indicates that purchases of goods and services from abroad and income payable to non-residents exceed amounts receivable from residents of outside world [2]. This situation, where it takes a long time, is fraught with grave consequences for the economy. The inflow of external resources to a sufficient extent ensures necessary funding for current transactions.

During the period from 1995 through 2004, the current account balance, for several objective reasons, experienced a deficit, reflecting an excess of expenses of expenditures on the purchase of goods and services from abroad over export earnings. In 2005, this indicator turned positive for the first time and remained so until 2020. The dynamics of the current account are shown below.

	2010	*2019*	*2020*
Credit (proceeds)	*30637*	*26239*	*18252*
Debit (payments)	*15597*	*21874*	*18480*
Gap	*15040*	*4365*	*- 228*

Table 1: Dynamics of the current account (Millions USD)
(Source: Adapted from Balance of Payments of the Republic of Azerbaijan www.
cbar.az/page-43/external-sector-statistics)

The current account surplus in the last 15 years was mainly conditional on the trade surplus. And it was precisely thanks to the trade surplus of USD 8.5 billion in 2019, the country saw a positive current account balance. Restrictions imposed because of the pandemic have limited economic activity and, at the end of 2020, the current account balance turned to negative in the amount of USD 228 million.

2.1. External trade
The country's intensive participation in the division of labor at the international level is one of the most powerful catalysts for economic growth, and it was possible by the liberalization of foreign economic activity. The table below shows the development of Azerbaijan's foreign trade during period subjected to analysis.

	2005	*2010*	*2019*	*2020*
Exports	*7649*	*26476*	*19868*	*12588*
Imports	*4350*	*6746*	*11335*	*10076*
surplus (+) / deficit (-)	*3299*	*19730*	*8533*	*2512*

Table 2: External trade balance (Millions USD)
(Source: Ibid)

In 2020, Azerbaijan had trade relations with 183 countries of the world. At the same time, only ten countries represent more than 3/4 of Azerbaijan's trade turnover. These countries include Italy, Turkey, Russia, China, Germany, Ukraine, USA, France, India, Georgia.

2.1.1. Exports of goods
Increased production by export-oriented enterprises of the oil and gas complex, as well as advantageous oil prices in 2005-2019, served as incentives for significant growth in gross exports. In 2019, compared to 2005, gross merchandise exports increased almost 2.6-fold to USD 19.9 billion [1]. The volume of exports in 2020 decreased by 40 per cent compared to 2019. This reduction was mostly caused by the drop in oil prices. The volume of exports of other industries decreased less significantly - by 4.3 per cent. Oil prices have been showing an upward trend since the beginning of 2021, and, analysts believe it will continue during the current year. The figure below reflects the commodity structure of Azerbaijan's exports in 2020.

Figure following on the next page
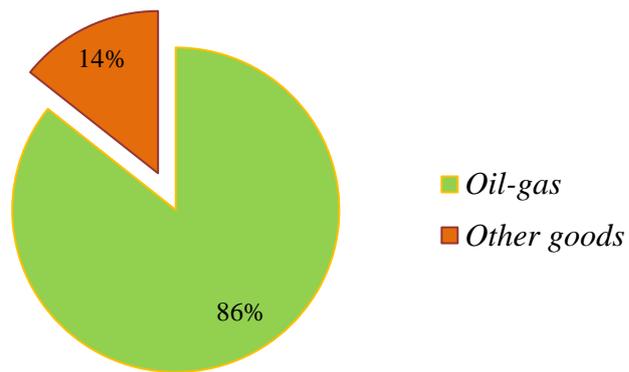
Figure 1: Azerbaijan Exports structure for 2020
(Source: based on BOP data www.cbar.az/page-43/external-sector-statistics)

As seen from the graph, oil and gas products took a dominant role in commodity exports, accounting for 85.7 percent. It is worth noting that the country has launched reforms with an aim of reducing reliance on hydrocarbon exports.

2.1.2. Imports of goods
The overall worsening of the global economic environment due to the pandemic is seen in imports as well. In 2020, compared to 2019, the total imports fell by 11.1 percent to about USD 10.1 billion. The graph below shows the structure of Azerbaijan's imports in 2020.
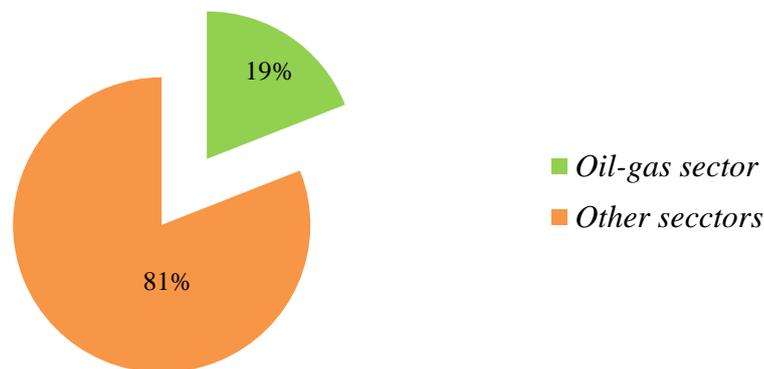
Figure 2 Azerbaijan Imports structure for 2020
(Source: based on BOP data www.cbar.az/page-43/external-sector-statistics)

The share of enterprises in the oil and gas sector accounted for 1/5 of overall structure of the total imports. A large part of the imports of goods, as seen from the graph, are accounted for by other sectors of the economy. If we look at the structure of imported products, the trend here is not unambiguous; i.e. the import has increased, for a number of items, such as pharmaceutical products, butter, and chemical products. The reduction in imports is seen in such goods as sugar, cars, furniture, tobacco, metal, alcoholic, and non-alcoholic beverages.

2.1.3. Services balance

The country's international services market is characterized by an underdeveloped service export structure, and, as a result, a persistent negative balance. To date, transportation services are the only revenue item of Azerbaijan's foreign trade in services, as evidenced in the table.

Table 3: Azerbaijan Services balance for 2020 (Millions USD)

	Credit (proceeds)	*Debit (payments)*	*Gap*
Services balance:	***2621***	***5461***	***-2841***
-transport	*1645*	*1302*	*343*
-travel	*304*	*412*	*-107*
-communication services	*65*	*90*	*-25*
-other sectors	*607*	*3657*	*-3050*

Table 3: Azerbaijan Services balance for 2020 (Millions USD)
(Source: Adapted from Balance of Payments of the Republic of Azerbaijan
www.cbar.az/page-43/external-sector-statistics)

Transport accounts for 62.8 per cent of services exports in 2020. Azerbaijan's export of transport services are represented by rail, sea, air, road, and pipeline transport. The construction of a new complex of the international airport and the accelerated development of the domestic merchant marine fleet, commissioning of oil and gas infrastructure facilities: Baku-Tbilisi-Ceyhan, Baku-Erzurum, Baku-Kars railway allows the country to more actively enter the external market with the offering of transit transportation services. As noted above, transport accounts for most of services turnover. The country saw some positive trends in 2020, compared to that of 2019. For example, exports of non-oil transport services rose by USD 1 billion. Although the country saw a deficit of USD 350 million in this item in 2019, the transport services experienced a surplus of USD 343 million in 2020. Concerning the tourism services, Azerbaijan, as well as the entire world, is experiencing a sharp decline in international travels due to the pandemic. In 2020, the number of Azerbaijani citizens traveling abroad decreased by 4.8 times, and the number of foreigners coming to Azerbaijan - by 4 times.

2.1.4. Primary income

In addition to the growth of imports of international services, a factor that determines the current account deficit, the country saw a negative balance of primary income. In 2020, USD 2.3 billion in revenues was received from non-residents. A large part of them (USD 1.7 billion) comes from repatriated earnings, mostly in the form of crude oil, to foreign investments in oil and gas consortium. Azerbaijan, in turn, has provided services to other countries amounting to USD1.9 billion. As a result, the primary income balance deficit for 2020 compared to 2019 fell by 4.5 times to USD 456 million. This was possible by reducing the deficit in the oil and gas sector.

2.1.5. Secondary income

The balance of secondary income in the current account, like the trade balance, saw a surplus; however, its impact on the current account balance remains insignificant. In 2020, the overall secondary income account transactions with foreign countries were USD 1.8 billion. Of that, USD 1.2 billion was proceeds, and USD 630 million was payments. 92.1 percent of total proceeds on secondary income are comprised of remittances of individuals from foreign countries. It should be pointed out that money transfers to Azerbaijan came from 214 countries, and went to 191 countries. The table below shows individuals remittances for 10 countries accounting for about 85 percent of all remittances.

Country name	In favor of individuals to Azerbaijan		Country name	From individuals in Azerbaijan	
	Millions of USD	In percent of total		Millions of USD	In percent of total
RF	606.1	55.4	RF	148.4	26.7
Turkey	76.4	7.0	Turkey	117.4	21.1
USA	53.5	4.9	Georgia	59.5	10.7
Germany	37.0	3.4	USA	50.9	9.1
Georgia	34.9	3.2	Great Britain	25.2	4.5
UAE	32.5	3.0	Ukraine	22.5	4.0
Kazakhstan	30.3	2.8	Germany	21.3	3.8
Great Britain	26.6	2.4	Austria	7.3	1.3
Qatar	13.9	1.3	Canada	7.0	1.3
Saudi Arabia	13.5	1,2	UAE	5.4	1.0
Total for 10 countries	924.7	84.5	Total for 10 countries	464.9	83.5
For other countries	169.3	15.5	For other countries	91.6	16.5
Total for all countries	1,094	100	Total for all countries	556.5	100

Table 4: Individual money transfers for 2020
(Source: Ibid)

As seen from the table, more than half of all remittances received by individuals in Azerbaijan were transferred from the Russian Federation. USD 556.5 million was transferred from Azerbaijan to foreign countries with a surplus reached by USD 537.5 million.

3. FINANCIAL ACCOUNT
The impact of the pandemic was also seen in the financial account of the balance of payments for 2020. For example, the country's net financial liabilities decreased by USD 200 million over the year. This is mostly caused by the fact that the country managed to fulfill the obligations to repay the principal debt on previously attracted loans and advances during 2020, as per the agreements. At the same time, new proceeds from the listed items were much less than in 2019.

3.1. Direct investment
Analysis of the financial account transactions shows domination of foreign direct investment in the structure. With the development of the oil and gas sector, telecommunications, construction, and enterprises producing consumer goods, the inflows of non-state guaranteed foreign investments have become increasingly important. The share of these investments in the total foreign capital inflow to Azerbaijan was more than 90 percent. Over the past five years, the gross foreign direct investments inflow into the economy of Azerbaijan amounted to over USD 20 billion. Given the repatriation of capital, the net inflow of direct investment is estimated at about USD 5 billion. Most of these investments were made in the oil and gas sector by the international consortium involving companies from the USA, Norway, Turkey, UK, Russia, and Japan.

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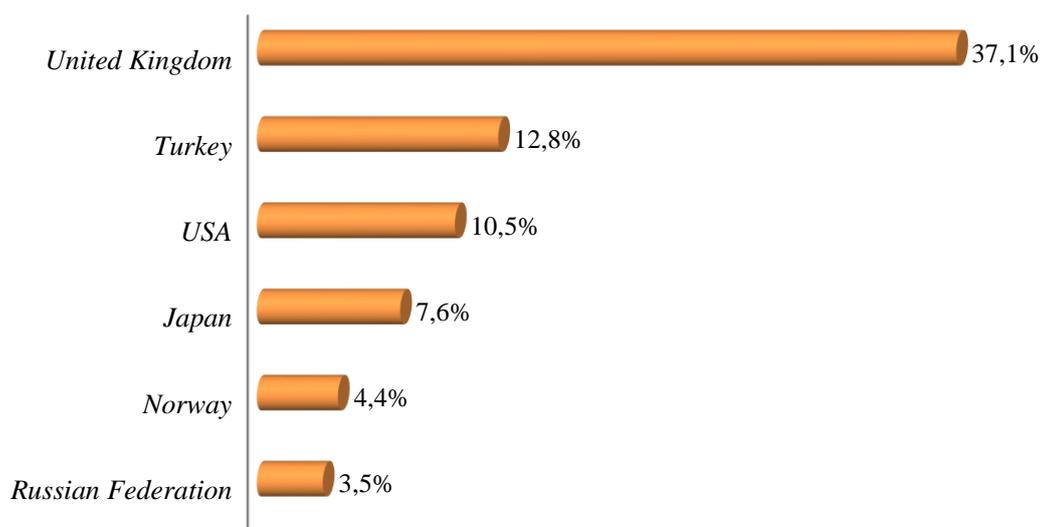
Figure 3: Main investing countries, 2020, in percent of total
(Source: based on BOP data www.cbar.az/page-43/external-sector-statistics)

As seen from the graph, the listed countries account for 75.9 percent of all attracted foreign direct investment. The share of other countries combined is 24.1 percent. As noted, investments are mainly made in the oil and gas sector, although other sectors have seen a gradual increase in the volume of funds attracted until 2020. The pandemic has had a major impact on investment flows to other sectors, where foreign investment has fallen by 35 percent over the past year.

4. CONCLUSION

An analysis of the financial account for several years shows that the priorities in attracting foreign capital into the country's economy are: direct investment, long-term loans, mostly concessional, and creating conditions for the private sector to attract external resources. More than two-thirds of foreign capital is attracted in the form of direct investment and a small share of long-term loans from international financial institutions. The medium-term loans attracted by the private sector show a steady upward trend. In general, such a structure of attracted foreign capital is quite favorable from the point of balance of payments sustainability. However, the pandemic has also affected financial account transactions. Thus, the country saw a fall of USD 2 billion in foreign currency reserves in 2020, although they increased by USD 5.1 billion in 2019. To summarize, we can conclude that when choosing measures of state economic policy, it is not important how much the deficit or surplus it is, but what are the reasons that caused them. The ongoing economic restructuring in the country aims to gradually address reliance on hydrocarbon exports and achieve active development of green economy.

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DIRECTIONS TO ENSURE THE SUSTAINABILITY OF TARGETED SOCIAL POLICY

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ABSTRACT
Independent Azerbaijan is at a historic crossroads in terms of economic, social, political, and cultural growth. The country's economy has been improved and modernized as a result of the socioeconomic reforms introduced during this period. The amount of the country's economy has more than tripled in the last 17 years, good socio-economic growth has been ensured, infrastructure has been built, and the level of poverty has decreased significantly in the context of positive dynamics. The rise in the minimum wage has resulted in a substantial decrease in illegal labor. Currently, the Republic of Azerbaijan's social policy, which is a priority of state policy, is followed by the country's sustainable development and an improvement in the indicators that characterize people's living standards.State budget spending for 2021 on public administration agencies, power systems, social policy implementation, real sector financing, and other expenditures according to the report, expenses related to the implementation of social policy account for 31.5 percent of total state budget expenditures.Expansion of the self-employment program, establishment of DOST centers providing 132 types of services, implementation of electronic appointment systems for 21 types of social security, ensuring accountability in the field of targeted social assistance and disabilit are great examples of this policy. The government's work in Karabakh to develop housing for families, disabled people, and internally displaced persons (IDPs) can also be considered a fruitful social operation. The conclusion was that the state should ensure a minimum wage, as well as help those who are unable to work and those who have temporarily lost their capacity to work. Azerbaijan government's social policy should be oriented to the sstablishment of an inflation-protection system, determination of the consumer basket's minimum level, economic growth, and population social situation, assisting the economy's improvement, ensuring the economy's sustainable development in order to enhance the country's socio-economic and demographic policy, equal social stability, an egalitarian society, and the balance of the capital and regions.
Keywords: *living standards, poverty, socio-economic reforms, social politics, social security*

1. INTRODUCTION
Social policy is one of the most important aspects of any state's domestic policy. A framework of policies aimed at improving the quality of life and the social condition of certain groups of the population is known as social policy. Social policy is an important part of the state's domestic policy, and it is expressed in the social services it implements, as well as the control of social interactions based on the interests of the population's major social classes.

The Azerbaijani state's social policy is a continuous and dynamic process aimed at establishing social justice, ensuring national wealth development, and implementing an equal distribution of national wealth through targeted programs. The Republic of Azerbaijan's key priority in terms of social policy is to establish a state of social welfare by implementing equal social security for all segments of the population. In recent years, the national economy's social orientation and reliance on the human element have been especially notable. Mr. Ilham Aliyev, the President of Azerbaijan, has repeatedly confirmed that our state's policy is focused on the human element, on the interests of people. The key aim of the President's multifaceted reform is to ensure that every person participates in the development process and use their available potential equally according to each individual's abilities and capabilities. In general, the average monthly volume of pensions has risen by 60% since the beginning of 2018.

2. THE IMPACT OF THE COVID-19 PANDEMIC ON THE WORLD ECONOMY

The COVID-19 pandemic, which is currently sweeping the globe, has put people to the test, and the battle against coronavirus employs a variety of tactics, techniques, and methods to bring residents of each nation out of the crisis with minimal losses. The next wave of the COVID-19 pandemic is likely to be covered in the June issue of the Asian Development Bank's Asian Development Outlook, which could lead to social instability and tension. In addition to these factors, the threat of trade tensions between the US and China escalating has been identified as a significant risk factor, as has been the case with other organizations during forecast revisions. Adjustments were made in the direction of reduction in this situation (Table 1).

Countries/regions	Data	Forecast			
		Indicators in 2020		Indicators in 2021	
	2019	Issue in April	Issue in June	Issue in April	Issue in June
Economic growth					
Developing countries	1,7	-0,3	-5,8	1,8	4,1
USA	2,3	0,4	-5,3	2,1	3,8
Euro zone	1,3	-1,0	-7,0	1,6	5,5
Japan	0,7	-1,5	-5,0	0,9	2,0
China	6,1	2,3	1,8	7,3	7,4
Kazakhstan	4,5	1,8	-1,2	3,6	3,4
Georgia	5,1	0,0	-5,0	4,5	5,0
Kyrgyzstan	4,5	4,0	-5,0	4,5	4,0
Uzbekistan	5,6	4,7	1,5	5,8	6,5
Tajikistan	7,5	5,5	-3,6	5,0	7,0
Turkmenistan	6,3	6,0	3,2	5,8	5,8
Azerbaijan	2,2	0,5	-0,1	1,5	1,2

Table 1: Asian Development Bank forecasts
(Source: ADB, Asian Development Outlook, April 2020, Asian Development Outlook Supplement, June 2020. The table is based on the above-mentioned sources)

The clarifications can be interpreted as taking into account the pandemic's extension and the correspondingly extended quarantine or isolation regimes, according to the chart. From a negative standpoint, and constructive dynamics are predicted for 2021. This is primarily due to the low base year impact, which is expected to rise in comparison to 2020 while also decreasing.

3. SOCIAL POLICY IS A PART OF THE STATE'S ECONOMIC POLICY

The state's general policy includes social policy. The management of social processes in the state of society, the provision of material and spiritual needs, and the normalization of each member of society's personality are all examples of social policy.

It governs the processes of social division that allow the realization of the socio-economic rights required for reproduction and growth. This strategy has an influence on the living standards of the population's key strata, classes, and categories. The state's social policy is based on the expectation of relationships between social classes, social strata, and within these strata. In the implementation of social policy, problems such as providing economic incentives to engage in the raid are addressed by regulation and social consumption of state social and labor relations. The core objectives of social policy are to ensure that every member of society has a minimum standard of living and to reduce income inequality as much as possible. The reduction entails creating conditions that enable every able-bodied individual to engage in productive economic activity. The primary goal of social policy is to protect the citizen, his legal and natural rights. The aim of social policy is to help and improve people, who are the most valuable asset of any society. The practical implementation of the social policy model depends on the political structure of the country, the level of economic development, property relations, and governance. The structure, history, historical features, and customs all play a role. The part of the created social product is the foundation of social policy. This division is based on various concepts. They can be attributed to the following models under some conditions:

1) The liberal model focuses on mitigating the effect of individuals and the state on the lives of the general public;
2) Social-democratic model (A socially focused market economy is one version of this model) - the role of the state in redistribution of income among different classes of the population, with social taking into account the needs of vulnerable groups;
3) A model focused on state property sovereignty and centralized production and distribution regulation;
4) Models that have been used in developed countries. In this case, the aim of social policy is to combat poverty, develop agricultural production, and address other problems, depending on the state of resources.

The Republic of Azerbaijan's social policy, which is a top priority of the government, is followed by the country's long-term growth and a rise in the indicators that measure people's living standards.

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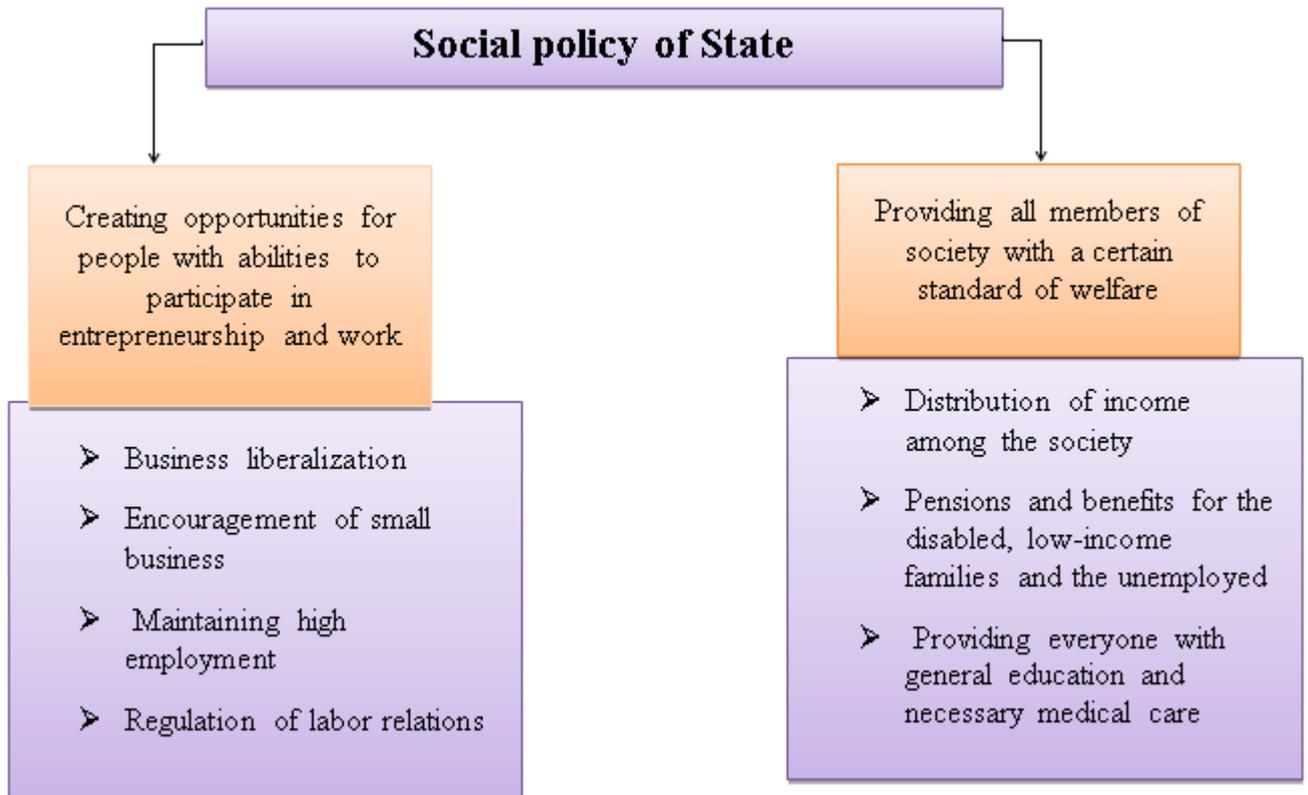
Figure 1: Social policy of State
(Source: The Great Economic Encyclopedia, Volume IV, Baku-2012)
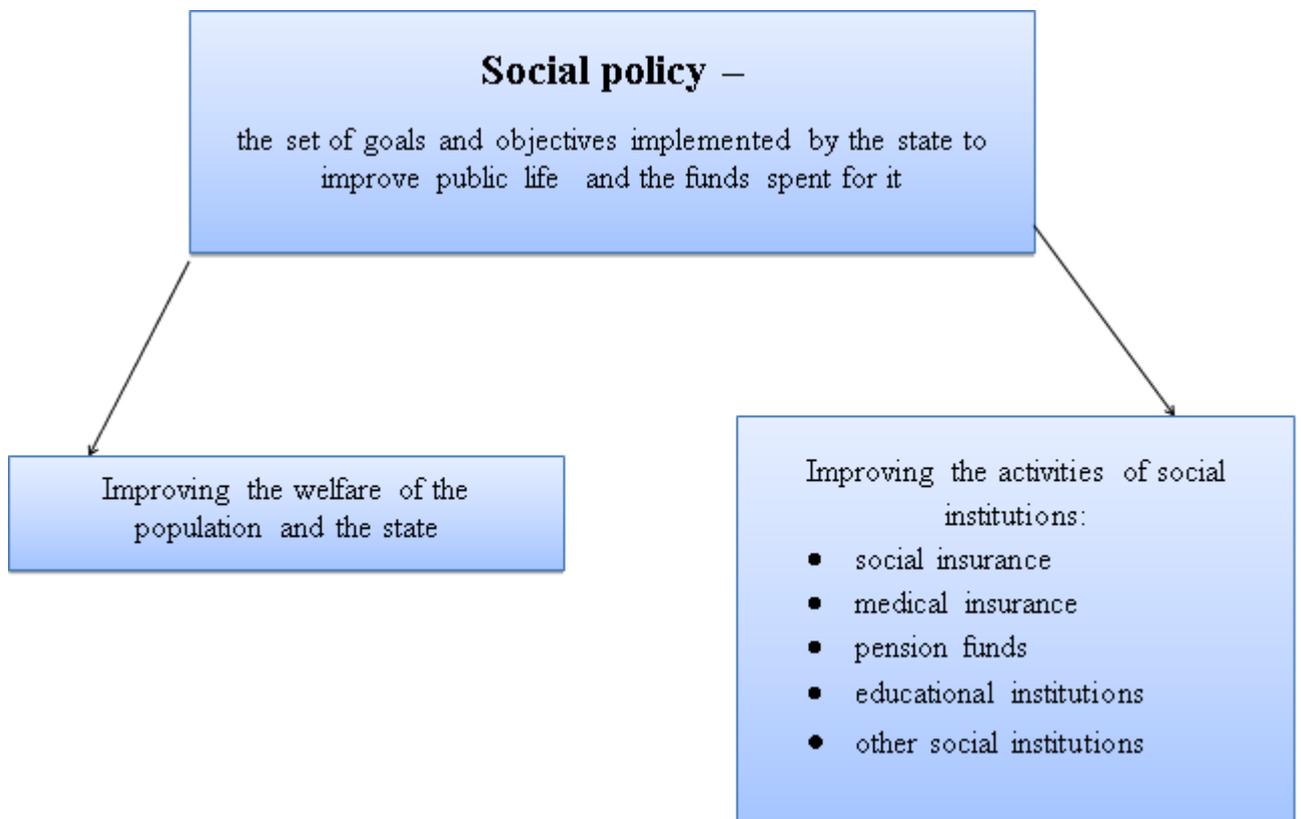
Figure 2: Social
(Source: The Great Economic Encyclopedia, Volume IV, Baku-2012)

The social policy pursued by states is directly related to the political regime and system of governance of those states. For this reason, states differ from each other in their social policies. For example, in a totalitarian state, social policy is limited by the totalitarian activities carried out in the social sphere, but in a democratic society, social policy is a function of a democratic state and a citizen. In order to incorporate complicated tasks that are typical of social policy and, in certain cases, eradicate a range of drawbacks and inconsistencies, the state undertakes comprehensive changes in a variety of areas. In Azerbaijan, the concept of social policy of the state includes the general features of the development of society. Thus, Azerbaijan, like other countries, forms a social policy in accordance with its development goals, and provides the necessary conditions for the implementation of this policy. The application of this policy is contingent on the correct understanding of state priorities and social policy objectives. The aim of social policy is to assist the government in achieving its objectives. One of the main issues in social policy is the formation of incomes for the members of society. In many countries, the term "social state" is used to refer to states that promote the development of members of society and help them to live in better conditions. The social sphere is an integral object of social policy. During the transition period, a number of social problems arose, and solutions to these problems played an important role in bringing issues such as social policy to the fore. We know that society is made up of a number of social groups, and the interaction of these social groups is inevitable. These reciprocal relations include confrontation, unity, privileged partnership, hostility, civil war, violence, and intimidation. All these forms of communication are in fact called policies and are divided into different areas. If social groups are concerned with economic problems, they are dealing with economic policy; if they are dealing with the state and the environment, they are dealing with environmental policy. This is a policy concerning the climate. Demographic, educational, and cultural factors all play a role in politics. Social policy is the improvement of people's social welfare, the satisfaction of material, social and intellectual needs of people, the formation of respect for the individual and society. It is a policy that has a direct bearing on stability in the world. The allocation of welfare and wages through the state budget is an important aspect of social policy aimed at the advancement of society's members. As a result, social policy, which is heavily affected by the human element because it is responsible for distribution policy, is inextricably linked to monetary policy and the state's tax policy. Social policy characterizes the social status of members of society, which is a complex characteristic of their life activities. The formation of market relations has led to a number of social problems. These include a number of social problems, such as income differentiation, declining employment, and rising unemployment. Government regulation is necessary to alleviate the consequences of the problems created by this revolution. State measures were primarily aimed at the social protection of various groups of the population. One of the factors complicating the implementation of the measures was the need for social protection not only for people with financial problems, but for all market participants. The new economic system has created the conditions to close a number of gaps. It is necessary to establish an atmosphere in which members of society operate in compliance with their activities, property is protected, and people are free to use their earnings. Social protection entails more than just the equitable allocation of land based on humane values and the abolition of income disparities. Because of this, everyone is forced to live in poverty at the same time. Social protection is a necessity that ensures the position of everyone and equality in a free, social society. People are divided into certain groups in society by their abilities, labor, and talents without the influence of others. For example: old and young, poor and rich, employed and unemployed. We are unable to categorize people into the first or second groups. While the state, some governments, and institutions provide social security, everyone should receive assurances from family members, members of the workforce in the workplace, and society. Social protection is not only the subject of the social sphere, but also the sphere of the economy.

Thus, with economic development, social protection will be more convenient for the state. Thus, social protection covers economic subjects. Now let's characterize social protection on the basis of economic subjects. Economic development can create certain social problems. High development of technology can lead to staff reductions, as well as technological unemployment. In addition, while economic development has led to positive results, such as the creation of new industries, it has also led to a decline in demand in certain areas. This creates structural unemployment. First of all, it should be noted that not all members of society belong to the employed population, that is, not all people can earn an income. For this reason, groups of people who are not able to earn income cannot meet their own needs. These groups include the physically handicapped, the chronically ill, and the disabled, who receive social protection from the state. They need to meet their needs. The employed population may also lose the ability to work for certain reasons (old age, accidents, illness, etc.). The employed population may also need social protection. The state can achieve the creation of a socially oriented society by creating conditions for members of society to freely and fully use market opportunities. Through this, people will be able to meet their material needs. Free access to market opportunities means that people can get an education, improve their skills, and do whatever they want within the law according to their labor and abilities. This means that people will be able to meet their material and social needs to the best of their ability, as well as people will be able to afford it. The state will provide for the needs of the people that cannot be met by.

World experience shows that the following systems belong here:

- Social assistance system
- Social security system
- Social insurance system

Management technique is both a criterion and an object of formal social sphere management. Three-tier pension system:

- **The first stage** is provided by the state as a minimum level of security provided by the state to all groups of the population who are not entitled to labor and insurance pensions and are not able to work, regardless of their employment. There will be a funded and basic social pension. Other categories will include special additions to the social pensions of other groups of retirees, such as those with disabilities from childhood.
- **The second stage** is the main stage, in which the legislation is based on the social insurance membership fee collected by the state social protection fund or independent insurance companies. The pension will be financed according to the norms provided by the law, depending on the length of service, the amount of earnings and the length of service.
- **The third tier** represents additional pension funds, and special pensions will be provided to individuals who have entered into a personal insurance contract with these pension funds and will be financed from a non-state pension fund. Membership fees can be paid by both the employee and the employer. The terms and amount of the additional pension will be determined in the individual contract concluded between the pension fund and the insured person on the basis of a standard contract of this type of insurance, which has been established in recent years. It is traditional for the state budget to be social in nature.

The republic's independence did not preclude it from facing difficult problems, as it has experienced a wide range of growth in both the social and other spheres. Azerbaijan became independent and transitioned to a new economic structure. Initially, the transition to an economic structure failed to prevent the economy from being paralyzed. The rise in the number of problems was also linked to the Nagorno-Karabakh conflict, which our country is currently dealing with, as the Nagorno-Karabakh conflict has displaced over one million people. Now, let us evaluate the current condition of the social sphere.

4. ASSESSMENT OF THE CURRENT STATUS OF SOCIAL SPHERES

COVID-19 pandemic resulted in sharp fluctuations in world energy and stock markets have an impact on the Republic of Azerbaijan's economy, macroeconomic stability, and employment prospects. The President of the Republic of Azerbaijan signed the order "On a number of measures to reduce the negative impact of COVID-19 on the subjects of the population" on March 19, 2020 aims to reduce the negative effect of the coronavirus pandemic on the country's socioeconomic existence and the prospects for post-pandemic growth. The Azerbaijani state, which prioritizes the social protection and social welfare of its citizens in its domestic policy, has reaffirmed its commitment to the people in these difficult times. President Ilham Aliyev mentioned on March 10, 2020 about reducing the negative effects of the Coronavirus pandemic on the country's economy and citizens' living standards. The Cabinet of Ministers prepared an Action Plan in accordance with the decree's implementation. Along with the financial and economic regulatory measures envisaged in the action plan, the government has taken important steps in the field of employment and social protection. The Azerbaijani state is a socially oriented state. The goal is to strengthen the social protection of our population as our economy develops. That is, economic income should be geared toward the population's social security and strengthening of social welfare. This has always been the case, and Azerbaijan's approach has always prioritized social policy. The review of state budget expenditures for 2021 on public administration bodies, power systems, social policy implementation, real sector funding, and other expenditures reveals that expenditures related to social policy implementation account for 31.5 percent of total state budget expenditures (Figure 3). At the same time, it should be noted that the share of budget expenditures for financing the real sector in 2019 and compared to the corresponding figure in 2020 was 7.0 and 0, respectively. The percentage of expenditures related to the implementation of social policy decreased by 4.8 percentage points and increased by 7.8 and 0.2 percentage points, respectively.
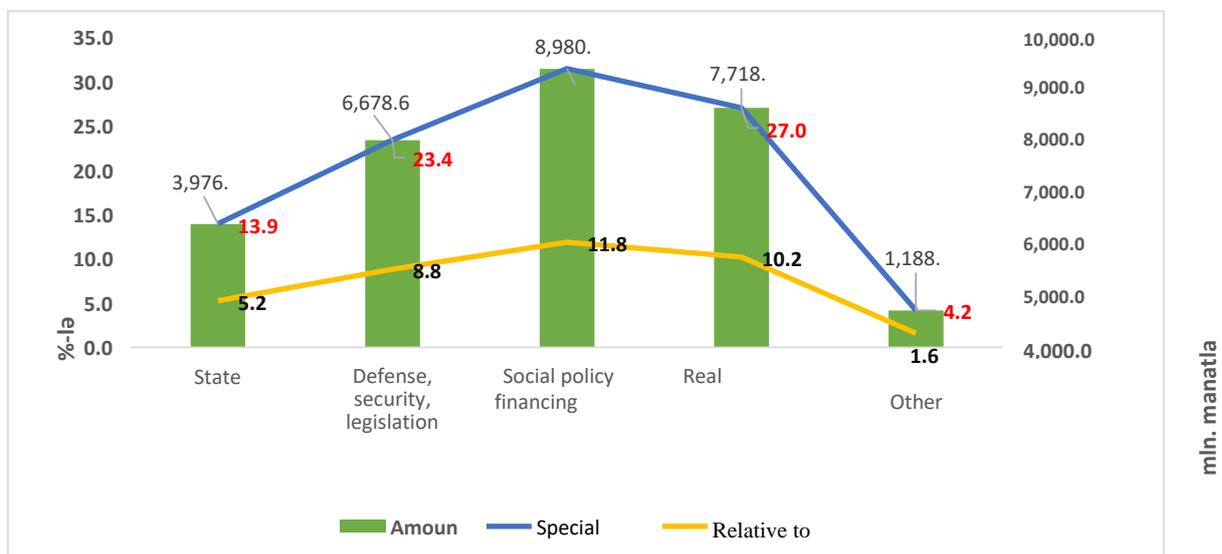
Figure 3: The total amount of individual expenditures for 2020 (in million manats), the share in the state budget and the ratio to GDP (in %)
(Source: Picture has been developed based on data provided by the State Statistics Committee of the Republic of Azerbaijan)

The State Social Protection Fund's budget, which functions under the Ministry of Labor and Social Protection of the Population, had revenues and expenses of 5146.0 million AZN. In order to balance the budget of this Fund, the funds allocated for the financing of the state budget liabilities amounted to 1631.5 mln. manats, which is 442.6 million manat more than the forecast

for 2020 (37.2% more). The Unemployment Insurance Fund budget had 157.8 million in revenue and expenses. The manat is projected to reach 6.6 million manats, up 4.3 percent from this year's estimate. The establishment of a legislative structure for this ("On Social Security," "On Individual Accounting in the State Social Insurance Scheme," "On Compulsory Medical Insurance," and Order of the National Leader Heydar Aliyev dated July 17, 2001 "Concept of Pension Reforms in the Republic of Azerbaijan") determines the conceptual basis for the establishment of a new pension system in the Republic of Azerbaijan. The Presidential Decree of 14 May 1998 "On the prevention of disability, rehabilitation and social protection of persons with disabilities for 1998-2001" has played an important rolw to comprehensively address the problem of disability. Steps such as the approval of the State Program on Social Development and so on have served to shape the social policy of the modern Azerbaijani state in accordance with the challenges of the new era. The social reforms initiated by the National Leader Heydar Aliyev have been successfully continued by President Ilham Aliyev since 2003. According to Mr. President Ilham Aliyev's decrees, "State programs for socio-economic development of the regions," education, health, social security, and demographic development are among the "State programs for socio-economic development of the regions." Hundreds of other initiatives in the fields of jobs, poverty reduction, affordable housing, IDP settlement, targeted social assistance, and self-empowerment have been introduced and are being implemented. Many social and humanitarian initiatives, including the introduction of mandatory premarital medical tests for married people, security of mothers and infants, thalassemia and hemophilia, have been launched at the initiative of Azerbaijan's First Vice-President Mehriban Aliyeva. Adoption of statutory acts relating to sick care, as well as the application of the state budget for the payment of tuition fees for children without parental care and children with disabilities in classes I and II are being employed. It is essential as the next step in health-care reform. As in other oil-dependent economies, the third stage of the global financial and economic crisis in 2014 resulted in a rapid depreciation of the national currency of Azerbaijan. Mr. President was able to quickly eradicate the detrimental impact of the crisis by effectively implementing the President's concept of harmonious regional integration and economic diversification. The "Strategic Roadmap for the Prospects of Our National Economy" adopted in 2016 identified 11 priority areas and stated that we have entered a new stage of our socio-economic development. The growth of our economy in 2018 has created financial guarantees to start a new phase of social reforms. The successful implementation of ASAN, ABAD, DOES services and self-employment programs should also be assessed as a practical result of social reforms. Mr. Ilham Aliyev, President of the Republic of Azerbaijan, has always said that the citizens of Azerbaijan and their social welfare are at the forefront of our policy. The President attended the opening ceremony of a residential complex for 1,000 IDP families in the Absheron area at the end of 2018, and then received a party of martyrs' families in the first month of 2019. He met with them and signed an order afterward to offer a lump sum of 11,000 manat to 12,750 people who were martyred between 1997 and 1997 but did not collect insurance premiums or collected insurance premiums at the time's exchange rate. About 130 million manat was allocated from the state budget for this purpose. 2019 has been quite a successful year in the life of our people and state. During this year, all the set socio-economic tasks have been fulfilled, the country's economy has grown, and the social welfare of our citizens has increased significantly. As a continuation of the economic reforms initiated by President Ilham Aliyev in 2018, deep social, governance and structural reforms were carried out in 2019. Two packages of social reforms, covering the recent decrees and orders, have provided financial guarantees for a significant improvement in the social welfare of 4.2 million citizens. Reforms in the field of taxation and customs, which began in 2018, and measures to limit the transparency and shadow economy in this system have brought more than 1 billion manat to the budget for tax and customs revenues. These funds are also aimed at improving the social welfare of our people.

The State Social Protection Fund's revenues increased by 364.4 million manat to 4 billion 116 million 700 thousand manat as a result of changes in the field of pension provision, and the total monthly amount of labor pensions in the country increased from 256 to 295 manat, a 15.3 percent rise. The minimum amount of labor pensions increased from 119 to 200 manat, in other words, by 72%. This increase has helped improve the living standards of 600,000 retirees. As a result of the reforms, Azerbaijan has risen to the first place in the CIS in terms of purchasing power of the minimum pension. The increase in pensions, an important component of the social security system, continued in the first quarter of 2021. In March, the average monthly amount of pensions increased by 11.8% compared to the beginning of the year and reached 332 manat as of April 1. The average monthly amount of old-age pensions reached 362.3 manat, which is 10.7% more than at the beginning of the year. They increased by another 10% compared to 330 manat. The average monthly amount of old-age pensions is 361 manat, the average monthly amount of disability pensions is 290 manat, and the average monthly amount of survivor's pensions is 267 manat, according to the Ministry of Labor and Social Protection. The indexed rise in pensions since the beginning of the year accounted for the majority of the increase. As a result of the reforms, the minimum wage in the country has almost doubled from 130 to 250 manat. The salaries of 1,350,000 workers in the country have increased significantly. In connection with the implementation of the decrees of the President, one-time payments in the amount of 11,000 manat were provided to 18,000 of the 12,000 martyrs. 640 million manat has been allocated from the state budget to solve problem loans, and the state has repaid the loans of about 900,000 citizens. During these years, the population's income exceeded inflation by 3 times, poverty was 5% and unemployment was 4.8%. The increase in the minimum wage has led to a significant reduction in illegal employment. Expansion of the self-employment program, establishment of DOST centers providing 132 types of services, implementation of e-appointment systems for 21 types of social security, and increased accountability in the area of targeted social assistance and disability. The successful work of the government in the social sphere is also reflected in the work done to improve the housing of the families of martyrs, disabled people of Karabakh, IDPs, who are vulnerable groups of the population. Tuition fees have been allocated from the state budget during the time of education of children of martyrs' families and children of disabled people from the Karabakh war who study on a paid basis in higher education institutions and secondary special education institutions of the republic. The country's legislation provides for a number of benefits and privileges for members of the families of martyrs and war veterans. In addition, 2 million people received social benefits. In 6 months, 590 million manat (27%) more was paid to the population than last year. State-sponsored social assistance is also available. About 15,000 lonely and disabled people over the age of 65 have received social services delivered to their homes. In social care institutions, around 1,000 individuals receive inpatient treatment. Food rations were distributed to low-income families in response to the spread of the COVID-19 virus. During this period, with the support of social partners, 100,000 families were provided with food rations twice. The allowance was extended for two months for people with expired disabilities, unemployment benefits, and vocational training (a total of 16,000 people). The limit of discounted electricity for the population in April-May is 100 kWh per month increased in volume. Employment and social welfare measures cover about 5 million people. Despite the suspension of activities in many areas of the public sector and the private sector in accordance with the requirements of the special quarantine regime, the employment of 900,000 people in the public sector (although 80% are not employed) location and salaries have been preserved. With the support provided to the private sector, 760,000 people were prevented from becoming unemployed. Since the beginning of the year, the number of employment contracts has increased by 120,000 (19%) and the salary fund by 15%.

Unemployed people and informal workers who lose their income due to the special quarantine regime have been paid a lump sum of 190 manat accordingly (subsistence minimum). Minimizing official-citizen communications to ensure population satisfaction in the field of services, as well as a high culture and humane approach to citizens' appeals, as well as consideration and provision of these appeals in a short period of time, would reinforce citizens' confidence in the state. The global coronavirus pandemic has been testing all nations and peoples since early 2020. When the leaders of many countries discussed the dilemma of "whether to save the economy or the people", the President of Azerbaijan, as a true leader of his people, said unequivocally and decisively: "Here we have to choose between two factors - economic activity, people's health. My choice is unequivocal - people's health!" The head of state added that there was a need to build new hospitals, despite the fact that the existing hospitals have enough facilities for the treatment of patients. For this purpose, the construction of modular hospitals was organized. To date, 9 modular hospitals have been commissioned. Also, an 800-bed hospital has been commissioned through the Ministry of Emergency Situations, and a 1,300-bed hospital will be commissioned by the end of the month. Thus, 2,100 additional beds will be created. In order to take precautionary measures, both Olympic Sports Complexes were turned into hospitals and were ready in a short time. Degree on tackling the Coronavirus pandemic (COVID-19), signed by the President on March 19, 2020, aims to reduce the negative impact of the coronavirus pandemic on the socio-economic life of the country and open up the prospects for the development of the post-pandemic period. As a result, a range of steps will be taken to mitigate the negative effects of sharp volatility in global energy and stock markets on the economy, macroeconomic stability, jobs, and entrepreneurship in the Republic of Azerbaijan. The decree is of great importance in terms of protecting the social protection of the population. As always under these difficult times, the Azerbaijani state, which has made social security and welfare a priority in its domestic policy, has reaffirmed its commitment to the people. The Cabinet of Ministers has pre-approved the implementation of the order of March 10, 2020 on reducing the negative effect of the COVID-19 on the country's economy and citizens' living standards. The Cabinet of Ministers' prepated an Action Plan and started its implementation accordingly. In addition to the financial and economic regulatory measures outlined in the action plan, the government has taken important steps in protecting employment and social protection.

5. CONCLUSION

Increasing the country's incomes should increase economic prospects, provide effective jobs and decent work for all segments of the population, and boost women's economic access. The required incentives should be provided to increase the private sector's share of jobs, and the number of workers should be dominated by private sector employers. It has also provided new opportunities for the effective implementation of the appropriate steps in this direction. In general, more than 50 decrees and orders have been signed over the past 15 years to increase state care for citizens and strengthen their social protection. Work is being done to improve society's social security, resources, and income, including salaries, ensure productive employment, increase the share of the private sector in employment, prevent informal employment, legalize income, and reduce poverty, in line with the high level of growth. Azerbaijan currently ranks first in the CIS in terms of purchasing power for the sum of the minimum pension and second in terms of purchasing power for the average pension. As a positive development, this is one of the measures of the success of social policy in our country.

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PROBLEMS AND TRENDS IN THE DEVELOPMENT OF THE DIGITAL ECONOMY AT THE PRESENT STAGE OF GLOBALIZATION

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ABSTRACT

The emergence and spread of the Internet at the end of the last century and the beginning of this century has become a major feature of the global process of globalization. This led to the formation of a single information space. This new stage of globalization can be called "digital globalization". The article examines the basics of the relationship between the digital economy and the current stage of globalization. Large-scale development of information and communication technologies has led to significant changes in the functioning of economic systems at various levels. At the present stage of development, digitalization has become the most important factor in the economic growth of the national and global economy. Under the influence of these factors, there is a transition from the introduction of individual digital technologies to the integrated construction of a digital ecosystem. The process of digitalization is particularly important, as it determines the transition to the fourth industrial revolution. Therefore, in most countries, digitalization of the economy is an important component of economic development. Digitalization of the economy is simultaneously becoming the basis for sustainable growth of production, improving competitiveness and living standards of the population. The article focuses on trends in the development of new global digital processes and risks that are generated by the digital economy. The study found that digital technologies are ubiquitous in traditional sectors of the economy and finance, and digital globalization should be viewed as a driving force of global economic growth, which provides companies with new business opportunities.
Keywords: *digital economy, digital globalization, digital platforms, economic growth, information and communication technologies*

1. INTRODUCTION

The emergence and spread of the Internet at the end of the last century and the beginning of this century has become a major feature of the global process of globalization. This led to the formation of a single information space. This new stage of globalization can be called "digital globalization". The article examines the basics of the relationship between the digital economy and the current stage of globalization. Large-scale development of information and communication technologies has led to significant changes in the functioning of economic systems at various levels.

Under the influence of these factors, there is a transition from the introduction of individual digital technologies to the integrated construction of a digital ecosystem. The process of digitalization is particularly important, as it determines the transition to the fourth industrial revolution. Therefore, in most countries, digitalization of the economy is an important component of economic development. Digitalization of the economy is simultaneously becoming the basis for sustainable growth of production, improving competitiveness and living standards of the population.

2. THE MAIN SOURCES OF GLOBALIZATION OF THE WORLD ECONOMIC SYSTEM

Globalization is a historical process of transforming the world into a single system with common characteristics. Historically, this system is generated by the action of globalization factors:

- electronic means of communication that can compress to a minimum the time and space that separates people;
- technological changes that allow the distribution of products around the world;
- formation of global ideologies, such as environmental or human rights movements.

The globalization of the world economy is the transformation of the world space into a single zone where information, goods and services, and capital move freely, where ideas are freely distributed and their carriers move freely, stimulate the development of modern institutions and debug the mechanisms of their interaction. First, globalization is caused by objective factors of world development, the deepening of the international division of labor, scientific and technological progress in the field of transport and communications, which reduces the so-called economic distance between countries. In the context of information integration of the world, technology transfer and borrowing of foreign economic experience is much faster. The second source of globalization is trade liberalization and other forms of economic liberalization, which have limited protectionist policies and made world trade freer. As a result, tariffs were significantly reduced, and many other barriers to trade in goods and services were removed. Other liberalization measures led to an increase in the movement of capital and other factors of production. The third source of the internationalization process and one of the main sources of globalization has become the phenomenon of transnationalization, within which a certain share of production, consumption, exports, imports and income of a country depends on the decisions of international centers outside the country. The leading forces here are transnational companies. Currently, 80% of the latest technologies are created by TNCs, whose incomes in some cases exceed the gross national income of certain rather large countries. Suffice it to say that TNCs rank 51st in the list of the 100 largest economies in the world. It should be noted that the sphere of activity of most of them is associated with the development of hypertechnologies, which include innovative technologies, network computers, the latest computer programs, technologies for shaping public opinion and mass consciousness, etc. Today, it is the developers and owners of such technologies that control financial markets and determine the face of the world economy. New technologies are one of the driving forces of globalization, but it, in turn, intensifies competition, stimulates their further development and distribution among countries. As a result of globalization, there is an increase in trade in services, including financial, legal, management, information and all kinds of "invisible" services, which are becoming a major factor in international trade relations. Although the bulk of the global product is consumed in producing countries, national development is increasingly aligned with global structures and becomes more multilateral and diversified. The fourth source of globalization is the achievement of global consensus in the assessment of the market economy and the free trade system. The fifth source lies in the peculiarities of cultural development.

We are talking about the tendency to form globalized homogeneous media, art, pop culture, and the widespread use of the English language as a universal means of communication. It is worth mentioning one more important feature of the globalization of the world economy — the rapid development of financial markets in the last years of the XX century [1].

2.1. Influence of digital technologies on the formation of digital globalization

The new role of financial markets (foreign exchange, stock, credit) in recent years has dramatically changed the architecture of the world economy. A few decades ago, the main goal of financial markets was to ensure the functioning of the real sector of the economy. In a word, the process of getting money from money has been greatly simplified due to the exclusion from it of the actual production of any goods or services. In globalization, two stages are traditionally distinguished:

- the first stage - the turn of the 19th – 20th centuries, the period of active development of international economic relations, which ended with the First World War;
- the second stage of globalization began in the 70s. XX century, and is associated with the integration of the world economy and the emergence of TNCs.

The widespread dissemination of digital technologies significantly influenced the formation of a new stage of globalization - digital globalization. Currently, digital flows of data and information are of great value, since they allow the movement of goods, services, finance and people and have a greater impact on the growth of world GDP than international trade [2]. In the context of digital globalization, the processes of production, distribution, cross-border exchange and consumption of information are becoming more important than other types of economic and economic activities, increasing the virtualization of the economy. As a result, a new system of economic relations is being formed – the global digital economy with its own laws and development trends. A significant consequence of the introduction of digital economy technologies has been the increase in non-material information flows between countries, regions, corporations and individuals. The digital economy offers great opportunities for information exchange, education, transparent business, and international cooperation, and is characterized by high growth rates, rapid innovation, and widespread use in other economic sectors. The use of digital technologies has already become a global process and plays a key role in improving the competitiveness of individual enterprises, countries and economic unions. Today the world community has embarked on the third stage of globalization - the digital transformation of society, first of all, under the influence of a large increase in cross-border data. The digital transformation of the economy is understood as the manifestation of qualitative, revolutionary changes that consist not only in digital transformations of individual processes, but also in a fundamental change in the structure of the economy. The potential for the development of information and communication technologies accumulated by the XXI century is the reason for significant changes in the functioning of economic systems at various levels – from the world economy to individual business entities, and digitalization is the most important factor in the economic growth of national and global economies. They are responsible for the transition from the introduction of individual digital technologies to the integrated construction of a digital ecosystem. Digitalization is an important component of the economic development of most countries and at the same time becomes the basis for sustainable production growth, improving the competitiveness and standard of living of the population.

2.1.1. The digital economy as a result of digital globalization

The "digital economy" is a system of social, economic and technological relations between the state, the business community and citizens, which functions in the global information space. In this system, digital network technologies are widely used and digital types and forms of

production are created, and products and services that are promoted to the consumer lead to continuous innovative changes in management methods and technologies in order to increase the efficiency of socio-economic processes. The above definition is quite General, so it is necessary to reveal the main features of the digital economy. These include:

- creation of cyberphysical systems in which a person and a machine represent a single, smoothly working organism.
- use of smart platforms in all areas of socio-economic activity.
- introduction of the Internet of people, Internet of things, Internet of services.
- application of Big Data technologies ("big data" processing).
- use of modern information technologies, such as blockchain, which ensure transparency of data transmission and reliability of data storage [5].

The digital economy is based on the decentralized cross-border blockchain technology, cloud computing, big data, cyber-physical systems, the Internet of Things, 3D printers, which together implement the concept of Industry 4.0 - a new approach to the integration of production and consumption. The use of digital technologies leads to the following positive economic and social effects: automation and intensification of traditional economic and technological processes, creation of new sectors of the economy; improvement of the business and investment climate by increasing the availability and efficiency of public services, transparency of business conditions; increasing the availability, quality and convenience of medical, educational, cultural, and financial services for the population; creation of comfortable and safe cities. Global digitalization is changing business models, which entails a revision of the principles of interaction with customers, suppliers and partners. Companies now have new opportunities to find the best suppliers, customers and talent around the world. Through digital technologies, people gain access to global markets for education, work, and more. Currently, the concept of the digital economy, evolving with the rise of digital technologies, has expanded beyond e-commerce and now includes doing business, maintaining communications and providing services in all industries (including transport, financial services, manufacturing, education, healthcare, agriculture. , retail, media and entertainment). In recent years, digital infrastructure has developed rapidly. The use of digital platforms and digital solutions provides companies and citizens with new opportunities:

- companies can conduct business "without borders", Internet technologies allow organizing global access to information and "instant" transactions (electronic commerce);
- the costs of transactions, marketing, interaction with customers in new markets are reduced;
- sales can be carried out in remote and fast-growing markets by organizing virtual teams interacting online [2].

A key factor in the development of the digital economy is the development of digital platforms. A digital platform is a set of technologies that ensure the creation of a digital interaction system in a specific and specialized field of activity. A digital platform is an enterprise that provides mutually beneficial interactions between manufacturers and consumers. It provides an open and efficient communication infrastructure for market participants, and sets new rules for interaction between business entities. The digital platform is a system of algorithmized, mutually beneficial schemes of relationships between heterogeneous, independent participants in the economic sector and is implemented in a single information environment. It is the basis of the digital transformation of the market. First, the digital platform contains basic services that are attractive to both manufacturers and consumers. They allow them to optimize the number of transactions and user costs. But linking to a digital platform restricts the freedom of business entities. On the other hand, the digital platform is sold to users, usually at a low price. Users are attracted by the low price, ease of use, and the effect of multi-channel marketing.

Thus, the digital platform expands its presence in the market and in production, monopolizing its influence on it. Market participants do not regard the owners of the digital platform as competitors and easily admit it into their value chain. They do not see a threat to their business and do not consider the role of the digital platform in this chain to be critical. Nevertheless, the digital platform, by increasing the power of an active community of participants, turns quantitative changes into qualitative ones, that is, structural changes take place. Doing business using the platform is becoming mainstream (the "main line" of development). After that, the digital platform possesses key information, controls the market, influences pricing, methods of supplying goods and services, completely capturing the value chain, and as capital accumulates, the digital monopoly turns into an economic monopoly. As a result, the digital transformation of the market can be said to be disruptive. That is, the digital economy affects the business climate in the country, forms the ecosystems of the country and regions. And the ecosystem of the country's economy, in turn, determines the conditions for the positive development of all economic entities, not excluding the competitive relations between them. A properly built digital transformation should ensure a favorable corporate business culture in the country.

3. PROBLEMS AND MAIN RISKS OF THE DIGITAL ECONOMY DEVELOPMENT

The introduction of the digital economy has its advantages and threats. The advantages of this process are: elimination of unproductive intermediaries (reduction of the product life cycle cost); direct sales channels (acceleration of business processes); lower marketing costs; increase in market volumes; increasing the transparency of operations and transactions, including in the provision of public services; improving the quality of life of the population. At the same time, there are certain opportunities: the formation of new markets; creation of databases on consumer preferences and producers' capabilities; stimulating the development of markets and new business; stimulating export growth; improving the structure of the economy; increasing the productivity of sectors of the economy and the quality of services provided. The weak points of implementing the digital economy are: the financial costs of creating and using a digital platform; the need to restructure corporate processes and improve the corporate culture of business; the lack of effective formalized regulatory tools; and the lack of development of regional, national and international legislation. When implementing a digital economy threats can be: loss of control over the market infrastructure (intercepted by the owners of the digital platform); loss of control over distribution channels; the emergence of new competitors, monopolization of production, as a result of the influence of digital infrastructure; negative consequences due to the lack of tools to control the actions of the owners of digital platforms; loss of control over the internal market in the event of the intervention of external digital platforms. It can be concluded that reducing the price of the product lifecycle and directly accelerating business processes as the strengths of the digital economy implementation should cover the losses arising from the financial costs of creating and using a digital platform. In addition, the loss of structural adjustment of corporate processes and improvement of corporate business culture should compensate for the remaining threats due to the loss of control over the market infrastructure and the loss of control over sales channels. And the losses from the development of regional legislation should compensate for all the above-listed threats. Properly structured digital transformation is expected to provide a favorable corporate culture of the business in the country. In this case, these conditions are determined by the mechanisms of regional regulation of economic activity and the availability of development resources. Thus, the digital transformation of the market is not evolutionary, but revolutionary. This means that there may be negative consequences of this process. Digital technologies carry both benefits and risks, including technological, social, political, the risk of increasing crime in its new manifestations, the risk of social, environmental and personal degradation. The technological risk is related to the fact that the advantages of digital technologies can be fully manifested only

with the balanced development of organizations in the real sector of the economy. But if one segment of real production works at an accelerated pace and with high quality, and the other-slowly and poorly, then as a result, the entire economy will work unsatisfactorily [10]. As a result of the development of digital technologies, there will be a radical transformation of the work organization system in the future, which will lead to a sharp reduction in the traditional relationship between employee and employer. Digital platforms make it possible to organize economic activities in such a way that the bulk of the functions traditionally performed by full-time workers within a given organization can be transferred to a group of sole proprietors and "online workers". The result is an economy that is based not on full-time employment but on short-term relationships with "online workers". Among the risks and threats posed by the digitalization of the economy and society, a particular danger is the social risk associated with a significant transformation of the labor market and a reduction in employment, as well as the risk of the spread of a new form of crime - cybercrime. The global digital economy is helping to develop complementary skills and qualifications. In addition, digital platforms will create employment opportunities for new high-paying jobs created by the digitalization of professions. Thus, the above social risks will be offset by the increased demand for specialists needed to create the infrastructure of the digital economy. Political risks are especially dangerous. According to experts, in the cross-border world of the digital economy based on blockchain technology with its decentralization and lack of a regulator, the role of the state should be reconsidered. It should take the form of a simple territorial entity with a certain population. This will lead to the abolition of the governing and controlling role of the state, the weakening of state regulation of the economy, the loss of the ability to exercise its functions and protect its sovereignty, and the emergence of private cross-border systems for managing economic, social and political processes [7]. The basis for such systems is provided by global social-information and trade-information networks and cryptocurrencies, the Internet of things and other depersonalized information means of making transactions that take international trade and Finance beyond national jurisdictions. Citizens can opt out of government systems to protect their interests by relying on network structures and using blockchain technologies and smart contracts [8]. In the global digital economy, businesses and people face increasing risks in the area of digital security and personal information protection. A world connected to the Internet opens up new opportunities for cybercriminals who collect personal data to use it for fraudulent transactions, or implement ransomware-malicious software that can block devices or encrypt data and demand money in exchange for a decryption key. The risks of violating personal data privacy are added to consumer concerns about the possibility of online fraud. There is a misconception that the digital environment minimizes the risk of fraud, but this is true only for low-tech types of fraud. In the new era of Internet dominance, every organization becomes digital by definition and, in one way or another, uses online technologies in its activities. Such conditions create opportunities for hacker attacks, and they can be both massive and targeted at a specific organization. Experts predict an increase in the scale of cross-border computer crime, because now, being in one country, with the help of simple manipulations, you can get the necessary information stored in the data Bank of the computer system of another country, then transfer it to a third country, while achieving the goal - to steal and appropriate funds. The risk of increasing corruption in the digital economy should also be considered, since a person, leaving for virtual reality, can use material benefits (for example, cryptocurrencies) anonymously, without revealing their identity. It seems possible to find him and punish him only by organizing constant and continuous monitoring of the corrupt official and comparing the expenses committed by him with his personality. The expansion of digital technologies and their introduction into everyday life transforms the internal and external world, which takes on more individual, but contradictory features.

This is facilitated by:

- individualization of production, in which the products produced will meet the needs and needs of each individual consumer;
- virtual and augmented reality that creates an individual artificial world for each person;
- human life itself, which is becoming more and more "digitized", analyzed, controlled, directed and regulated, as a result of which a person loses his identity, identity;
- loss of a person's freedom and ability to independently form their own personality;
- increasing the ability of the authorities to segregate people, determine and shape their life paths, as well as the right employees [4].

4. CONCLUSION

Digital globalization of economic processes is becoming a fundamental trend and principle of development of the modern economy. It is determined not only by revolutionary technological changes, but also by the laws of the evolution of the economy as a whole, and contributes to the growth of labor productivity and product quality. The consequence of digital globalization is international economic integration. And thanks to this integration, non-traditional cross-border flows of goods, loans and investments are growing rapidly, and the global exchange of information, ideas and technologies is intensifying. This leads to the fact that national economies become part of a single global digital economic system. In this regard, it is necessary to form a national digital security policy and constantly update it. This should become one of the most important activities of the leadership of our country. The state must prevent discrimination of any kind, protect consumer rights, intellectual property and personal data, and ensure that citizens have an adequate level of education and digital literacy. At the same time, excessive national protectionism can hinder the development of the global digital economy. The desire to store all data on the servers of only one's own country, the protection of confidential information are barriers to cross-border trade and hinder digital globalization [11].

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ECONOMETRIC ANALYSIS OF PERSPECTIVES THAT OPENS UP GROWTH OF TOURISM IN REGION AFTER LIBERATION OF KARABACH

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ABSTRACT

The tourism sector is a mirror of the commitment of the world's countries to civilized values, the rule of law and its socio-economic situation. In recent years, the development of tourism has become one of the priorities of economic development of the regions of Azerbaijan and there are great opportunities for realization of this development strategy. Like other regions of Azerbaijan, the Garabagh (Karabakh) region has great tourism potential as well. There are great opportunities for the reconstruction and development of various forms of tourism in both lowland and upper Garabagh - eco-tourism, mountain tourism, winter tourism, medical tourism, hunting tourism. The article approaches the tourism sector as a complex, dynamic and stochastic economic-cybernetic system and was shown that cybernetic characteristics specific to this sector, in particular, necessitates the use of econometric modeling, which is a mechanism for assessing the validity of economic laws in the study of existing dependencies in the tourism sector is based on statistical concepts and approaches. The article tests the stationary nature of the time lags of statistical indicators characterizing the tourism sector by the correlogram method, and these lags are brought to the stationary. The Granger test also assessed the existence of a "cause-and-effect" relationship between the statistics involved in the study. As a result of econometric studies, multi-regression models of quantitative dependencies in the tourism sector have been developed and their practical significance has been assessed.
Keywords: Tourism sector, economic - cybernetic system, econometric modeling, stationary time lags, non-stationary time lags, correlograms, multi-regression model, Granger test

1. INTRODUCTION

44-day war that left an indelible mark on the history of Azerbaijan! The victorious Azerbaijani army put an end to the 30-year occupation of the Armenian aggressors, "drove the enemies away from the holy land like dogs" and liberated our native Garabagh. The Azerbaijani people and the victorious Azerbaijani army, rallying around the Supreme Commander-in-Chief, President Ilham Aliyev, like an "iron fist", demonstrated their indomitable strength to the whole world and restored our territorial integrity. Now a new historical period begins in the life of our native Azerbaijan - life must be restored in the liberated from occupation and devastated by the hated enemy of Garabagh. Both the Garabagh region and Azerbaijan as a whole have great potential for the development of the tourism sector. Therefore, attention should be paid to the development of this sector of the economy, the development strategy of this sector should be developed and implemented in a comprehensive manner. There the tourism sector must be approached as a complex cybernetic system and the vector of optimal behavior and development of this sector should be determined on the basis of econometric modeling method to achieve this goal.

2. RESEARCH

The liberation of Garabagh opens new opportunities for the development of tourism in the country. Your age is unknown! How much have you endured! Indeed, Azerbaijan, one of the cradles of human development, has always fought for its freedom and peace, and in order to achieve this sacred goal, its children rose to the top of martyrdom. At the end of the 20th century, our native Azerbaijan was subjected to a new aggression by our hated neighbors - the Armenian fascists, and part of our territory, Nagorno-Garabagh and 7 regions of Aran Garabagh were occupied by the enemy. The hated enemy committed the Khojaly genocide on our lands, our native Shusha was lost, Fizuli, Zangilan and other regions were defeated... However, the Azerbaijani state responded to this terror, which lasted almost 30 years, with dignity and dignity. We have returned!!! The people of Azerbaijan and the victorious Azerbaijani army united around the Supreme Commander, like an iron fist, crushed the Armenian terrorists in the 44-day Patriotic War and restored our territorial integrity. The whole world understood the truth that "Garabagh is Azerbaijan!" After the historic victory in the Second Garabagh War, Azerbaijan set a new task - to restore our territories, which were liberated from occupation and treacherously destroyed by Armenian terrorists. This goal set by President Ilham Aliyev as a national issue - the realization of the goal of reviving our liberated territories - has already begun and initial positive results have been achieved. As noted by President of the country Ilham Aliyev, in this case, it is not a question of carrying out reconstruction in those areas, but of carrying it out radically. Thus, during the years of Armenian occupation of our territories, they completely destroyed Aran Garabagh, which is around Nagorno-Garabagh and has an area of 10,000 square meters, and even demolished the rocks of these territories. That is why the return of our occupied territories has been identified as a national issue under the name "Construction of Garabagh". The experience of recent months shows that the Azerbaijani people and leadership have great confidence that Garabagh will soon be restored to the highest standards. As in the 44-day war, the solidarity of national forces will serve as a source of inspiration and driving force in this work. Therefore, we can say with full confidence that by mobilizing all the internal resources of the country, in a short time it will turn our Garabagh, destroyed by Armenian vandals, into a nightmare, and the real owners of these lands - our compatriots living as refugees will return to their ancestral lands. It is gratifying that the construction of the international airport in Fizuli is already underway. A highway is being built to Shusha, railway lines are being restored, gas and water pipelines are being laid. The President declared a "green zone" of the liberated territories. In other words, in these lands, preference will be given to the use of energy from renewable sources (solar, wind, etc.) rather than traditional energy. As it's been mentioned above, the Garabagh region of Azerbaijan was one of the oldest cultural centers in the world. This region also has a rich tourism practice and has long attracted the interest of both the population of the former USSR and foreign countries. In fact, the tourism potential of Garabagh is very rich, and there are great opportunities to rebuild and develop various forms of tourism in these liberated areas - eco-tourism, mountain tourism, winter tourism, medical (medical) tourism, hunting tourism. Shusha, the cultural capital of Azerbaijan, located at an altitude of 1400 meters above sea level and distinguished by its flora and fauna, historical, cultural and religious monuments, unique architecture, Kalbajar and others, distinguished by the thermal treatment water "Istisu". it is a mirror of how vast these possibilities are (Nazim Mammadov, 2010). The tourism sector acts as a mirror of each country's commitment to democratic values, the rule of law and its socio-economic status. From this point of view, the Republic of Azerbaijan has an ancient and rich tradition in the field of tourism. The development of tourism in Azerbaijan, the expansion of tourism geography dates back to the 70s and 80s of the twentieth century and is associated with the name of the great leader Heydar Aliyev.

In recent years, the development of tourism has been recognized as one of the priorities of economic development of the regions of Azerbaijan, and there are great opportunities for its implementation (Naghisoylu M., 2017). Our country, which has won a great victory over the "visible enemy", or rather the Armenian terrorists, and expelled them from our lands "like dogs", is still facing an "invisible enemy" - the coronavirus pandemic (covid - 19). Like other sectors of the economy, the tourism sector has been in decay as a result of the pandemic crisis (It should be noted that since tourism is associated with population displacement and border crossings, the destructive impact of the pandemic on the tourism sector is stronger). First of all, this decay is reflected in the fact that the number of tourist flows to our country has decreased significantly compared to previous years. So, if in the first 4 months of 2018, about 630,000 tourists from 157 foreign countries came to our country, in 2019, about 611,000 tourists, the number of foreign citizens who came to our country in January 2021 was only 36.1 people (from 105 countries) and this figure was 6.3 times less than the corresponding period of 2020. It should be noted that the vast majority of this contingent came to our country not as tourists, but mainly for non-tourism purposes. There are a number of negative aspects in the development of the tourism sector in Azerbaijan. Thus, the tourism sector in our country has not gained the status of a "people's" sector and has a more "elite" status. For example, in neighboring Georgia, a large part of the country's population (about 70%) works in the tourism sector, which has already received the status of a public business. In Azerbaijan, before the lockdown, only 20,000 people worked in this sector. Georgia's $ 3 billion in tourism revenues in 2018 is also significantly higher than in Azerbaijan. So, our country has great and feasible prospects for the future development of the tourism sector. Although a number of successes have been achieved in the development of the tourism sector in our country, Azerbaijan has not yet become a global tourism industry, and the share of this sphere in the formation of GDP for the country is insufficient. One of the reasons for this situation in the tourism sector is the unsatisfactory material resources and the need to reform it. There is a great need for state data on the tourism sector in Azerbaijan, tax exemptions, the construction of relatively cheap and simple hostels, the creation of an affordable hotel chain, the simplification of visa procedures, and even visa-free travel for some countries. The strategic roadmap for the development of the tourism sector of the Republic of Azerbaijan states that the creation of a quality system of national tourism was chosen as goals that will stimulate the development of the tourism sector in our country with a view to fully realize the tourism potential of Baku at the expense of foreign tourists, to create a favorable environment for the development of the tourism sector in the country, to develop regional tourism, to increase tourist satisfaction. Of course, the liberation of Nagorno-Garabagh and surrounding areas from Armenian occupation and the expulsion of terrorists from our lands have created new realities and the development of tourism in Aran and Nagorno-Garabagh should also be considered as one of the goals of the development of the tourism sector in our country. Achieving these goals will maximize the mobilization of available resources for successful and sustainable development in the tourism sector - ie will create conditions for the creation of free economic zones, freeing the tourism sector from the tax burden, providing a favorable lending system and, finally, attracting foreign investment in the country's tourism sector.

3. ECONOMETRIC ANALYSIS OF THE DEPENDENCIES BETWEEN THE INDICATORS OF THE TOURISM SECTOR

The study of the tourism sector of our country should be based on a systematic analysis. So that, This sector by its nature acts as an economic cybernetic system of a complex, dynamic and stochastic nature with numerous direct and indirect relationships with other environmental systems. These cybernetic characteristics, especially stochasticity, which are characteristic of the tourism sector, makes it necessary to use econometric modeling which is a mechanism for

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assessing the validity of economic laws in the study of existing dependencies in this sector and consists mainly of stochastic concepts and approaches. The purpose of our research is to identify the relationship between the economic indicators that characterize the tourism sector and, on this basis, to quantify the development prospects of this sector on the basis of econometric analysis (Chistaya G.O.,2018). We believe that the results obtained will adequately reflect the prospects for the development of tourism in the Garabagh region, which was liberated from the Armenian occupation. Data reflecting changes in the main economic indicators of travel agencies in the tourism sector during 2006-2019 were used (Table 1) As a statistical base of research.

	Income earned by travel agencies (in thousand manats) SG	Number of tourist trips sold (in units) TY	Number of travel agencies (in numbers) SA
2006	8480	20256	96
2007	15966,6	26008	117
2008	17120,5	27055	123
2009	17839,6	28509	124
2010	19065,3	34121	126
2011	22634,8	42583	141
2012	27121,5	62866	170
2013	29600,9	65448	197
2014	31107,1	66233	218
2015	36482,2	44615	243
2016	36758,3	36978	273
2017	41034,2	44066	339
2018	56439,1	49992	374
2019	63363.8	63885	432

Table 1: Dynamics of key economic indicators of travel agencies in the tourism sector (Source: The state Statistical Committee of the Republic of Azerbaijan)

As can be seen from Table 1, the economic indicators that characterize the tourism sector are expressed in three chronological order (time sequence):
1) Time sequence SG, which reflects the revenue generated by travel agencies.
2) Time sequence TY representing the number of travel trips sold.
3) Time sequence SA, reflecting the number of travel agencies.

Time lags play an important role in econometric modeling. An important feature of these lag is that they are evenly distributed and statistically independent. Therefore, the application of traditional correlation-regression analysis methods to the study of economic indicators expressed in the form of time lags may give incorrect results. An example of this type of error is the wrong decision about the existence of a connection. Therefore, before constructing a regression model of a relationship based on time lags, the time lags must be analyzed and the necessary changes made. Adequacy of econometric research to the studied real conditions and validity of the obtained results is directly related to whether the time lags of economic indicators used in the research process are stationary or non-stationary. Thus, if the stationaryity of the time sequence is violated, then it is practically impossible to determine the statistical characteristics of such a time lag (Damador N. Gujerati, 2012). Saying the stationary time lags we understand such lags that their probabilistic properties remain constant over time. Rather, the stationary time sequence is such that it has a fixed mean, and the value of the lag revolves around a certain fixed variance around this mean.

Thus, $\{y_t\}$ $(t = \overline{1,n})$ time sequence is considered stationary if time sequence is considered stationary if its mean value and variance be constant, and covariance between its τ laga Y_t and $Y_{t+\tau}$ lags be dependent on length of τ value and independent on the time:

$$M(Y_t) = m,$$

$$D(Y_t) = M(Y_t - m)^2 = \sigma^2,$$

$$\gamma_t = M[(Y_t - m)(Y_{t+\tau} - m)] = \sigma^2 \rho(\tau)$$

Studies show that for a time lag to be stationary, its structure should not have a trend condition, seasonal component and random balance homoscedasticity. To check the stationaryness of time lags graphical analysis, as well as correlogram and single root tests can be used (Green, William G.,2016). Now, let's test the stationary nature of the time lags of tourism sector indicators shown in Table 1. In the process of our econometric research we tested the stationary time lags SG, TY and SA of the economic indicators of the tourism sector of the economy of the Republic of Azerbaijan, reflected in Table 1, using the correlogram method (This method is often called the ACF and PACF autocorrelation function method) (Hadjızalov Y.I ,Huseynova L.N, 2013). To check the stationaryness of these lags The failure to use the Dick-Fuller single root test (This test is often called the DF, ADF, KPSS and PP test) is due to the small number of n observations in the time lags (n = 15 <25). To assess whether the revenue (in thousand manats) earned by travel agencies is fixed in the SG time lags, first of all, let's look at the graphical description of the lags. (Figure 1)
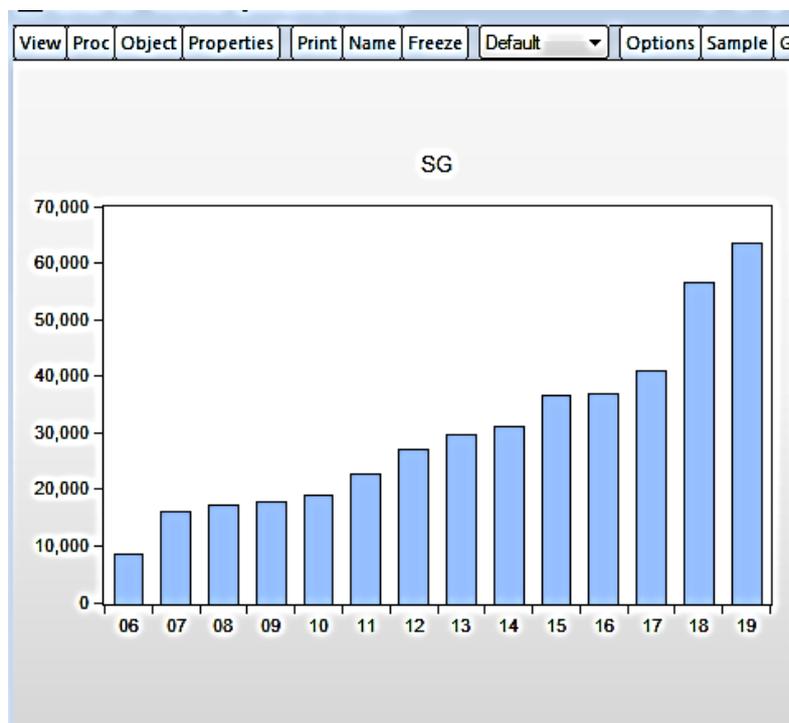
Figure 1: Graphical description of travel agency revenues by time lags (SG lags)

According to the graphic description, this lag is non-stationary. So, as can be seen from the graph, there are additive leaps in the SG time lags in 2018 and 2019. Below is a correlogram showing the time lags (SG) test results of stationary income of travel agencies as shown in Table 1 (Figure 2).
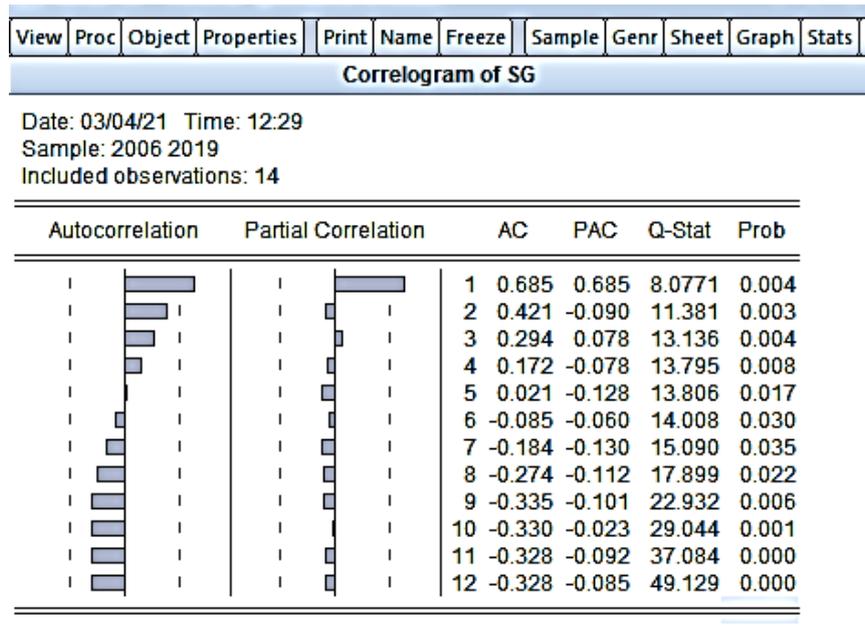
Figure 2: SG time lags correlogram

Analysis of the correlogram shows that the SG lag is not stationary because for this lag the value in ACF (1) approaches the unit, and then the correlogram decreases with a sinusoidal interval. So the lag is non-stationary. This lag is an integrated lag. If we use the increment function to bring the SG sequence to a stationary state, then üe üill obtain the following correlogram for this lag (DSG lag) (Figure 3).
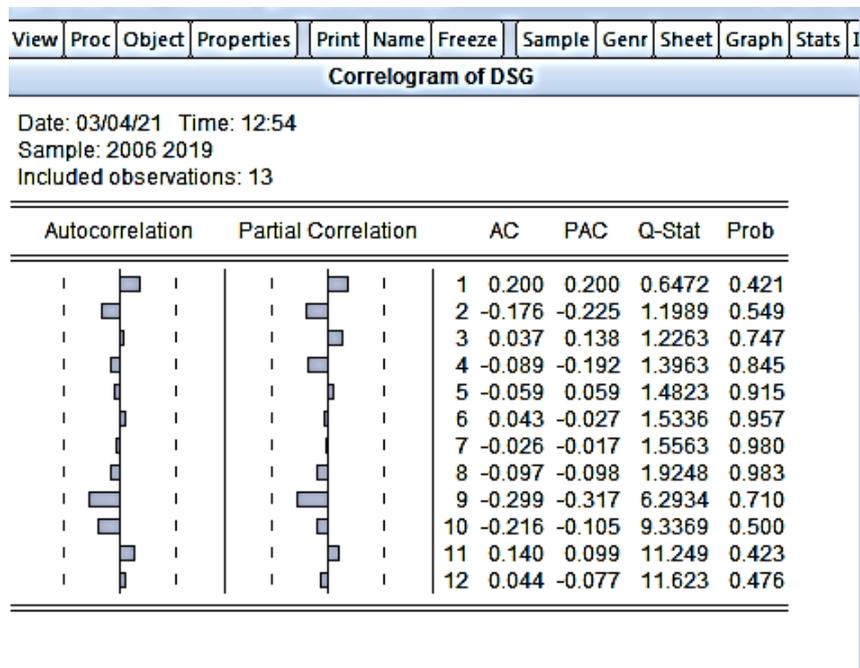
Figure 3: DSG time lags correlogram

Analysis of the correlogram shows that the ACF and PACF values for the DSG lags do not exceed the 95% reliability limit and are stationary at the range levels. A graphical description of the time lags (TY time) of the number of sold tourist trips is as follows (Figure 4).
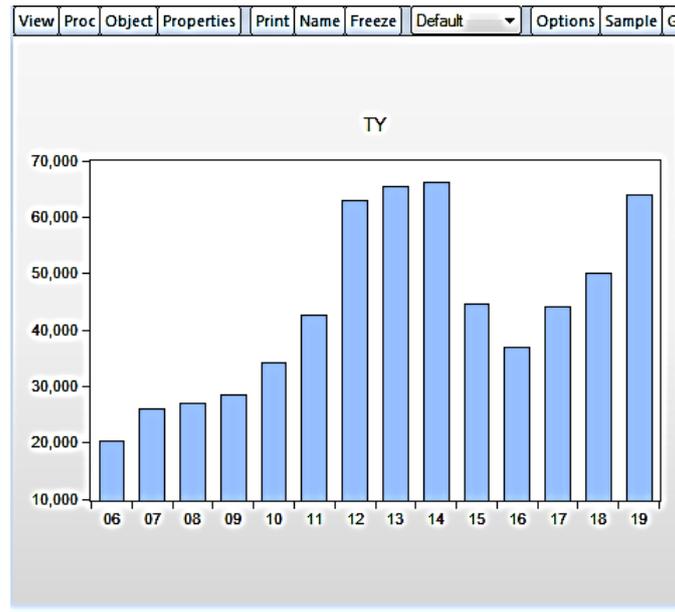
Figure 4: Graphical description of the TY time lags

This lag is non-stationary. Thus, as can be seen from the graph, there were additive leaps in 2012, 2013, 2014 and 2019. Analysis of the correlogram shows that the TY lag is not stationary, because for this lag the value in ACF (1) approaches the unit, then the correlogram gradually decreases along the sinusoid. So the lag is non-stationary. This lag is an integrated lag. If we use the growth function to bring the TY lags to a stationary state, we see that although there is a sharp increase in the ACC (1) and PACF (1) autocorrelation functions in the 3rd lags for this lag, such values are small and the values do not exceed 95% confidence intervals. If we analyze the time lags (SA lags) of the number of travel agencies in a similar way. According to the timeline graph, there has been a sharp increase in the indicator since 2015, according to the correlogram analysis, the value in ACF (1) is close to the unit, and then the correlogram gradually decreases on the extinct exponent. So the lag is non-stationary. Rather, this lag is an integrated lag. If we use the increment function to stabilize the SA lag, the SA lag is stationary with respect to the 1st difference in growth rate relative to the correlogram, because the values of the ACF and PACF functions do not exceed the confidence intervals. Now let's examine whether there is a cause-and-effect relationship between the indicators of the tourism sector involved in the study. Let's use the Granger test for this purpose. There were reflected the results of verification of the existence of a long-term relationship between the number of sold tourist trips and the natural logarithm of the time lags LN_TY between LN_SG lags, which is a natural logarithm of the SG time lag of income of travel agencies in the tourism sector in the table below by the Granger test (Table 2).

Pairwise Granger Causality Tests
Date: 03/04/21 Time: 16:16
Sample: 2006 2019
Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
LN_SG does not Granger Cause LNTY	13	0.28495	0.6051
LN_TY does not Granger Cause LNSG		5.74801	0.0106

Table 2: Granger test statistics for LN_SG and LN_TY time lags

The test results show that the number of tourism trips sold has a significant impact on the revenue generated by travel agencies. Since F-Statistic = 5.75 => p (F) = 0.01 <0.05, it can be assumed that the number of tourist trips sold plays a role in Granger's reason for the revenue indicator earned by travel agencies. This fact is consistent with economic theory. The income generated by travel agencies in the travel sector was tested by the Granger test for a long-term relationship between the natural log of the time lag SG, the LN_SG sequence, and the number of travel agents (Wooldridge J.M., 2012). The test statistics show that the number of travel agencies significantly affects travel agency revenues. Since F statistic = 20.54 => p (F) = 0.00 <0.05, it can be assumed that the number of travel agents plays a Granger causal role for the revenue generated by travel agencies. Taking all of the above into account, if we take the travel agency revenue as the dependent variable (dependent variable "y"), the number of travel package travel packages sold (free variable x1) and the number of travel agencies (free variable x2) sold as explanatory regressor, the mathematical description of the econometric analysis of the relationship between these indicators is as follows:

$$Y(SG) = -3385{,}86 + 0{,}118x_1(TY) + 133{,}99x_2(SA) \qquad (1)$$
$$P(0.17)(0.07) \quad (0.00)$$

(1) The quality of the regression model is quite high. Since the value of the coefficient of determination is R = 0.97, the number of travel goods sold and the number of travel agency regressors account for 97% of the revenues received by travel agencies. However, it should be noted that according to this statistic, the number of tourist trips sold (TY) is insignificant (regressor x2) because (P = 0.07> 0.05 = α). Therefore, taking the logarithm of the parameters included in the model (1), in terms of the exponent (based on e = 2.71828) let's built a new econometric model of this type:

$$LNY(LN\_SG) = \beta_0 + \beta_1 LNX_1(LN\_TY) + \beta_2 LNX_2(LN\_SA) + \varepsilon \qquad (2)$$

According to these statistics, the following logarithmic model is obtained.

$$LN\_SG = 2.10 + 0.31LN\_TY + 0.91LN\_SA + \varepsilon \qquad (3)$$
$$P\ (0.07) \quad (0.03) \quad (0.00)$$

The quality of the model is quite high. The coefficient of coefficient explains 95% of the revenue earned by travel agencies by the number of travel packages sold and the number of travel agencies, and all commentators are 95% significant. According to DW statistics, it falls into the zone of uncertainty (0.905 <.DW = 1.46 <1.551). (3) The correlogram of autocorrelation infection of the linear multi-regression model is shown below (Figure 5).

Figure following on the next page
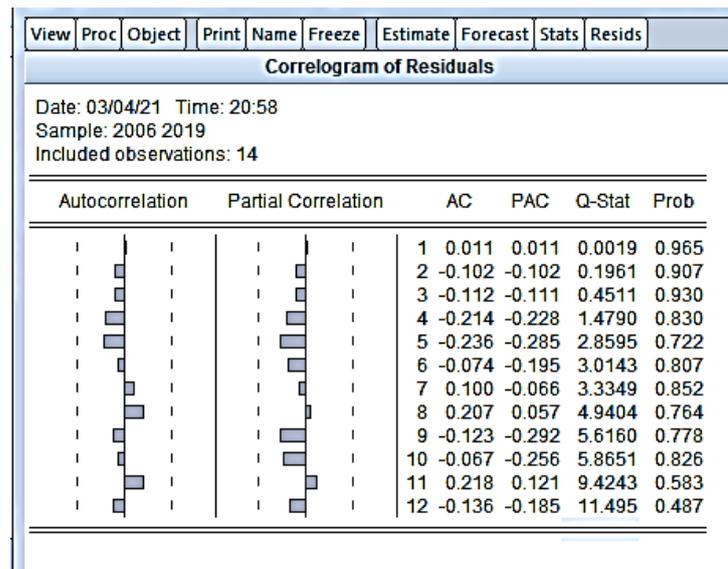
Figure 5: (3) Correlogram of autocorrelation testing of a multi-regression model

Analysis of the correlogram shows that there is no first-order autocorrelation in the regression model (3). Thus, (3) the model of multi-regression can be considered as a model that fully meets the Gauss-Markov conditions and adequately reflects the real situation in the field of tourism. According to the economic interpretation of this model, a one-unit increase in the number of travel items sold increases the revenue of travel agencies by 0.31 units, and a one-unit increase in the number of travel agencies increases the revenue of travel agencies by 0.91 units. The high quality of the econometric model we have received allows us to use this model as an effective mechanism for forecasting the development of the tourism sector.

4. CONCLUSION

As a result of the unprecedented victory of the victorious Azerbaijani army over the Armenian invaders in the 44-day homeland war the new opportunities opened by the liberation of Garabagh and the restoration of its territorial integrity were considered. It was determined that, one of these new opportunities is in Aran and Nagorno-Garabagh, which have been liberated from the clutches of the enemy. As well as the development of the tourism sector in other regions of Azerbaijan. Therefore, the tourism sector of the country's non-oil sector was approached as a complex economic-cybernetic system and has been researched in terms of a systematic approach. The stability of the time lag of indicators related to the tourism sector was checked with the help of special tests and non-stationary time lag were brought to stationary time lag in the process of econometric analysis. With the help of the Granger test, it was determined whether there is a cause-and-effect relationship between the indicators of the tourism sector. In the process of econometric analysis, a multi-regression model was established to quantify the existing dependencies in the tourism sector and its quality was assessed using special tests.

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FINANCIAL SUSTAINABILITY: THEORY AND AZERBAIJAN APPLICATION

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ABSTRACT

In addition to providing macroeconomic balances for the economies of the country, sustainability of these balances has become an important issue. One of the issues raised in the recent period regarding sustainability is the concept of financial sustainability, which covers the sustainability of budget deficits and debts. Financial sustainability is recognized as a necessary condition for the co-ordination of a sound and consistent economic policy and monetary policy. An unsustainable fiscal policy carries risks that may cause economic growth to slow down due to high interest rates in the future. Azerbaijan left the USSR on October 18, 1991 and announced its independence. The main reason for the sound functioning of all institutions in the market economy is the regulations in banking and other financial institutions. The reason for this is that the market economy consists of banks and financial institutions. It is not correct to talk to the market system from a healthy transition without creating healthy financial institutions and realizing free banking system in the country. This study begins with the development of economic policies in Azerbaijan since 1991. For this purpose, the economic crises and policies implemented over the last twenty-seven years have been read from the example of Azerbaijan. The aim of the study is to empirically analyse the financial sustainability in Azerbaijan for the period 2006-2020. Firstly, unit root test was applied to the data used in the study and the results showed that the data were not stable at the levels. All variables were found to be static at first differences. The long-term co-integration relationship was then investigated using the Johansen (1988) test. Finally, Engle-Granger cointegration test were used to test financial sustainability. This study for the first time in the financial sustainability literature includes an innovative view. For the purpose of revealing the effects of public revenues and public expenditures separately, the analysis was performed by separating these items. The results show that the financial sustainability in Azerbaijan for the period 2007-2020.
Keywords: *Azerbaijan Economy, Fiscal Policy, Sustainability, Financial Sustainability, Financial Competence, Government Budget Constraint, Unit Root Test, Co-integration Test*

1. INTRODUCTION

The concept of sustainability nowadays means different things to different people, and a large part of humanity around the world still live without access to basic necessities. Sustainable development is often an over-used word, but goes to the heart of tackling a number of inter-related global issues such as poverty, inequality, hunger and envirnomental degradation. In theory, development that is not sustainable and not damaging to the planet is very possible (Augaitytė, 2013). In a world where environmental pollution has accelerated over the past 15 years, the philosophy of sustainability has become one of the most often debated topics.

Sustainability is described as achieving stability and economic development while saving the environment. Another concept of sustainable development is "meeting today's needs without jeopardizing future needs fulfilment" (Yeni, 2014). For more than 15 years, the idea of sustainability has become a major concern in many aspects of our lives. The term "financial sustainability" is a crucial part of the meaning of the term "sustainability." This idea is critical for future stability and economic development (Chapman, 2008). Following the global financial crisis, the topic of financial sustainability has become increasingly relevant, especially in developed and developing countries. Financial stabilization ensures that the country will be able to fulfil its loan repayment obligations as quickly as possible. Fiscal sustainability refers to how the government can finance its deficit in the future (Ilgun, 2015). The financial policy should be in line with current macroeconomic targets such as economic growth, inflation, payments. The purpose of this study is to define the concept of financial sustainability and to investigate whether financial sustainability is being achieved in Azerbaijan. This paper would look at how successful Azerbaijan's financial policies have been since independence. The paper contained a literature summary, an explanation of the principle of financial sustainability, and the analysis results in the final chapter.

2. FINANCIAL SUSTAINABILITY CONCEPT

Financial sustainability means that financial policies are also applicable in the future (Emirkadi, 2017). In recent years, most developing countries have increased public spending and have led to a significant increase in the public debt measured according to GDP. This debt accumulation questions the sustainability of budget imbalances in these countries after a major recession (Paniagua, Sapena, & Tamarit, 2017). The overdebt of the state restricts its choices, such as lending, printing money and taxation. That's why the state's overdebt savings are a problem. Therefore, fiscal sustainability is the issue that governments must always keep in mind (Akram & Rath, 2020). Financial sustainability does not have a single theoretical measure. In general, if the state is unable to pay its debt in the long term, it can be said to be unsustainable. The most commonly known and most commonly used definition is that the state cannot organize a pyramid chain (Rajan, Giap, & Yam, 2014). The state's total debt stock is often found in the way that the state's expenditures within a year are removed from revenues. Public expenditure is more than public income, which can result in a budget deficit. For financial policies to be sustainable, the budget deficit must be at a long-term payable level, but these policies should not create more debts (Yavuz, 2011). According to Ayshe Kaya (2013), fiscal sustainability is equal to one of the state's budget expenditures and revenues today. So, the budget deficits that can arise during a certain period and the budget surplus are balanced. Financial sustainability analysis is the discovery of the findings by investigating whether any financial and monetary policy set by the state is sustainable. If these policies are causing the debt to not be repaid, they are unsustainable. This time goes to state policy change (Emirkadi, 2017). Governments, on the whole, strive to find a financially viable direction that allows them to keep their debt under control. Although macro economists agree on the need for manageable debt ratios, they differ on the thresholds below which national debt becomes a threat to the economy (OECD, 2015). Fiscal sustainability is the ability of the state to obtain or maintain its own expenditures and revenues without Bording (Bolat, 2013). In some of the various studies on this issue, they are focusing on public income to ensure financial sustainability, while in other studies, they are focusing on public expenditure and expenditure. In this way, discussions are still being discussed about the definition of the concept of financial sustainability (Kokcu, 2016). There are many definitions of the concept of financial sustainability in the literature. The concept seeks to answer the question of whether current fiscal policies can continue in the future. However, research has concluded that it is difficult to measure financial sustainability.

If the current fiscal policy distances the state from the payoff force in the future, it can be perceived as unsustainable. Therefore, to measure the sustainability of finance, it is necessary to check the government's terms of affordibility (Croce & Juan - Ramon, 2003). The concept of financial sustainability in literature is often used. If state policies can manage the country's budget correctly, the country is sustainable financially (Bolat, 2013). Financial sustainability policies can affect state income and expenses, private sector savings and investment behavior. To determine whether the current fiscal policy stance is sufficient to ensure sustainability, certain assumptions about the behavior of each of these variables are needed. Factors impacting income and interest rates, on the other hand, can limit the opportunity to begin financial restructuring in order to satisfy budget constraints (Croce & Juan - Ramon, 2003). But we need to know that the budget restriction has been provided is not necessary for financial sustainability, but not a sufficient requirement (Kokcu, 2016). There are factors that influence financial sustainability. Changes in the stock market are one of these effects. If the stock price increases, people start to consume more. Because these increases in stocks make consumers feel richer. Increased consumption means more sales. That means increased sales tax revenues. However, housing markets are one of the factors that influence financial sustainability. The increase in housing sales also leads to increased sales tax revenues. Of course, the decrease in stock prices and housing sales will also affect fiscal sustainability as it will reduce tax (Chapman, 2008). We face financial sustainability as the capacity to sustain the current financial situation without the need for regulations in tax or expense policies. In other words, financial sustainability can also be expressed as budgetary stability protection without serious deterioration in the balance of income and expenditure of the budget (Eroglu, 2019). Fiscal sustainability refers to how public debt evolves over time and where it is based as a percentage of GDP. In this scenario, one might argue that as long as the real interest rate exceeds real GDP inflation, the government's debt will continue to rise indefinitely. On the contrary, it is true. To reduce the debt-to-GDP ratio, economic growth must surpass interest rates if a government expects to offer a primary opening (Rajan, Giap, & Yam, 2014). As countries have some economic goals to do, it is important that they continue to achieve these goals. Financial sustainability is realized by continuing the economic goal in the long term (TUNA, 2017). Because the world debt crisis occurred in early 1980, various studies on the issue emerged during the 1990 years, and discussions on public debt have started to grow significantly. Fiscal sustainability is a mandatory analysis used by a state against excessive debt build-up (BOLAT, 2013). A few steps are taken to know if a country is financially sustainable. Fiscal sustainability is estimated based on several years of macroeconomic data (usually 5 years). Inflation, money supply, income, expenses, investment in this macroeconomic data, imports and exports and other factors are the property. Another step to measure sustainability is to estimate debts. The increased debt rate is one of the main reasons for concern. In this case, alternative scenarios will be required (Chalk & Hemming, 2000).

3. LITERATURE REVIEW

Recent concerns about global climate change, people in poverty, tensions brought by increasing social inequalities among societies have given more importance to sustainable development. Because the concept of sustainability exists in many places, different definitions have been introduced over time (Giovannoni & Fabietti, 2013). The concept of sustainability that is used in many areas means that it is about the human future and that the resources of its space are saved and protected (Ozer, 2015). Financial sustainability, which is the subject of the article, is defined differently by different researchers, so there is no definitive definition of the word (Rai, 2012). According to Ulf Papenfub (2014), public agencies and other entities are particularly expected to report accurately regarding money, tax, loans, and financial statistics deposited for financial sustainability.

According to Kuriyan and others (2006), the poor's wellbeing and the private sector's benefit can all be improved by financial sustainability. However, there is still the question of political danger. This vulnerability is a political charge that the government only supports the needs of special interests. If the government places so much emphasis on financial sustainability, merchants will be forced to deal with consumers who are able to pay a high price in exchange for high income. In the other hand, if the state places too much emphasis on the project's social growth path and entrepreneurs fulfill the poor's development needs, the state will be compelled to fund these entrepreneurs. According to Meltem Koylu (2017), the development of the economic system is undergoing strengthening of the financial structure. The financial system creates financial institutions that mediate financial markets and trading transactions. Payment terms and systems must be effective in order to improve financial relationships. Different financial institutions, banks, have a big role in this. Financial sustainability, according to Ibrahim Can (2019), is the long-term financial performance that allows a business to recover more than its financial resources that value each stakeholder, and the confidence to prevent financial problems that threaten it. According to Mirat Gecim (2020), good financial sustainability contributes positively to the country's well-being. It is essential that the management and control committees of the institution are completely transparent, responsible, reliable and fair, and that the institution is able to provide financial sustainability. Financial resilience, according to Eppich and Grinda (2019), can be evaluated in five categories: revenue identification, cost analysis, monitoring, strategic planning, and project support. The financial sector's growth, according to Memmedov and Ahmedov (2021), involves both financial expansion and financial deepening. The Azerbaijan state has created a financial support system for entrepreneurs to influence the country's financial sustainability. The Republic has begun to receive the results of its regulations. Since 2013, scientific studies on finance and economic structure have also seen a visible increase (Koylu, 2017). Mammadov (2020) has tried to show how exchange rate and stability in financial markets can stimulate the economy and entrepreneurship. In the research, the monetary policies used by the state were determined and discussed to see that the policies developed against devaluation were successful.

4. FINANCIAL SUSTAINABILITY ANALYSIS

Although several theoretical and empirical studies have been carried out on fiscal sustainability in recent years, it is observed that the number of studies carried out in Azerbaijan is very limited. However, monitoring financial sustainability in a country is a very important issue for a country. The target of monetary policy cannot be achieved without financial discipline. Unit root tests and cointegration testing are often used in financial sustainability research. We can assume that financial stabilization has been provided if the series are constant and there is a cointegration relationship between budget revenues and budget expenses (Al, 2019).

4.1. Method

In the analysis of financial sustainability, there are two basic methods: The method of economic indicators and the econometric method (Shen at al, 2010). In this study, it is preferable to use the econometric method because the results obtained have shown more precise findings in the analysis of financial sustainability. Unit root test (ADF and PP) and cointegration test (Engle-Granger) were used to analyze whether financial sustainability was achieved in the study. Studies using econometric methods, of course, require analysis of a long period (Al, 2019). The study used data for the period 2006-2020 on budget revenues and budget expenditures as a ratio to GDP. This data is quarter data and is obtained from the official site of the Azerbaijan Central Bank.

4.2. Unit root analysis

This method is a standard approach to testing the sustainability of budget deficits and has been used in many studies. The unit root test method can be applied to series as well as the budget deficit series, as well as to series of budget deficits for the past years and total interest payments that constitute a significant part of public expenditure, to test whether financial sustainability exists. The following are the Augmented Dickey-Fuller (ADF) and Phillip-Perron (PP) unit root tests for the series selected to test whether there is financial sustainability in Azerbaijan. The ADF and PP tests use a method that controls high-degree autocorrelation in the series. The PP unit root test has been developed as a method that takes into account the impact of a structural change (structural break) in the series (Shen at al,2010). Therefore, the series have been tested for ADF and PP unit root respectively. Unit root tests have been applied to the corresponding series and the findings obtained are presented in Table 1;

R = Income G = Spending		ADF		PP	
		Intercept	**Trend and intercept**	**Intercept**	**Trend and intercept**
R	**Level**	-6.084274 [0.0000] (0)	-6.374004 [0.0000] (0)	-6.033437 [0.0000] (2)	-6.339188 [0.0000] (2)
	1st difference	-11.33275 [0.0000] (2)	-11.23390 [0.0000] (2)	-26.77329 [0.0001] (25)	-27.27736 [0.0001] (24)
G	**Level**	-6.669761 [0.0000] (0)	-2.109616 [0.5292] (3)	-6.669778 [0.0000] (2)	-7.355506 [0.0000] (2)
	1st difference	-11.93266 [0.0000] (2)	-11.81549 [0.0000] (2)	-25.36225 [0.0001] (14)	-25.06086 [0.0001] (14)

Table 1: Unit root test results
(Source: compiled by the authors on the basis of: stat.gov.az, cbar.az, http://etsim.az/
(accessed on 10.04.2021))

Figure following on the next page
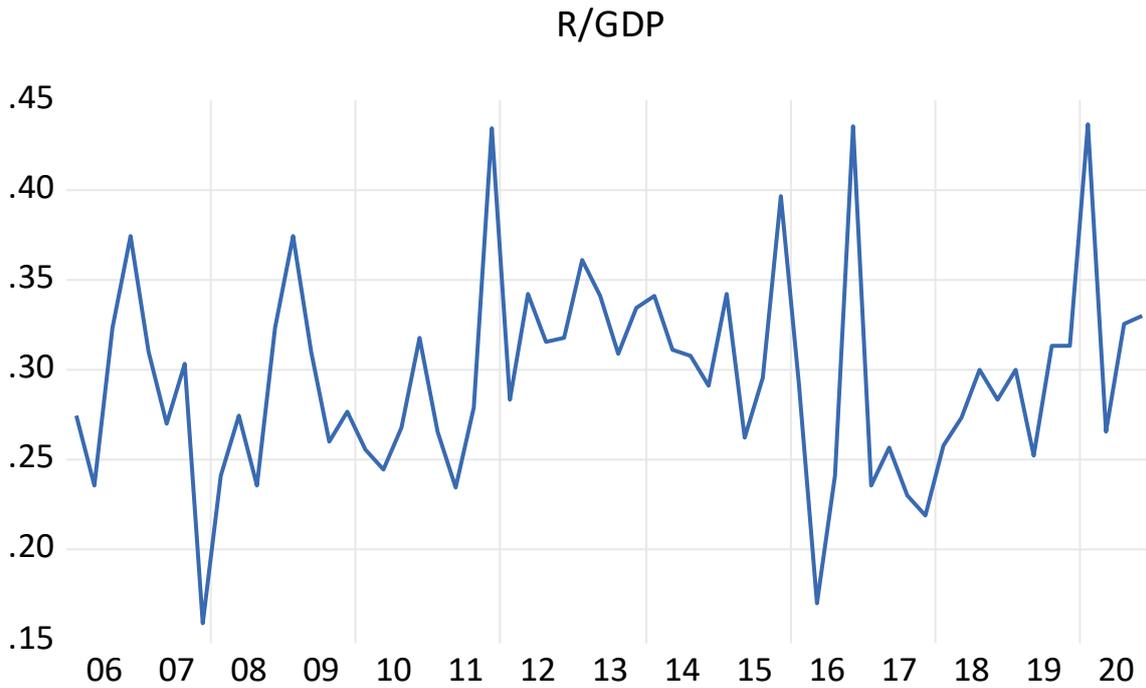
R/GDP

Figure 1: Unit Root Graph R/GDP
(Source: compiled by the authors on the basis of: stat.gov.az, cbar.az, http://etsim.az/
(accessed on 10.04.2021))

G/GDP
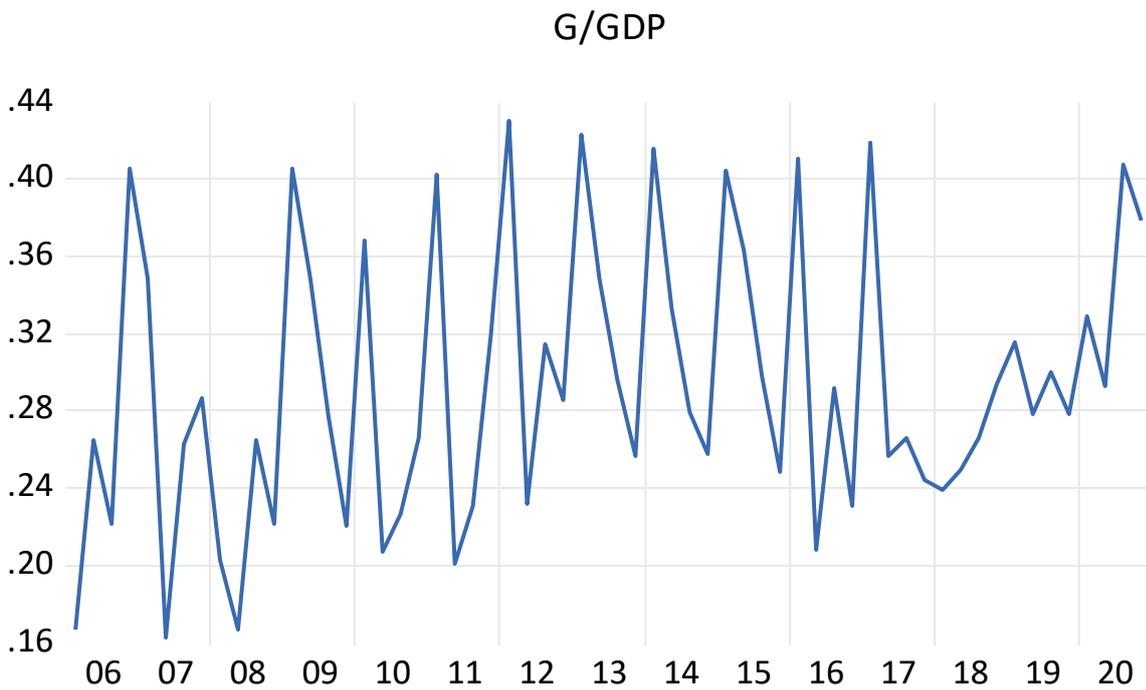
Figure 2: Unit Root Graph R/GDP
(Source: compiled by the authors on the basis of: stat.gov.az, cbar.az, http://etsim.az/
(accessed on 10.04.2021))

In the table, the values in the brackets show the probability values and the values in the other second parenthesis show the appropriate lag lengths. Both variables are constant. Therefore, the Engle-Granger cointegration test can be used to investigate the cointegration relationship between the relevant variables.

4.3. Engle-Granger test

In the case of a constant combination of two universally integrated series at the same level, the Engle and Granger test is often used in the literature for testing the cointegration relationship that is stated to exist between the two series (AL, 2019). The long-term relationship between budget revenues and budget expenditures has been tested by Engle-Granger cointegration testing and findings have been presented in Table 2;

Dependent variable	Independent variable	t-Statistic	Probability
R	G	-8.794014	0.0000
G	R	-13.71920	0.0000

Table 2: Engle-Granger test results
(Source: compiled by the authors on the basis of: stat.gov.az, cbar.az, http://etsim.az/
(accessed on 10.04.2021))

The empty hypothesis in the Engle-Granger cointegration test is "H0: No cointegration between the series", while the alternative hypothesis is "H1: cointegration between series". According to the data in the table, H0 hypothesis is rejected. Therefore, the series in question are cointegrated. This result shows that financial sustainability has been achieved in Azerbaijan.

5. CONCLUSION

Fiscal sustainability demonstrates that the government's available fiscal policies can continue to be effective in the future. The government, which cannot pay its debts in the long term with existing policies, is deemed unable to provide financial sustainability. In this study, it has been investigated whether financial sustainability is maintained in Azerbaijan. The quarterly data on GDP, budget revenues and budget expenditures that are relevant to the research purpose 2006-2020 was taken from the official website of the Azerbaijan Central Bank and included in our work. The existence of a cointegration relationship between budget revenues and budget expense sequence has been investigated in this regard. The ADF and PP unit root tests were run first, and the series concluded that they are constant. Due to the constant of both factors, the Engle-Granger cointegration test was determined to be feasible. According to the findings obtained from this cointegration test, these variables are cointegrated. The fact that there is a cointegration between budget variables is interpreted as providing financial sustainability. According to the Engle-Granger cointegration measure, Azerbaijan is financially sustainable in this sense.

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PORTFOLIO OPTIMZATION USING GENETIC ALGORITHM: AN APPLICATION IN BIST – 100 BEFORE THE PANDEMIC AND DURING THE PANDEMIC PERIOD

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ABSTRACT
The main purpose of our research is to investigate how the crisis created by the COVID-19 pandemics has an impact on certain sectors in the Stock Exchange Istanbul. In order to conduct our investigation, we used data from shares of companies that have been traded for at least six years, starting in 2015. Investors' portfolios were compared before and after the pandemic to see if there were any discrepancies in stock selection. In our research, 4 sectors, 4 companies, and 16 shares were used in total. Data obtained from the "Borsa Istanbul (BIST-100)" index was covered in 2 periods: i) COVID -19 pre-pandemic period – 2015-2020 and ii) COVID-19 pandemic period – 2020-2021. The daily returns of shares and the covariance matrix were calculated with the help of Microsoft Excel. The covariant matrix is obtained using Excel Solver (Microsoft Excel Add in). The remainder of the work was completed in MATLAB R2016b using the genetic algorithm process. Simple genetic algorithms and multipurpose genetic algorithms are the two types of genetic algorithms used in MATLAB. Using the multipurpose genetic algorithm, you can use two different functions. The first is to reduce risk, and the second is to increase profit. The results of the MATLAB analysis have been interpreted, and the results have been collected. There were variations between pre and post pandemic as a result of the study. Significant variations were observed in the wholesale, retail, and industrial sectors before and after the pandemic, although minor improvements were observed in the banking and aerospace sectors. During the pre-pandemic and post-pandemic periods, the shares that will be weighted in the portfolio in the wholesale, retail, and industrial sectors have changed dramatically.
Keywords: *portfolio optimization, genetic algorithm, COVID-19, pandemic*

1. INTRODUCTION
At least two shares are included in the portfolio. Investors and fund managers strive for a portfolio that yields the highest possible return while posing the least amount of risk. According to traditional theory, lowering portfolio risk is a crucial criterion for determining the best portfolio and must be varied to do so (ÇANKAL, 2015). Markowitz's model gave birth to modern portfolio theory, which considers the importance of risk and potential returns, as well as their equilibrium. Markowitz's Modern Portfolio theory is synonymous with the phrase "don't throw all the eggs in one basket." The most critical factor for an investor, according to Markowitz, is that the portfolio's valuation is maximized. He does, however, want to minimize his risk. As a result, investors often diversify their portfolios to reduce risk. Thereby That the creditor is not totally ruined if the value of one of the shares in the portfolio sinks too much. Investing in other shares allows you to diversify your portfolio and reduce risk. As a consequence, Markowitz's Mean-Variance model, which he added to the literature, helps us to maximize return while minimizing risk. There are many approaches to portfolio optimization, but genetic algorithms are the most powerful and efficient. In physics, economics, and other fields, genetic algorithms are often used to solve optimization problems.

Selection, crossover, and mutation operators affect the performance of genetic algorithms. As a consequence, these operators have been subjected to research and development (Kroll & Liu, 2016). The purpose of this study is to create portfolios with the multipurpose genetic algorithm and to compare the pre-pandemic and pandemic period of the portfolios created in 4 specific sectors.

2. PORTFOLIO MANAGEMENT

The term "portfolio" refers to a set of shares for investment purposes. According to portfolio theory, investors want to minimize risk while maximizing return (REILLY & BROWN , 2012). The first aim in fund management is to choose from a range of securities the best investments for risk and return for the portfolio (Tung & Jo , 2020). The most important risk that an investor takes is the risk of porföy. If each investor had to choose between the two securities, he or she would choose the one with the lowest risk in terms of equivalent returns. Using the same rationale, if he has to pick between two securities of equivalent risk, he will choose the one with the highest yield (REILLY & BROWN , 2012). The majority of investors are concerned with selecting securities for inclusion in the portfolio, assigning weights to them, and combining these securities to satisfy risk/return criteria. Having too many securities in the portfolio means diversification of the portfolio. The benefit of portfolio diversification is that instability is minimized and if the value of one security decreases, the value of others will rise to compensate (Wiksuana , Artini, Rahyuda , & Purnawati, 2019). Securities included in the portfolio are usually made up of stocks, bonds and alternative investment tools (Michaud & Michaud, 2008). It is very difficult to keep track of a portfolio of various investing tools and shares through various industries. That in this situation, the investor must be aware of the progress of each sector to keep track of any changes (Wiksuana , Artini, Rahyuda , & Purnawati, 2019).

2.1. Modern portfolio theory

Only diversification was proposed in traditional theory for reducing risk in fund management. Markowitz created the first statistical model for fund management that took a risk and return into account (Goldfarb & Iyengar, 2003). Markowitz devised a method for calculating the portfolio's cost and return. The relationship between shares (correlation), according to Markowitz, should be included in the portfolio (CURTIS, 2004). Markowitz argues that securities with negative correlation should be found in a portfolio, as the price of positive correlation securities varies simultaneously (Tung & Jo , 2020). Markowitz's Mean-variance model consists of the fact that the portfolio returns are kept constant at a certain value and the weight that makes the portfolio risk a minimum. The weights are determined by the formula to provide the investor with a low return for high risk and a high return for low risk (Altaylıgil, 2008). The following are the formulas for Markowitz's mean-variance model, i.e. risk and predicted returns:

$$Minimization = \sum_{i=1}^{n} \sum_{j=1}^{n} x_i x_j \sigma_{ij} \leq Risk$$

$$Maximitation = \sum_{i=1}^{n} x_i r_i \geq Return$$

Where x_i refers to the weight of the property value within the portfolio, the weight of the x_j j property value in the portfolio, the covariance value between the σ_{ij} two securities, and r_i refers to the expected return of the i property value.

3. GENETIC ALGORITHMS

Genetic algorithms are a technique that provides a natural solution to optimization problems. Developed by Holland in GA 1960, later defined by Goldberg (1989) (Lin & Gen, 2007). In genetic algorithms, the population is made up of chromosomes, and chromosomes are made up of genes. Genes are considered the basic building blocks of algorithms. The chromosome made up of genes is used in genetic algorithms to encode the solution (Mirjalili, 2019). The first step in the implementation of a genetic algorithm is to produce a population of chromosomes, which is normally done at random. The scale of the population is one of the most important topics in genetic algorithms (Lin & Gen, 2007). The genetic algorithm contains 3 basic processes: Selection, crossover and mutation. GA is research algorithms that apply the evolution mechanism with the help of these operators. Instead of a single solution to problems, these algorithms produce a set of solutions consisting of different solutions (ÖZTÜRK , PAKSOY, & ÖZTÜRK, 2018). Given the need for a partner to be chosen in genetic algorithm operators, we can say that this is based on the principle that the most appropriate one should survive. To produce new chromosomes, the chosen chromosomes are added to the mating pool (Kramer, 2017). Crossover, a second operator from GA operators, combines the characteristics of two chromosomes to form a new generation (Lin & Gen, 2007). Mutation - the third GA operator, has the function of changing one or more genes in the chromosome. This is used to preserve genetic diversity (Chakroborty, Roy, & Seal, 2015).

4. PORTFOLIO OPTIMZATION USING GENETIC ALGORITHM

Genetic algorithms are an approach that finds a valid solution to optimization problems in finance and many other areas. When used in portfolio optimization, each chromosome represents the weight of assets in the portfolio (Chang, Yang , & Chang, 2009). The GA delivers faster and more reliable results in problem resolution than other techniques. Pandemic, war and other extraordinary events have an impact on investors' portfolio selection. Some companies are positive from these extraordinary events, some are negative, others are not affected at all. The main purpose of our research is to investigate how the crisis created by the COVID-19 pandemic has an impact on certain sectors in the Stock Exchange Istanbul. The data of the shares of companies that have been traded for 6 years since 2015 has been used by the purpose of our investigation.

4.1. Method

In our study, the genetic algorithm method was used to solve the portfolio optimization problem. The multipurpose genetic algorithm in the optimization tool of the MATLAB R2016b program was used for the study. In MATLAB, the genetic algorithm can be used in 2 types: Simple genetic algorithms and multipurpose genetic algorithms. It is possible to use two purpose functions using the multipurpose genetic algorithm. The first is to minimize the risk and the second is to maximize the return. The daily and average returns of shares were found by the statistical operations section in the formulas section of the Excel program. The covariant matrix was obtained using Excel Solver. The other part of our work has been carried out in MATLAB R2016b.

4.2. Analysis Results

In the application section, the program was run separately in 2 different periods for each sector. The number of shares in the portfolio and the weight of each stock was found with the help of the program. 6 different portfolio has been created for each sector. Findings before the COVID-19 pandemic for the wholesale and retail sector are shown in Table 1;

Getiri	Varyans	H.S.Say	BIM x_1	MGROS x_2	SELEC x_3	BIZIM x_4
0.010	0.019	3	0.101	0.588	0.311	0.000
0.015	0.028	3	0.507	0.083	0.000	0.410
0.020	0.032	3	0.348	0.000	0.251	0.401
0.025	0.084	2	0.457	0.000	0.000	0.525
0.030	0.070	3	0.580	0.075	0.000	0.345
0.035	0.087	3	0.605	0.379	0.016	0.000

Table 1: Findings before the COVID-19 pandemic for the wholesale and retail sector

Table 1 contains 6 different portfolios. These portfolios were acquired in the MATLAB program using genetic algorithms. Share weights vary in the portfolio obtained. For example, the variance of the portfolio providing 0.01 returns was calculated as 0.019. This portfolio consists of 3 shares. The highest weight (0.588) in this portfolio is given to the MGROS stock. Other portfolios can be interpreted like this. When the 6 portfolios is considered, the total maximum weight in the pre-pandemic wholesale and retail sector was found in the BIM stock. One of the things to be aware of is the increased risk of the portfolio as diversification decreases. If it is necessary to choose the optimum portfolio for the pre-pandemic retail sector, this portfolio will consist of 3 shares, with a return of 0.020 and a portfolio at risk of 0.032. Findings before the COVID-19 pandemic for the industrial sector are shown in Table 2.

Getiri	Varyans	H.S.Say	ARCLK x_1	TUPRS x_2	PETKM x_3	CEMTS x_4
0,010	0,022	2	0,000	0,291	0,709	0,000
0,015	0,052	3	0,551	0,203	0,246	0,000
0,020	0,068	3	0,101	0,308	0,591	0,000
0,025	0,088	2	0,000	0,811	0,189	0,000
0,030	0,085	2	0,000	0,542	0,458	0,000
0,035	0,122	2	0,000	0,956	0,000	0,044

Table 2: Findings before the COVID-19 pandemic for the industrial sector

Table 2 contains 6 different portfolios. These portfolios were acquired in the MATLAB program using genetic algorithms. Share weights vary in the portfolio obtained. For example? the variance of the portfolio providing 0.015 returns was calculated as 0.052. This portfolio consists of 3 shares. The highest weight (0.551) in this portfolio is given to the ARCLK stock. Other portfolios can be interpreted like this. When the 6 portfolios is taken into account, the total maximum weight in the pre-pandemic industry was found in the TUPRS stock. If it is necessary to choose the optimum portfolio for the pre-pandemic industry sector, this portfolio will be 3 shares, with a return of 0.020 and a portfolio at risk of 0.068. Findings before the COVID-19 pandemic for the banking sector are shown in Table 3.

Table following on the next page

Getiri	Varyans	H.S.Say	SKBNK x_1	GARAN x_2	YKBNK x_3	ISCTR x_4
0,010	0,031	2	0,266	0,000	0,000	0,734
0,015	0,040	3	0,476	0,208	0,000	0,316
0,020	0,087	2	0,841	0,000	0,159	0,000
0,025	0,092	2	0,666	0,000	0,000	0,334
0,030	0,097	3	0,574	0,240	0,000	0,185
0,035	0,119	3	0,143	0,760	0,000	0,097

Table 3: Findings before the COVID-19 pandemic for the banking sector

Table 3 contains 6 different portfolios. These portfolios were acquired in the MATLAB program using genetic algorithms. Share weights vary in the portfolio obtained. For example, the variance of the portfolio providing 0.015 returns was calculated as 0.040. This portfolio consists of 3 shares. The highest weight (0.476) in this portfolio is given to the SKBNK stock. Other portfolios can be interpreted like this. When the 6 portfolios was taken into account, the total maximum weight in the pre-pandemic banking sector was found to be in the SKBNK stock. If it is necessary to choose the optimum portfolio for the pre-pandemic banking sector, this portfolio will be 3 shares, with a return of 0.015 and a portfolio at risk of 0.040. Findings before the COVID-19 pandemic for air transport sector are shown in Table 4.

Getiri	Varyans	H.S.Say	THYAO x_1	PGSUS x_2	CLEBI x_3	TAVHL x_4
0,010	0,033	4	0,065	0,474	0,144	0,317
0,015	0,058	2	0,000	0,000	0,835	0,165
0,020	0,063	2	0,000	0,235	0,582	0,183
0,025	0,083	3	0,078	0,000	0,645	0,277
0,030	0,063	3	0,070	0,000	0,492	0,438
0,035	0,094	3	0,150	0,000	0,757	0,093

Table 4: Findings before the COVID-19 pandemic for air transport sector

Table 4 contains 6 different portfolios. These portfolios were acquired in the MATLAB program using genetic algorithms. Share weights vary in the portfolio obtained. For example, the variance of the portfolio providing 0.010 returns was calculated as 0.033. This portfolio consists of 4 shares. The highest weight (0.474) in this portfolio is given to the PGSUS stock. Other portfolios can be interpreted like this. When the 6 portfolios are considered, the total maximum weight in the pre-pandemic transport sector was found to be in the CLEBI share. If it is necessary to choose the optimum portfolio for the pre-pandemic transport sector, this portfolio will be 3 shares, with a return of 0.030 and a portfolio at risk of 0.063. The findings for the COVID-19 pandemic period for the wholesale and retail sector are shown in Table 5.

Getiri	Varyans	H.S.Say	BIM x_1	MGROS x_2	SELEC x_3	BIZIM x_4
0,010	0,041	3	0,800	0,176	0,000	0,024
0,015	0,036	3	0,285	0,687	0,028	0,000
0,020	0,061	3	0,652	0,234	0,115	0,000
0,025	0,074	3	0,586	0,352	0,000	0,062
0,030	0,053	3	0,179	0,376	0,445	0,000
0,035	0,069	3	0,231	0,203	0,561	0,000

Table 5: Findings for the COVID-19 pandemic period for the wholesale and retail sector

Table 5 contains 6 different portfolios for the period of pandemic. These portfolios were acquired in the MATLAB program using genetic algorithms. Share weights vary in the portfolio obtained. For example: The variance of the portfolio providing 0.020 returns was calculated as 0.061. This portfolio consists of 3 shares. Other portfolios can be interpreted like this. When the 6 portfolio was taken into account, it was observed that in the retail sector, the highest total weight was in the SELEC stock during the pandemic period. Before the pandemic, BIM was replacing this stock. If it is necessary to select the optimal portfolio for the retail sector during the pandemic period, this portfolio will be 3 shares, with a return of 0.030 and a portfolio at a risk of 0.053. Findings for the COVID-19 pandemic period for the industrial sector are shown in Table 6.

			ARCLK	TUPRS	PETKM	CEMTS
Getiri	Varyans	H.S.Say	x_1	x_2	x_3	x_4
0,010	0,079	3	0,644	0,243	0,000	0,113
0,015	0,057	3	0,256	0,572	0,171	0,000
0,020	0,062	2	0,734	0,266	0,000	0,000
0,025	0,067	3	0,279	0,237	0,000	0,484
0,030	0,076	3	0,021	0,000	0,035	0,944
0,035	0,077	3	0,000	0,101	0,266	0,633

Table 6: Findings for the COVID-19 pandemic period for the industrial sector

Table 6 contains 6 different portfolios for the period of pandemic. These portfolios were acquired in the MATLAB program using genetic algorithms. Share weights vary in the portfolio obtained. For example: The variance of the portfolio providing 0.015 returns was calculated as 0.057. This portfolio consists of 3 shares. The highest weight (0.572) in this portfolio is given to the TUPRS stock. Other portfolios can be interpreted like this. When the 6 portfolio was taken into account, CEMTS stock was found to have the highest overall weight in the industrial sector during the pandemic period. Before the pandemic, TUPRS was replacing this stock. If it is necessary to choose the optimal portfolio for the industrial sector during the pandemic period, this portfolio will consist of 3 shares, with a return of 0.035 and a portfolio at a risk of 0.077. Findings for the COVID-19 pandemic period for the banking sector are shown in Table 7;

			SKBNK	GARAN	YKBNK	ISCTR
Getiri	Varyans	H.S.Say	x_1	x_2	x_3	x_4
0,010	0,023	2	0,251	0,000	0,000	0,749
0,015	0,055	3	0,428	0,000	0,472	0,100
0,020	0,092	2	0,613	0,000	0,387	0,000
0,025	0,089	2	0,591	0,000	0,000	0,409
0,030	0,056	3	0,568	0,183	0,000	0,249
0,035	0,090	2	0,599	0,000	0,000	0,401

Table 7: Findings for the COVID-19 pandemic period for the banking sector

Table 7 contains 6 different portfolios for the period of pandemic. These portfolios were obtained in MATLAB by means of genetic algorithm. Share weights vary in the portfolio obtained. For example: The variance of the portfolio providing 0.030 returns was calculated as 0.056. This portfolio consists of 3 shares. The highest weight (0.568) in this portfolio is given to the SKBNK stock. Other portfolios can be interpreted like this.

When the 6 portfolios were taken into account, the total weight in the banking sector during the pandemic period was found to be in the SKBNK stock. The SKBNK shares remain the industry leader in the banking sector before and during the period of the pandemic. If it is necessary to choose the optimum portfolio for the banking sector during the term of the pandemic, it will be a portfolio of 3 shares, with a return of 0.030 and a risk of 0.056. Findings for the COVID-19 pandemic period for the air transport sector are shown in Table 8.

			THYAO	PGSUS	CLEBI	TAVHL
Getiri	Varyans	H.S.Say	x_1	x_2	x_3	x_4
0,010	0,046	3	0,653	0,000	0,067	0,280
0,015	0,059	3	0,393	0,184	0,424	0,000
0,020	0,083	3	0,068	0,000	0,638	0,294
0,025	0,099	2	0,302	0,000	0,698	0,000
0,030	0,083	2	0,492	0,000	0,508	0,000
0,035	0,087	3	0,266	0,055	0,685	0,000

Table 8: Findings for the COVID-19 pandemic period for the air transport sector

Table 8 contains 6 different portfolios for the period of pandemic. These portfolios were acquired in the MATLAB program using genetic algorithms. Share weights vary in the portfolio obtained. For example: The variance of the portfolio providing 0.015 returns was calculated as 0.059. This portfolio consists of 3 shares. The highest weight (0.424) in this portfolio is given to the CLEBI share. Other portfolios can be interpreted like this. When the 6 portfolios were taken into account, the total weight in the transport sector during the pandemic period was found to be in the CLEBI share. CLEBI shares remain the industry leader in the transport sector before and during the period of pandemic. If it is necessary to choose the optimum portfolio for the transport sector during the pandemic period, this portfolio will be 3 shares, with a return of 0.035 and a portfolio at risk of 0.087.

5. CONCLUSION

In this study, GA is used to solve the portfolio optimization problem since it provides more reliable results than other methods. In the study, Markowitz's Mean-Variance model was tried to be optimized with a multipurpose genetic algorithm. Within the scope of the study, daily data of shares included in BIST-100 was obtained for the period 2015-2020 and 2020-2021. Based on daily data, daily returns were then calculated for the average return on each stock. The covariance matrix was then calculated using Excel Solver. The resulting covariance matrix and returns have been entered into the MATLAB program within the purpose function. The program was run after the constraints were included. The variance was used as a risk criterion in the study. The program has calculated the minimum risk for a specific return rate and how much weight should be given to each share. The calculation result was 6 different portfolios with the reputation of each sector and period. Industry leader has varied between pre-pandemic and pandemic period in the Retail and Industry sectors. Prior to the pandemic, it was seen that it was a retail sector-leading BIM stock and an industry-leading TUPRS. During the period of the pandemic, it was seen that it was a retail sector leader SELEC stock and that it was an industrial sector-leading CEMTS. Although there are differences in the banking and transport sectors, industry leaders remain the same. Other results are shown in the tables and their descriptions.

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THE HUMAN CAPITAL AND THE PROBLEMS OF ITS DEVELOPMENT IN CONTEMPORARY AZERBAIJAN

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ABSTRACT
The author suggests and proves the possibilities and perspective ways of further development of human capital in contemporary Azerbaijan. The author also reminds of theoretical sources of the very category "human capital' in economic science as far as about its appearance in practice; there is also given the estimation of meaning of "The Human Capital Index" in international comparisons. In his analysis of current situation in the Republic of Azerbaijan the author emphasizes current tasks connected with the struggle against covid-19 viral epidemic consequences alongside with long-range tasks of improving the life conditions and life activities of the population according to situation in our country. The special attention is given to priorities in suggested governmental policy in social activities; according to this analysis the author also suggests such term as social competitiveness of national state in sharpening global competition in contemporary world. According to special position of such branches of social activities as healthcare and education which define general situation of human capital in contemporary state, the author explains those achievements of Azerbaijan in these branches since 2010 which were marked on international level. Then he proves possible directions of their further development in the nearest years as far as in long-range future and also suggests some concrete measures of such development.
Keywords: *human capital, qualitative development of the human capital, improving the life conditions of the population, social competitiveness of national state, prior directions of governmental policy in social activities, healthcare and education*

1. INTRODUCTION

Today, the whole world is facing not only the problem of overcoming the severe consequences of the global economic crisis caused by the covid-19 viral pandemic, but also the choice of a new long-term development paradigm. At the same time, it is already obvious that the economic recovery itself can stretch into two stages. The first stage involves the gradual resumption of economic activity in the context of directly overcoming the dangers of a sluggish pandemic, the threat of relapses of which has not passed at all, as evidenced by the situation in a number of countries, including our neighbors. During the second stage, the socio-economic losses incurred as a result of the pandemic are actually compensated.

2. THE TERM "HUMAN CAPITAL": HISTORY AND CONTENTS

According to abovementioned, it is necessary to make some important remarks. First, today it is already becoming clear that the entire process of economic recovery will require not one or two, but a number of years. At the same time, the choice of a long-term development strategy assumes that it will not begin to be implemented "sometime in the future", but should already cover the specified recovery period and extend to subsequent years, which – as it is now clear – will differ in new approaches to the problem of economic growth itself. In this regard, and secondly, it should be noted that one of the leading components of the new growth will be the unevenness of the future sectoral and branch development. This means that not all sectors and areas of the national economy and specific industries will make up for today's losses by already proven methods, achieving a purely quantitative recovery.

In some cases, obviously, this will be possible, but for other industries and industries, the priority will be not just survival, but a qualitative breakthrough under new conditions and with new components. This task is extremely difficult, but its implementation will be able to provide a truly qualitatively new stage of economic growth in the future. And in these conditions, the most important distinguishing feature of the new stage of economic growth will be its indispensable strongest social component. In these circumstances, the quantitative and, to an even greater extent, qualitative improvement of human capital becomes, without exaggeration, of key importance, it assumes the most harmonious and comfortable and at the same time sustainable development of the entire human habitat and life activity, designed, as we have already said, for the long term. Based on this, we can conclude that it is the comprehensive improvement of a person as the main subject of all economic and social activities that becomes not just important – which has already been the case for a long time - but a decisive condition for the success of the entire subsequent stage of economic development. Human capital has been discussed for decades and on various international platforms. In this regard, it should be recalled that the very concept of "human capital" originally appeared in Western economics at the turn of the 50s-60s of the last century; in particular, it is actively used by such prominent representatives of the neoclassical school in economic theory, as T. Schultz and G. Becker, who later became Nobel Prize laureates in economics. In their collective monograph "Human Capital and Education", dedicated to this issue, the scientists of Moscow University note that the approach of T. Schultz and G. Becker differs in that they focused their economic analysis on the "new quality of the human factor" in the conditions of the modern scientific and technological revolution. What is the expression of this "new quality"? First of all, as the authors of this monograph believe, "in the growing level of labor skills and professional knowledge, which are, first, the result of the development of education and provide, second, a high increase in labor productivity» [1,p.10]. At the same time, it must be remembered that much earlier, the question of the abilities of a person as a subject of production was repeatedly addressed by the classics of political economy W.Petty, A. Smith, D. Ricardo. Thus, W. Petty used the category of "living active forces of man" [2, p. 324], which can be interpreted as a kind of forerunner of the concept of "human capital". Subsequently, prominent representatives of other scientific schools also addressed similar concepts in relation to various aspects of analysis. Nevertheless, for all the seemingly elaborate development of this term in the literature and in the socio-economic practice of the last decades, there is still virtually no canonical, verified definition of this concept. At the same time, just as "in fact", at present, the category of "human capital" both in scientific circles and in international organizations includes the totality of physical and spiritual capabilities of a person, as well as – what is very important to emphasize – the dynamics of their changes at the national and state level. At the same time, the specified population itself can be considered both from the quantitative and mainly qualitative side. Here, too, there are possible options. For example, according to Professor Paul Savchenko (Russian Academy of Sciences), human capital can be quantified as the value of the accumulated human capital [3, p. 249]. Developing this idea of Prof. Savchenko, we can assume that in general, such a "human fund" consists of a set of physical, social and spiritual potentials of an individual, which he receives at birth and increases in the course of subsequent life. In turn, it is natural that the degree and the very possibilities of such an increase directly depend on the quality of functioning of each of the national-state levels in the modern world, on what each of the states is able to offer the individual for his self-realization. In other words, the quality of public administration in general and the socio-economic policy pursued by the state ultimately have a decisive impact on the development and improvement of human capital. That is why, for several years now, following the long-familiar measurement of the country's human development index (HDI), which includes a number of indicators (such as GDP per capita production, average life expectancy and the level of education of citizens), a special report "Human Capital Index" for

countries of the world is published annually at the international level. The calculation of this index includes such important indicators for the very existence and development of a person as:
- life expectancy ("survival rate") of the country's population as a whole and separately by age group;
- estimations of the quality of education and health care.

As we can see, this index – in contrast to the same HDI - is a more objective indicator, since it focuses specifically on the human dimension in the development of nation-states, does not include quantitative macroeconomic indicators, focusing on qualitative results. We can say that the human capital index shows the social competitiveness of the national state in the conditions of general aggravation of competition. This study is conducted by the World Bank, and the number of States covered by it increases every year. The latest at the moment "Human Capital Index 2020" (World Bank Group. – The Human Capital Index. 2020. Update), published in September last year, contains data for 174 countries, which allows us to draw the most reasonable and reasoned conclusions about the place of each country in the field of ensuring the quality of life of the population and specifically about the progress made in this area.

3. ACHIEVEMENTS OF HUMAN DEVELOPMENT IN AZERBAIJAN

According to this international rating, Azerbaijan is in the top ten countries where the rate of human capital growth has been the highest since 2010. It is particularly important to note that the greatest contribution to such a high assessment of our country was made by the progress made in Azerbaijan in the field of education and health [4]. Thus, we see confirmation of the above-mentioned fact that this international index allows us to truly evaluate, first of all, qualitative, rather than quantitative results in improving human life, and to show them in dynamics, that is, to demonstrate the comparative significance of certain social results on a global scale. Let's start with health care, taking into account the specifics and acuteness of the current moment, as well as the most important fact that it is precisely because of the specifics of the moment that the requirements that are currently being placed on the problem of improving our entire national economy are focused on health care. Let's turn to the statistics. During the period covered by the international study we are considering, the volume of budget financing of healthcare in our country in quantitative terms increased from 429.2 million manats in 2010 to 709.9 million manats in 2018, or about 1.65 times [5, p. 400]. The growth itself is considerable in the context of the constant turbulence of the world economy that took place during this period, and the impact of global crisis phenomena on our national economy. Not all – even much more developed and formally rich-countries of the world can demonstrate comparable growth during this period. However, we emphasize once again that as we see there are not only these quantitative indicators that have influenced the high assessment of Azerbaijan's success in the field of human capital development. Speaking about health care, we mean the obvious qualitative improvement of medical services for the population of the Republic of Azerbaijan. Let's take for example such a fundamentally important indicator as periodic inspections. In the period from 2010 to 2018 inclusive, the total number of annual medical examinations increased: from 3.35 million people to more than 3.7 million people, respectively. Regular preventive medical examinations are in themselves a huge social achievement of modern society, and the increase in their number shows the real concern of the national state for its population. However, even here, the qualitative component of this phenomenon is of great importance. So, if we consider this indicator for individual age categories, we will see, for example, a significant increase in preventive medical examinations for young people aged 18 to 29 years – from 270.6 thousand to 326 thousand annually, that is, more than 1.2 times. As we can see, almost all the student youth of Azerbaijan falls into this sample, which is extremely important from the point of view of improving the human condition

of our people, since it is at this age that, on the one hand, the final physical formation of a person takes place, on the other hand, the spiritual and intellectual formation of him not only as a qualified specialist in. An equally important component of the indicator of periodic medical examinations concerns the categories of persons aged 30 years and older. In the period we have noted – from 2010 to 2018 - the number of such" age " examinations increased as much as possible, almost 1.4 times – from 713 thousand to 975 thousand people [6, p.75]. This fact should be emphasized in particular. The detail we have noted is of fundamental importance because we are talking about those age categories (especially not even 30-year-olds, but people of older ages) for whom periodic medical examinations are not just particularly significant, but sometimes literally vital. Therefore, a well-formed and effectively functioning national system of regular medical prevention can rightly be considered as a significant contribution to the increase and improvement of human capital. This trend towards an increase in medical examinations for older people, which in itself – as we have seen – is important and has been outlined, as we can see, even in the pre-crisis period, today, after all that happened in 2020, it is becoming extremely significant. On the one hand, the practice of the past 2020 showed that older age groups of the population were more exposed to the covid-19 virus, and this in itself requires more medical attention. On the other hand, older people are objectively characterized by chronic diseases that are dangerous in themselves, but which, in combination with infection with the same covid-19 virus or simply escalating in a tense situation, pandemics threaten much greater dangers for their health and life itself. Therefore, it seems to us that the prevention of such serious diseases as cardiovascular diseases or diabetes mellitus, which was previously "under control" by the medical community, is now becoming one of the priorities of the entire subsequent socio-economic policy of the state. In this regard, the well-established practice of periodic medical examinations in our country needs all possible support and further development, including through the allocation of "spot" funding for these purposes and investment in the appropriate infrastructure. At the same time, it is necessary to realize that what happened to all of us in 2020 encourages us to consider the priorities of budget financing and, in general, investment in certain social areas in a different way. In this regard, it is obvious that the organization of mass vaccination of the population is imperative to come to the fore in 2021-2022; therefore, certain changes in the direction of budget funding flows will inevitably be required, in other words, changes in the distribution of already planned budget expenditures on health care. Besides, in addition to the above-mentioned reallocation of planned expenditures, when forming the budget for 2022, additional financial measures are possible, in our opinion, to provide a kind of anti-accident "safety cushion" for the population of our country. This is necessary in case of relapses of the c covid-19 virus, additional vaccination for some part of the population, ensuring an emergency regime of self-isolation and similar emergencies, one way or another related to the fight against the pandemic. On the other hand, despite the importance of today's tasks, the problem of vaccination, which has now become the number 1 state concern, nevertheless, in our opinion, can by no means be considered as a one-time problem that will automatically be resolved with overcoming the threats and immediate consequences of today's pandemic. And the point here is not even in the features and dangers of the current pandemic, although medical experts, including from the World Health Organization (WHO), warn about the validity of concerns about both the repetition of possible variations of the covid-19 virus, and the occurrence in the future of similar epidemics in scope and danger. Therefore, it seems to us that in these new conditions, the country needs a national vaccination system, which would provide the population of Azerbaijan with affordable doses of the vaccine and maintain the proper order of vaccination itself in the event of a recurrence in the future of any emergencies associated with the threat of mass infection or any other mass diseases. This means holding such events without national shocks and with the possible minimization of material losses.

Thus, we can say that the fight against serious diseases, many of which are becoming more acute due to the covid-19 viral pandemic, and its accompanying measures on a national scale are a significant contribution to the improvement of human capital. This will require, in particular, special attention to the further priority development of such advanced areas of medicine as ultrasound diagnostics, nuclear medicine, radiology, computer (CT) and magnetic resonance tomography (MRT), and a number of others. The development of such areas in itself becomes another of the priorities of the entire state social policy, requiring a corresponding increase in financing and organizational and technical support from state authorities and management. As historical experience shows, it is only through the accumulation of efforts and resources of medical science and science in general, the state budget and the investment community that it is possible to create conditions (primarily of a material and financial nature) under which the country will achieve long-term progress in the fight against diseases that pose a socially significant threat to the whole society. It should be particularly recalled that at the same time, the tasks of improving public administration as a whole are being solved, identifying its most successful forms and methods in relation to the tasks of improving the entire national efficiency and competitiveness, which were already discussed above. Therefore, paying special attention to strengthening the coordinating role of the state and improving its social policy in terms of the development of new areas of health care, it is necessary to emphasize such organizational opportunities as the wider use of public-private partnerships and the possible creation of investment consortia (with appropriate incentives for private investors) in order to select and implement the most promising medical projects. Based on such forecasts, we can assume that the new challenges of global economic development will require greater use of artificial intelligence in almost all areas of economic and social activity in modern society. This is due not just to technical convenience, but to the already occurring complication ("intellectualization") of the processes of production of goods and services and the widespread aggravation of the above-mentioned competition at all levels. In turn, the accelerated development of artificial intelligence systems and digital technologies in healthcare and related areas, and within the national economy as a whole, will require an increase – it is possible that in some cases, multiple - loads on human intelligence. It is he who performs and will continue to perform the expanding and increasingly complex functions of the operator and controller of all electronic information systems, and it is he who will ultimately determine the effectiveness of these systems. Increasing the load on a person's physical strength will also require appropriate emotional and medical relief, and this, in turn, implies completely new opportunities for national health care. In connection with all the above, it seems that the main requirements for the national health system in the context and in order to improve human capital are:

- increasing the availability of not only medical care in general, but also the possibility of effective treatment of the most severe and socially dangerous diseases;
- improving the quality of medical services at all levels of the health system;
- uninterrupted provision of the national health service with qualified personnel.

It is clear that the last of these requirements and, of course, the entire complex implementation of current and strategic tasks in the context of overcoming the pandemic crisis also imply new opportunities for the national education system. At the same time, if we conditionally limit ourselves only to the personnel needs of healthcare, it should be noted that the modern world faces considerable problems in the field of training of medical personnel. Suffice it to recall that, according to WHO estimates, by 2035, there will be a shortage of almost 13 million qualified doctors, midwives and nurses in the world. In such a situation, a country with a developed system of personnel training will definitely win.

Here, Azerbaijan has some achievements to build on, which, as we have already found out, is recorded in the last year (2020) "Human Capital Index". Even the quantitative indicators of state participation in the development of education are impressive. Thus, the volume of budget financing of education only in the period from 2010 to 2018, cited, as noted above, in the mentioned World Bank study, increased respectively from 1.2 billion manats to 1.97 (that is, almost two) billion manats, or 1.66 times. Without exaggeration, this significant increase in state allocations will look even more impressive if we recall that it "crowned" the large-scale financing of the educational sector from the state budget of the Republic of Azerbaijan, which took place in previous years. Thus, for a relatively short time period in 2005-2010, the volume of such financing in absolute figures increased from 372.5 million manats to almost 1.2 billion manats, or 3.2 times [5, p. 400]. This amount of state support, of course, served as a strong basis for further qualitative improvements in the training of qualified and highly qualified personnel in our republic, which is reflected in the "Human Capital Index" of the World Bank. In the light of the new challenges facing our national economy, further qualitative changes in the system of higher and secondary specialized education in our country will certainly be required. In the context of all the above, we can say that Azerbaijan will first of all need, on the one hand, highly qualified personnel of higher and secondary medical personnel, on the other hand, specialists in the field of applied mathematical and engineering-physical disciplines necessary for further modernization and improvement of the overall intellectual level of our economy. Of course, this does not detract from the importance of representatives of other specialties, primarily chemical – biological and humanitarian areas, which form the intellectual potential of our nation and, in general, its human capital. In addition, we must not forget about the traditional - including" heavy " - sectors of the economy (metallurgy, mechanical engineering, and a number of others), which have so far made a significant contribution to the creation of the overall economic power of our state and may currently experience – as mentioned above – certain difficulties in connection with the way out of the current crisis.

4. CONCLUSION
The improvement of the human capital of our country will be impossible without:
- first, ensuring the growth of labor productivity in these industries through the transfer of advanced means of production and management solutions;
- secondly, the organization of a constant influx of new technologies into these industries from more "advanced" sectors of the economy.

In this regard, in our opinion, the further development of industrial parks and technoparks provides significant opportunities for improving human capital in our country. The accumulation of a significant number of highly qualified specialists, as well as highly intelligent potential, within the framework of advanced scientific and technological projects, creates conditions for providing breakthrough technological solutions that are necessary for our entire economy. At the same time, of course, we should not lose sight of the problem of efficiency in the formation of the technoparks themselves, in no case being carried away by quantitative indicators to the detriment of qualitative results. The existence of a serious problem here is confirmed, in particular, by the experience of our neighbors, including Russia. Thus, according to the most recent estimates of the Association of Clusters and Technoparks of Russia, at the end of 2020, no more than 22 percent of the total number of formally functioning technoparks could be called effective [7, p.4]. This means that there is simply no talk of any breakthrough intellectual development within the vast majority of technoparks. Such examples in the practice of our country should be avoided. All of this, as has been repeatedly emphasized above, will require significant investment, which can be accumulated by improving the interaction of the state with mixed companies and interested private investors.

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THE STRENGTHENING OF THE ROLE OF SCIENTIFIC & EDUCATIONAL FACTOR OF DEVELOPMENT OF THE AZERBAIJANI ECONOMIC MODEL IN THE CONTEXT OF OVERCOMING THE CONSEQUENCES OF THE GLOBAL CRISIS

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ABSTRACT

In the proposed article there are shown objective reasons of strengthening of the role of science and education in nowadays realities of the struggle against the consequences of the crisis that was caused by the covid-19 viral epidemic, alongside with increasing of the importance of abovementioned branches in forming the long-range model of further stable growth in the Republic of Azerbaijan. The whole contemporary world experience confirms the special role of science and education and their decisive position among all other branches of economic and social life. There have been examined concrete results which have been achieved in our country during the period before crisis in improving situation in science and education branches and there are also have been suggested possible directions of their further qualitative development. The author demonstrates the key meaning of scientific &educational development for achieving that positive result of social & economic modernization which has been taking place in Azerbaijan during last several decades. Alongside with this the author emphasizes that the problem of supporting of the post-crisis stable growth remains the key one for the whole global economy , including the most developed countries. So, as far as Azerbaijan is concerned, we need qualitative improvement of the existing economic model just now; that will make us possible not only compensate losses after crisis but also provide basis for stable development. The further increasing of such quality is possible, first of all, because of strengthening of the role of scientific & educational factor.
Keywords: *improving of the Azerbaijani economic model, long-range basis of future growth, overcoming the consequences of covid-19 viral epidemic, strengthening of the role of science and education, social & economic modernization, post-crisis stable development*

1. INTRODUCTION

The general economic situation in the modern world continues to develop under the conditions and under the influence of the covid-19 viral pandemic. And if in the period up to the pandemic, the world economy continued to feel the consequences of the global financial and economic crisis that broke out in 2008-2009, then in the foreseeable future we all face the problem of making up for the losses caused by the virus crisis of 2020. The International Monetary Fund's latest forecast to date, issued in October last year, explicitly warns that "the recovery will be long, uneven, and not guaranteed" [1].

2. THE NEW ROLE OF SCIENCE AND EDUCATION IN THE MODERN WORLD

This refers to the recovery of the entire world economy, but no national economy will be able to develop steadily further without overcoming the consequences of the crisis of 2020, which, as we can see from the above forecast and the current situation in the world, may also be delayed. One way or another, the problem of ensuring sustainable growth remains a key one for the entire global economy. As for Azerbaijan, it is already necessary to make a qualitative improvement of our economic model, which should allow us not only to make up for the losses from the crisis, but also to provide a foundation for sustainable development, which we mentioned above.

Such improvement, in our opinion, involves a whole set of directions and measures in various areas. For example, a comprehensive improvement of the human environment and, through it, the improvement of the general conditions and quality of life and all work activities is of key importance. At the same time, it is obvious that such an improvement is not only a strategic foundation for future development, but becomes almost decisive in the context of simultaneous elimination of the consequences of the coronavirus pandemic, which in one way or another affected the majority of the population and which must be dealt with today. In solving these problems, the leading place belongs to advanced science, which is designed to generate a set of ideas and transform them into practical proposals for the qualitative improvement of the economic and social environment in which modern life takes place. In turn, the most important activity of any modern society for its own improvement is education. Thus, the activities of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in the field of education are designed to ensure the possibility of education for everyone, at all levels and throughout life, because education plays a major role in the formation and development of the individual, economic growth and strengthening of social ties. At the same time, it is an important tool in the fight against poverty and one of the foundations of sustainable development [2]. At the same time, it should be recalled that the entire modern stage of economic, including industrial, development is characterized by a wide use of the latest results of fundamental and applied science in the form of improving and applying technical, technological, organizational and managerial achievements, as well as by deepening the relationship of material production industries directly with the social sphere and-what is especially important to emphasize - the natural environment as a human habitat. Therefore, based on the above-mentioned special role of science and education in the modern world, it is necessary to identify their defining place among other areas of economic and social life. Accordingly, it seems to us that the growing importance of these industries – whether the world is facing an epidemic or not - should be re-emphasized and highlighted from a twofold point of view:

- first, in connection with their role in creating a competitive national economy;
- secondly, in the process of forming - by increasing the overall level of development and intelligence - a highly moral, intellectually developed personality.

Once again, we emphasize that the importance of the scientific and educational factor in the modern world is increasing regardless of whether people are facing crisis phenomena or their consequences at a particular moment, whether the world economy and most national economies are experiencing a period of recovery or, on the contrary, a decline, which we, for example, are facing today. Science and education have acquired the role of a permanent engine for the development of the general progress of modern human society. We can see and feel the importance of the development of education together with science with our own eyes on the example of Azerbaijan, since they are largely associated with the positive result of the socio-economic modernization that has been taking place in our country over the past few decades. Of course, if we turn to foreign experience, we also see that education and science are the main factors of social and economic progress in developed countries; the main capital of these countries is increasingly becoming intelligence. As a result, the intellectualization of the economy is accompanied by the penetration of knowledge into all spheres of human activity, into the production of almost any product, and the concept of a knowledge-based economy is increasingly used in the sense of widespread use of scientific developments in improving not only production itself, but also the economic system as a whole. It is a time when the intellectual factor in economic development is becoming increasingly important so that we can talk about the real digitalization of our economy.

3. THE MAIN FACTORS OF THE IMPROVEMENT OF AZERBAIJANI ECONO-MIC MODEL

The digitalization of the economy, which has covered almost all developed countries of the world over the past 10 years as part of the implementation of the concept of the "fourth industrial revolution", suggests that overcoming the consequences of the coronavirus crisis will be carried out by further strengthening the role of scientific achievements while accelerating their transfer to the economic life of most developed countries. This shift will be supported and accompanied, in particular, by the improvement of the system of continuing education, which allows for the uninterrupted training and retraining of highly qualified personnel for a rapidly changing economic environment. These same factors – scientific and educational-will play a crucial role, we emphasize once again, in determining the promising directions of post-crisis development, and for a long period. Therefore, based on all the above, we can make a reasonable conclusion that science and education will have a significant impact on the improvement of the entire Azerbaijani economic model. Let us turn once again to the question of the connection between education and science. Both foreign experience and our own experience, already accumulated in Russia, show that only a diversified structural, institutional and substantive modernization of education can give a systemic effect of innovative development of the country. It is necessary to continue to pay great attention to improving the quality of education, training highly qualified personnel, promising scientific research, the production of high-tech products and high technologies, and the export of intellectual developments. Now let's look at the situation with the financing of the entire scientific and educational complex. In Azerbaijan, the leading role in the financing of science and scientific and technical research belongs to the state for the entire previous pre – crisis period of development. And this leading role is reflected not only in the specific amounts of funded investments, but also, in our opinion, in the fact that in our country, along with the growth of funding for education and science in quantitative terms, the situation has begun to improve somewhat qualitatively – in terms of the attitude of society, including young people. In particular, among young scientists there was a desire to work in domestic science. At this particular moment, we believe it is important that this trend continues as borders are opened up to deal with the consequences of the coronavirus pandemic. At the same time, it is equally important to emphasize that the leading role of the state in the financing of science and scientific research does not negate the task of greater involvement of private investment in this area, and it should be said that in this direction in modern Azerbaijan in the pre-crisis period, certain progress was made. In our opinion, the importance of private investment, despite the current crisis, all its consequences and objective financial difficulties, will be very significant both for overcoming all these consequences as soon as possible, and for further accelerating the development of our national economy. Let's look at how the situation in our country developed in the pre-crisis period based on specific data. Thus, the share of funding for the scientific sphere from the state budget in the total amount of funding for science increased from 60 percent in 2005 to 71.3 percent in 2019, and the volume of budget funding for science in quantitative terms increased during this period from 9.3 million manats to 122.3 million manats, that is, almost 13.2 times [5, p. 351]. Once again, in our opinion, it should be emphasized that such an increase in state investment in science and research development in itself indicates an increase in the financial capabilities of the Azerbaijani state as a whole, and this, in turn, would not have been possible without the general economic successes achieved, which were discussed above. At the same time, speaking about the growth of public investment in the scientific sector, it is necessary to make some important clarifications. First, over the specified period, in general, despite the marked increase in the budget financing of science in quantitative terms, there was a relative decrease in the share of expenditures on it in the total state budget expenditures of the Republic of Azerbaijan – from 1.2 percent to 0.5 percent, that is, more than twice.

In other words, it turns out that the growth of the state budget of our country, reflecting the overall success of the economic policy, is not simultaneously accompanied by a corresponding increase – in relative terms – in spending on science and research. In our opinion, this, unfortunately, means that the branch of science has not yet received priority state significance and attention, expressed through qualitative changes in the structure of budget expenditures. Secondly, within the time period we took, there were shifts that confirm the above conclusion. Thus, the share of financing of the scientific sphere from the state budget in the total volume of all expenditures on research activities reached its maximum in 2010, amounting to 99.4 percent. However, it should be noted that by this time there was already a trend to reduce the share of expenditures on it in the total volume of state budget expenditures, as mentioned above: this share was only 0.8 percent. In the future, as already noted, it decreased to 0.5 percent [4, p. 351]. Accordingly, there was a consistent decline in the share of budget funding in total expenditures on research and development: to 96.5 percent in 2014, to 92 percent in 2015, [3, p.351] to 85 percent in 2016, to 83 percent in 2017, to 78.4 percent in 2018, and, as noted above, to 71.3 percent in 2019. However, at the same time, it should be noted once again that in quantitative terms, the state budget expenditures on scientific activities in 2019 increased to a maximum value of 122.3 million manats [5, p. 351]. What do these figures indicate? In the foreseeable future, when, simultaneously with overcoming the consequences of the coronavirus for our economy, the long-term foundations of future growth will be laid, based on a significant strengthening of the role of the scientific factor, as already mentioned above, a certain revision of the state budget policy will be necessary. Science, as we believe, should take one of the priorities and inviolable from the point of view of possible reduction of places in state funding. In other words, it is necessary to provide for the possibility of increasing the state funding of the scientific industry by increasing the share of expenditures on science in the state budget. Despite the importance of other items of public expenditure, it is necessary to remember that it is the leading positions in science – first of all, fundamental and theoretical, but also applied-that will be able to provide our country with the solution of such tasks as:

- the final overcoming of the raw material orientation of the economy;
- providing sustainable growth to the manufacturing industry, especially in the advanced electronics industries;
- changing the structure of national exports at the level of the standards of the most developed countries of the world.

Of course, in today's conditions, support for public health in the context of the fight against the coronavirus pandemic and its consequences is added to these tasks. This fully applies to such an industry as education. Thus, if we take into account quantitative indicators, the volume of funding for the education sector from the state budget of the Republic of Azerbaijan in absolute figures increased from 372.5 million manats to almost 1.967 billion manats, or almost 5.3 times. However, it should be taken into account that at the same time during this period there was a decrease in the share of education in the total expenditure part of the state budget, which amounted, respectively: in 2005 – 17.4 percent, in 2010 – 10.0 percent, in 2014 – 8.3 percent, in 2015 – 9.0 percent, in 2016-2017 – 9.9 percent, in 2018 – 8 percent. At the same time, it is important to take into account that the entire expenditure part of the state budget for the period 2005-2018 increased by 10.6 times [6, p. 400]. On the other hand, during this period, the share of education in the total budget expenditures in the direction of "Social and cultural activities" also decreased from 44.2 percent in 2005 to 38.4 percent in 2018 [6, p. 400].

4. CONCLUSION

Thus, as in the above example with the scientific industry, in our opinion, there is a certain underestimation of the importance of public investment in the field of education in terms of its current and future role in ensuring the competitiveness of our economy and the country as a whole in the global world, despite all the undeniable achievements in the development of education in Azerbaijan. This situation, in our opinion, needs to be corrected as soon as possible.

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THE ROLE OF INNOVATION IN THE DEVELOPMENT OF TOURISM BUSINESS

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ABSTRACT

Accelerating globalization processes in the modern economy contribute to increased competition in the market. Therefore, companies, in order to effectively develop their activities, must form and strengthen competitive advantages. Currently, the main source of maintaining the competitiveness of companies is innovation and scientific and technological advances, which have become the main driving force of economic and social development. The development of new products and services allows enterprises to modernize production, maintain a leading position in the market, achieve financial stability and capture new markets. The tourism business is innovatively capacious, due to the fact that in this area it is not goods that provide communication between producers and consumers of tourism services, but information flows in the form of payments and services. The development of the tourism business can only be based on the introduction of new ideas, improving the production processes of goods and services, expanding the range of tourism products, development of management system on the basis of innovation methods. One of the most effective innovative methods of tourism business development is the cluster approach, thanks to which tourism business companies can maintain their competitiveness in the market. The development of the tourism business in Azerbaijan is one of the strategic directions for the development of the national economy. Currently, Azerbaijan has numerous factors for the development of this business, but there are many problems that do not allow Azerbaijani tourism to develop in accordance with the existing potential. Therefore, innovation should become the main component in the development of tourism in Azerbaijan. Only thanks to the innovative development of tourism, our republic can occupy its niche in the competitive environment of the global tourism business.
Keywords: innovation, tourism business, innovative technologies, management, innovation methods, competitive advantages, the cluster approach, Azerbaijani tourism

1. INTRODUCTION

Intensive processes of integration and globalization in the modern economy change the content of many economic processes. Strengthening globalization processes contributed to increased competition. Currently, enterprises in various sectors of the economy, in order to develop their activities, must form and strengthen competitive advantages, which are characterized by dynamic changes, while the main source of competitiveness is innovation and scientific and technological achievements, which have become the main driving force of economic and social development. The development of new products and services allows enterprises to modernize production, maintain a leading position in the market, achieve financial stability and expand their position in the markets.

2. THE ROLE OF INNOVATION IN THE MODERN WORLD ECONOMY

For the first time the concept of "innovation" as an object of scientific research appeared in the 19th century. Austrian economist Josef Schumpeter in his scientific work "Theory of Economic Development" first explored the role of innovation in the process of overcoming economic crises, based on the introduction of new products, new technologies and new production processes.

In his theory, Schumpeter identified five innovative changes:
1) Production of new goods and services.
2) Using new sources of raw materials.
3) Using a new production method.
4) Introduction of new organizational forms.
5) Opening new sales markets [1]

A significant contribution to the study of the role of innovation in economic development was made by such scientists as E. Mansfield, R. Foster, B. Twiss, M. Porter, R. Solow, representatives of the neoclassical theory of innovation M. Kalecki and G. Mensch, T. Brian. According to the American researcher B. Twiss, innovation is a process in which an invention or idea acquires economic content: "This is a unique process that unites science, technology, economics and management. It consists in obtaining novelty and lasts from the inception of an idea to its commercial implementation, covering a complex of relations, production, exchange, consumption" [2]. As mentioned above, innovation creates an opportunity for enterprises to maintain their competitive advantage. The American economist M. Porter devoted his theory of competitive advantage to this issue. In his writings, M. Porter noted that changes in production are of an evolutionary nature. In Porter's opinion, accumulated small changes sometimes yield more results than major technological breakthroughs. Innovations are the result of not only research and development work, but also the improvement of the organizational structure, active investment. Innovations make it possible for enterprises to achieve a competitive advantage in the market. Porter in his theory, considering the determinants of competitive advantage, an essential role emphasizes the role of developed factors of production, one of which is innovation [3]. In the context of globalization, competition between countries and between enterprises within individual countries is intensifying. But, unfortunately, the processes of globalization lead to the asymmetric development of the world economy. A group of countries specializing in knowledge-intensive and high-tech industries, highly qualified services, with a new structure of employment, is characterized by high incomes of the population, high living standards, low unemployment and developed infrastructure. This group of countries includes developed countries such as the United States, Germany, France, Japan, and the Asian tiger group. These countries are characterized by a high contribution to R&D, a predominance of innovative products and high-tech products that dominate the export structure, and at the same time, these countries have a competitive advantage in the world market. Developing countries, due to their specialization in raw materials, economically lag developed countries and cannot fully compete in the world market. Innovative activity should be present in all spheres of business: in trade, production, advertising. This work is aimed at finding and implementing new ideas, thanks to which can get additional profit in various activities.

3. FACTORS OF INNOVATIVE DEVELOPMENT OF TOURISM BUSINESS
The tourist business is one of the important components of the post-industrial society, in which the service sector plays a predominant role. Tourism is a rather complex socio-economic sphere, which includes various activities for the provision of services to tourists. Therefore, the tourism business, in turn, cover the domestic and foreign markets, can multiply the development of related sectors of the economy, stimulate the development of regions, contributing to increased employment in the regions and an increase in the welfare of the population. At the same time, tourism can have a positive effect on the structure of the country's balance of payments based on the development of international tourism, providing an inflow of foreign currency. In the field of tourism, as well as in other areas, there is fierce competition. Therefore, the use of innovative achievements in the tourism business is an important condition for the further

development and maintenance of the competitiveness of tourism enterprises. Innovation in tourism is a complex of research, organizational, economic measures aimed at improving the tourism product in accordance with the increasing and changing needs of consumers. Innovation in the tourism business can be divided into innovation in the tourism product itself and innovation in the production process of the tourism product. If we talk about improving the tourism product itself, this means the creation and popularization of new types of tourism, for example, ecological, agritourism, adventure tourism, etc.

Goals of innovation in the tourism business:
1) Improving the efficiency of interaction between travel service providers and their consumers.
2) Search for new ways of providing services, that is, continuous improvement of the process of providing services.
3) Effectively satisfaction the needs of the clients of tourism services.

On the basis of these goals, the main directions of innovation in the tourism business are formed, such as:
1) Use of new tourism resources.
2) Introduction of new tourist routes in accordance with the changing needs of potential customers and changes in the situation in the tourism market.
3) Expansion and improvement of the provided hotel service
4) Application of new methods of organizing tourism business.

Several factors determine the need to use innovative methods in the development of tourism business (Fig. 1).
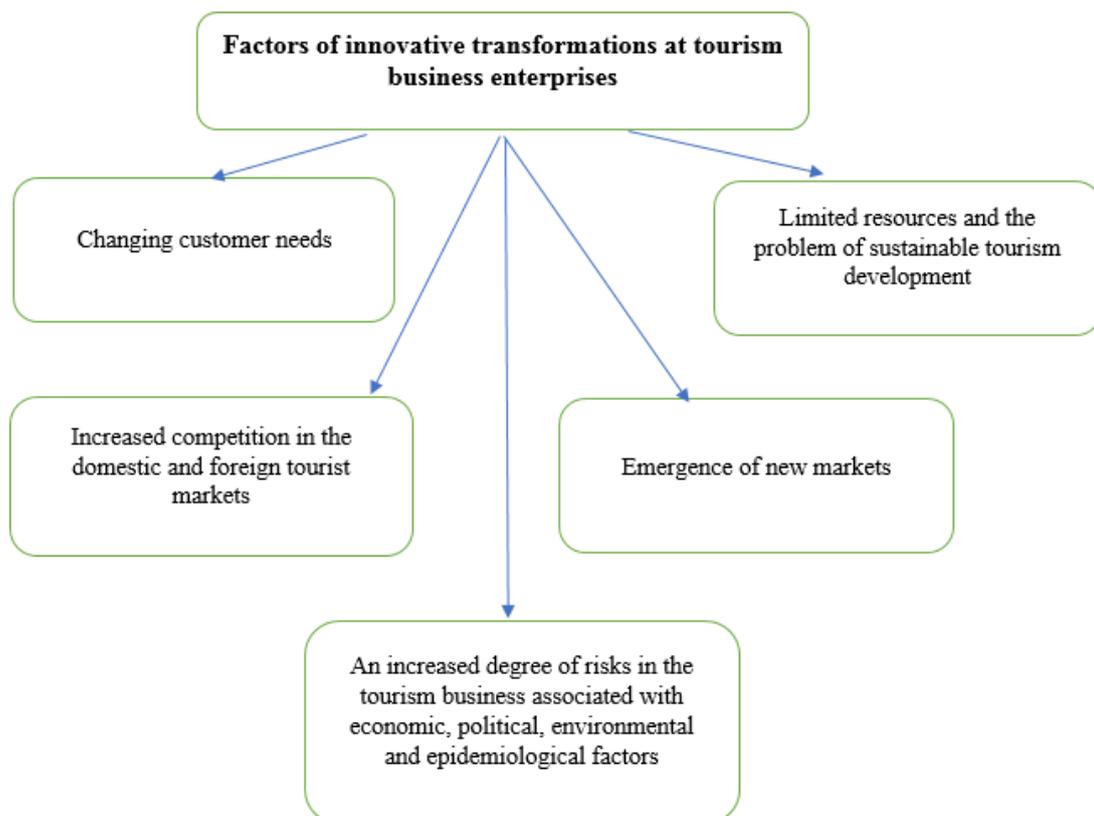
Figure 1: Factors of innovative tourism development

The formation of a consumer society is the main characteristic feature of the country's economic development. On the one hand, a free market forms a consumer society, and on the other hand, the existence of a market is impossible without individual consumption. In the process of market exchange, the individual tries not only to satisfy the basic needs for the product, but also tries to obtain additional benefits, the symbolic value of the product. On the other hand, manufacturing becomes consumer-oriented. That is, in modern society there is not the production of products, but the production of "differences" and "symbols". The consumer needs not just a car, but a whole set of symbols, not just clothes, but a way to stand out from the crowd, not just a watch, but a recognizable watch. That is, modern society is a society of global consumption. In the field of tourism, everything is the same. With the development of society, the needs of tourists increase and change. So, today in the world there are more than 300 types and subspecies of travel, which, due to the influence of many factors, are constantly supplemented with new varieties that can satisfy the most diverse desires and needs of the tourist. The problem of limited resources has become especially acute for mankind since the second half of the 20th century. At this time, such concepts as strategic planning and innovative development appeared. Tourism, like other sectors of the economy, is faced with the problem of a lack of resources, therefore the problem of sustainable tourism development is an important factor in an innovative approach to the development of tourism business. Sustainable tourism development means long-term development, in which a balance is achieved in the implementation of economic, environmental, social and cultural development goals. In the context of sustainable development of tourism, the interests of tourists, tourism businesses, and the local population are considered based on the rational use of tourism resources [5]. In today's global marketplace, there is global competition, which some experts call hypercompetition. In the context of hypercompetition, previously isolated factors of the competitive environment begin to collectively influence the activities of enterprises, including in the tourism business. In conditions of tough competition, when non-price competition dominates, the requirements for the process of creating a tourism product and, accordingly, the need to use innovative approaches are increasing. In particular, there is a growing need to find new ways to fight for a market segment, use new technologies and innovative solutions, new resources and modern forms of cooperation with competitors. Those travel companies that can offer their customers high quality products and services through the introduction of innovative achievements will be able to withstand the competition. In particular, there is a need to improve the services of the hotel, transport industries, as well as to improve tour operator and travel agency activities. For example, in the context of the COVID-19 pandemic, it became necessary to use an integrated automated and computerized service system in the hotel business, which will make it possible to minimize contacts of hotel employees with customers. According to the innovative approach used in the field of tourism, it is necessary to note an automated unified management system, which includes a computer reservation system, a unified traffic flow system, an electronic money transfer system, telephone networks, and means of communication. Thus, this system combines the interconnected activities of all components of the tourism industry (tour operators, travel agencies and transport companies, hotel and entertainment industry). An integral part of modern business are risks that negatively affect the business. Risks can sometimes lead to irreversible consequences, right up to the bankruptcy of the company. Any tourism company in its strategic development plan must clearly identify all types of risks that the company may face in the course of its activities. There are many types of risks, which differ from each other in reasons and specific characteristics that threaten the activities of any travel organization (hotels, transport companies, tour operators, travel agencies, etc.). All risks that a company may face in the course of its activities can be divided into internal, which the company can manage, and external, which are difficult to manage, and sometimes impossible to foresee.

So, the group of external risks includes world economic and political crises, environmental and epidemiological disasters. The COVID-19 pandemic has caused and continues to cause significant damage to the all global economy, including the tourism industry. The world tourism business is in a state of complete collapse and, as many experts assume, after the end of the pandemic, significant changes will be made in the management this industry. At the same time, the sophisticated technology of customer service will require new forms of control and decision-making, will present new requirements for the professional level of employees of tourism companies. Thus, in order to reduce the level of risks, tourism business enterprises need to use strategic innovative planning, thanks to which it is possible to conduct a thorough analysis of the internal and external environment of a tourism enterprise, to identify factors that can potentially threaten or stimulate the development of the company. Based on this analysis, the tourism company can plan innovations that will further develop the company and strengthen its market position.

3.1. Cluster approach in the development of tourism business

As noted above, one of the unique features of tourism is its multiplicative impact, which stimulates the development of small and medium-sized businesses. Tourism unites not only enterprises directly related to the tourism sector, but also enterprises related to tourism industries and enterprises indirectly involved in the tourism business. In recent years, the cluster method of business development has been actively used. In our opinion, the use of the cluster approach in tourism can increase the efficiency of this industry and contribute to the innovative development of the tourism business. The cluster business is the joint development of the main and related companies, which are united by a single territory, infrastructure, human resources and other components that allow to optimize the production process. The founder of the cluster theory is the American economist Michael Porter. Based on the cluster method, Porter developed the concept of a competitiveness strategy. The introduction of a cluster form of business creates a real opportunity to ensure the competitiveness of the company, based on the consideration of the main factors (determinants) of competitive advantage. According to M. Porter's theory, it is not the countries that are initially competitive, but the national companies of these countries. To compete successfully, firms must have one of two advantages: low production costs or a high-quality product with a high price level. According to Porter's theory, a country's international specialization is determined by those sectors of the economy in which its national producers are most competitive. According to the classical theories of A. Smith, D. Ricardo, as well as the theory of Porter, no country in the world can be absolutely competitive in all spheres, since its limited resources affect. An important task is to use the country's resources in the most rational way, and to specialize in the most efficient competitive segments of the economy [3]. According to Porter's model, competitive advantage consists of four determinants that form the environment in which a business operates:

- Factor conditions
- Demand conditions
- Related and supporting industries
- The structure and strategy of firms, intra-industry competition.

Let's consider each of the determinants in more detail. Condition factors are necessary for successful competition in a particular industry. M. Porter in his theory actually expanded the list of factor conditions included in the neoclassical three-factor Heckscher-Ohlin model. At the same time, he differentiated factors into basic and developed ones. Developed factors, according to the author, are more significant for the company's competitiveness. These factors, as a rule, are not automatically inherited from previous generations, but are created in the labor activity.

The developed factors that determine international competitiveness include scientific and information potential, skill labor force, capital, infrastructure and innovation. The next determinant of competitive advantage is the state of domestic demand. The country gains a competitive advantage in industries in which domestic demand provides companies with an initial understanding of customer needs. Domestic buyers pressure companies to innovate and thereby gain a competitive advantage. It is also important that domestic must match to global market trends. If we consider this theory on the example of tourism business, the development of domestic tourism is a very important component of increasing the competitiveness of the tourism industry. Strengthening the role of the development of domestic tourism has become very relevant in the context of the COVID-19 coronavirus pandemic, because international tourism is in a global crisis. The tourism industry combines several sub-sectors and is closely related to other sectors of the economy. To ensure the competitiveness of the tourism business, the role of related industries (restaurant business, entertainment business, retail trade, etc.), as well as supporting industries (health care, education, banking, media, advertising, etc.) is essential. According to Porter, due to the multiplicative influence of tourism, not only individual industries become competitive, but also an entire cluster in which companies are integrated vertically and horizontally. To achieve high competitiveness, it is necessary to ensure close and effective interconnection of all components of the cluster. Strategy and intra-industry competition is the fourth component of Porter's Rhombus. The success of the company depends on the correctly chosen strategy, and with it the success of the whole country. As you know, there are enough tourist-attractive countries in the world and all of them can provide almost the same range of services. Therefore, it is necessary to find an effective method of attracting tourists to your own country. For this, it is necessary that the country has a clear strategic plan for the development of the tourism industry, in the development of which the state should play a significant role. Intra-industry competition is very important in the development of the tourism business. To improve the quality of the tourism product, it is necessary that there are many national tourism companies in the country, because in the process of competing, they reduce costs, improve the quality of products, stimulate the development of scientific and technical progress and actively use innovative methods in creating a tourism product and in company management. The activities of government institutions, albeit indirectly, can significantly affect the competitiveness of the tourism business, and this influence can be both positive and negative. For example, long-term support of an object by the state can lead to a slowdown in innovation processes and a loss of competitive advantages. But, at the same time, the government, with the adoption of appropriate laws, can stimulate companies in their development. Correctly chosen tax policy, personnel policy, support for innovative development of the economy, stimulation of investment attraction are the driving factors in the formation of a competitive tourism business in the country. Finally, the chance factor, while not the main determinant of competitive advantage, can lead to tangible problems. For example, companies cannot foresee global economic crises, wars and political conflicts between countries, natural phenomena, environmental disasters, epidemics. For example, the 2008 global financial crisis had a significant impact on the economies of tourism-oriented countries. The COVID-19 pandemic has had even more devastating consequences for all global economy and especially for the tourism business.

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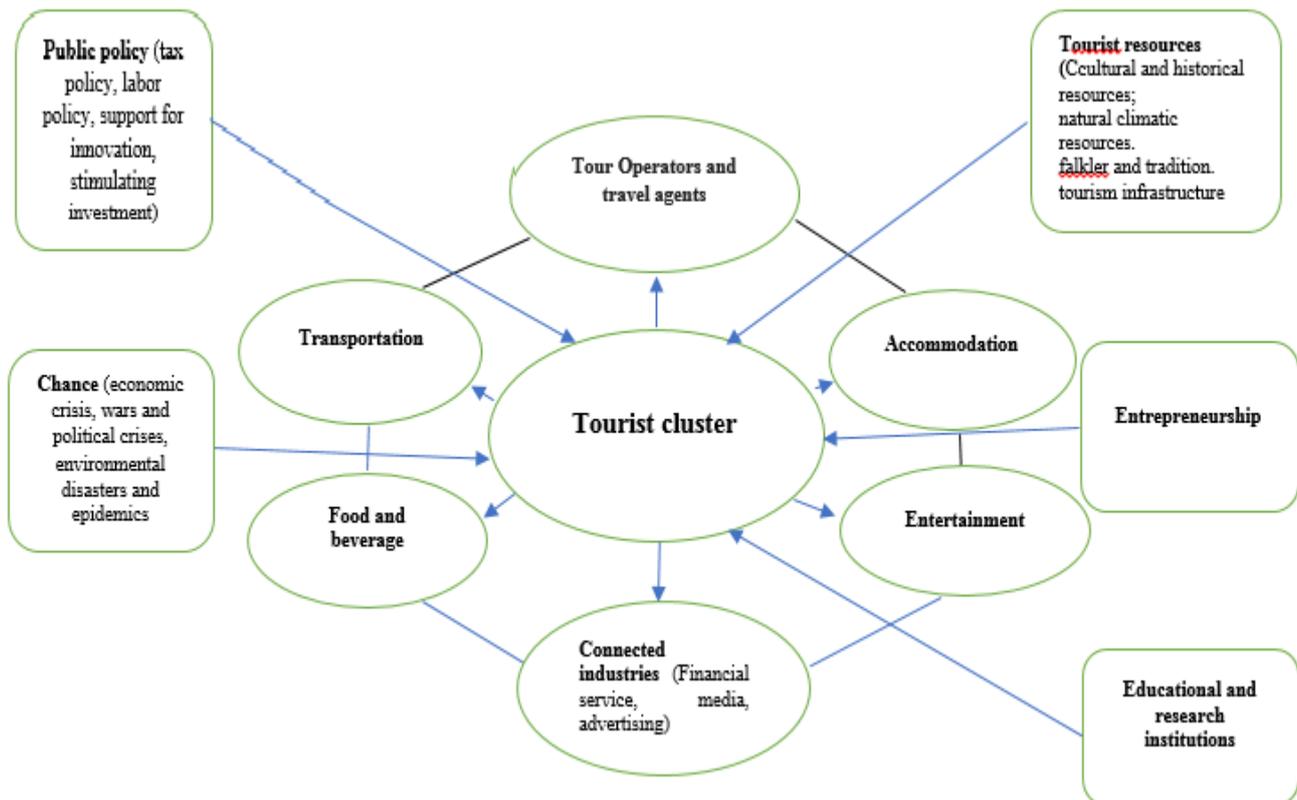
Figure 2: Tourism cluster
(Source: Developed by the author)

Based on Porter's diamond model, we propose a tourism cluster model, which illustrates the relationship between the main components of the tourism industry and the relevant institutions, on the activities of which the efficiency and competitiveness of the tourism business significantly depends. The cluster approach in the development of the tourism business can help to increase its competitiveness through the implementation of effective interaction between cluster members, access to skill labor, necessary information, and innovative achievements. In addition, the cluster approach can facilitate the effective attraction of domestic and foreign investment in the tourism business, as well as its entry into the global value-added chain.

4. PROSPECTS FOR THE DEVELOPMENT OF TOURISM BUSINESS IN AZERBAIAJN

Tourism in Azerbaijan is recognized as one of the priority and strategic directions for the development of the national economy. The importance and prospects of the development of the tourism business have especially increased as a result of the liberation of the Karabakh region of the country after many years of occupation. It should be noted that this region has significant potential for tourism development. The "Strategic Roadmap for the Development of the Tourism Industry Specialized in the Republic of Azerbaijan" includes measures such as supporting the development of the tourism sector within the stipulated time frame, creating high-quality and competitive tourism services on the international and domestic markets, attracting new investment projects based on modern ideas and innovations, and the introduction of innovative forms of management in the tourism business. Currently, Azerbaijan has numerous factors for the development of this business, such as geographical location, historical heritage, geopolitical position and dynamic economic development. In recent years, there has been a dynamic in the development of tourism in Azerbaijan, which is reflected in the growth in the number of tourists to our country. (Fig. 3).
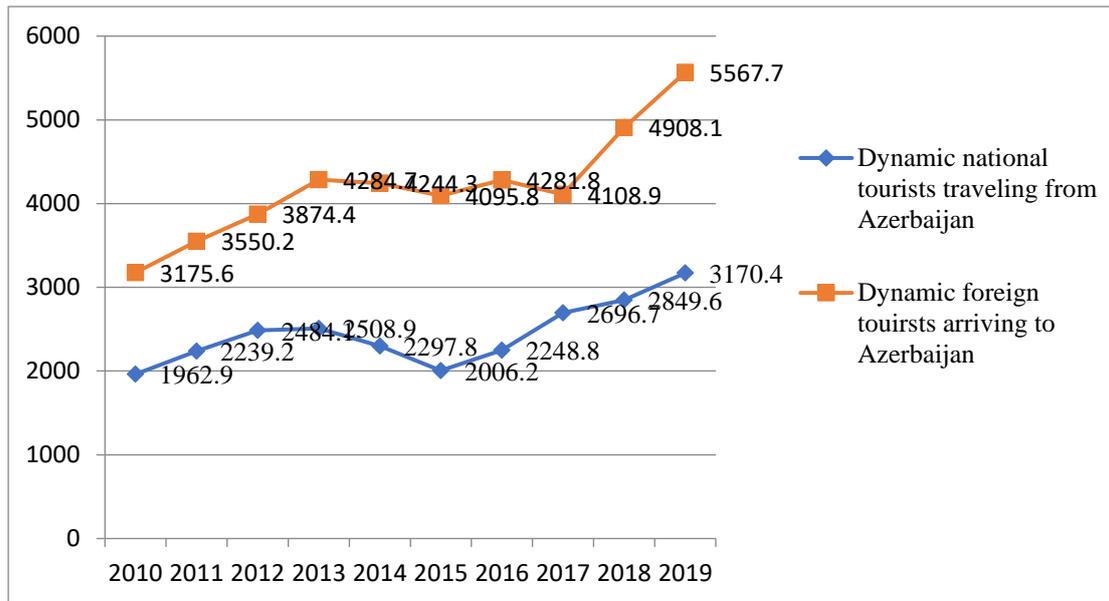
Figure 3: Dynamic of inbound and outbound tourism in Azerbaijan in 2010-2018 (thousand people)
(Source: State Statistics Committee of the Republic of Azerbaijan)

But there are many problems that do not allow Azerbaijani tourism to develop effectively in accordance with the existing potential.

1) Lack of an integrated approach to the development of the tourism business, while it is vital to develop a mechanism for the integrated management of the tourism business based on innovative methods.
2) Problems in the accommodation industry, associated with the ineffective development of the hotel base. Expensive 5 and 4-star hotels prevail in the country, and there are practically no 3-star hotels with appropriate quality and price. As you know, it is three-star hotels that are necessary for the development of mass tourism.
3) Expensive air transportation
4) Lack of qualified personnel who meet modern market requirements.
5) Imbalance between price and services in the tourism industry
6) Insufficient support of small and medium-sized businesses in the tourism sector
7) Weak and ineffective cooperation between government, commercial and non-profit organizations.
8) Weak development of domestic tourism.

It is especially necessary to note the problems in the development of domestic tourism. According to Figure 3. Azerbaijani tourists prefer to rest outside the country. High prices, low quality of services provided are the reasons for the prevalence of outbound tourism. At the same time, in the context of the COVID-19 coronavirus pandemic, the role of domestic tourism in all countries specializing in tourism development is growing dynamically, and domestic tourism should play a decisive role in the survival of the tourism business. According to UNWTO data, there is a demand for domestic tourism in the USA, Germany, France, Russia, China and other Asian countries. Azerbaijan must certainly take into account this global trend and begin the effective development of domestic tourism and the use of innovations in this process should play a decisive role. Only thanks to the innovative development of tourism, our country can find its niche in the competitive environment of the global tourism business.

5. CONCLUSION
To achieve and maintain a competitive advantage by tourism business enterprises, it is necessary to take into account the modern characteristics of society:
1) Competitive advantage can be maintained only through the introduction of innovations.
2) The globalization of the tourism business is forcing companies to consider national and international interests.
3) The tourism business has a complex mechanism of functioning, since its development depends not only on directly related enterprises, but also on indirectly related industries, therefore it is necessary to work out an appropriate development strategy.
4) The role of government and various public institutions are important in elaboration an effective strategy for the development of the tourism business.

Summarizing the above, we can conclude that the use of the cluster approach in tourism development is the most effective method of increasing the productivity, efficiency and competitiveness of the country's tourism product and tourism services using innovations.

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DEVELOPMENT PERSPECTIVES IN INCREASING AZERBAIJAN'S EXPORT POTENTIAL

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ABSTRACT
The article highlights the current state of export potential on the basis of modern economic challenges, its development, as well as the integrated use of export potential, production of competitive goods and services using modern achievements of scientific and technological progress, ensuring their free access to international markets. In the current period of relations with the world market, the main directions of the state's foreign economic strategy should be to increase its export potential, improve the structure of both export and import operations, as well as access to world markets of competitive products that meet international standards and requirements. Today, one of the main priorities of Azerbaijan's foreign economic strategy is to be actively economically integrated into modern world economic processes, to respond adequately to new trends in the global economic space. At present, our main goal is to increase the competitiveness of the national economy and its effective integration into the world economic system, increase the volume of exports of priority sectors of the non-oil sector, accelerate the development of entrepreneurship and stimulate export potential. is to do. Today, the export of products produced in Azerbaijan to most countries in the world gives reason to say that there are enterprises in Azerbaijan that produce high quality products in accordance with world standards, and their number is constantly growing, which is also one of the priorities of state economic policy. The high quality of the products increases the competitiveness of these products in the export markets, as well as ensures the right of our consumers to consume quality products. Therefore, in order to protect the domestic market from unfair competition, strengthen control over the compliance of imported goods with relevant quality standards and ensure the rights of consumers, work is underway to further expand the activities of the State Service for Antimonopoly Policy and Consumer Protection.
Keywords: *world market, international market, export potential, export stimulation, export tariff*

1. INTRODUCTION

The global COVID-19 pandemic and minimizing the impact of the economic crisis on the Azerbaijani economy are the main priorities and goals of economic reforms. Azerbaijan's economy can also be characterized by the post-oil period, which has its own characteristics, which have shaped the economic processes that need to be addressed in the economy. As difficult as these problems are, especially in the foreign sector, not only for Azerbaijan, but for all countries of the world, the solution of this problem again focused on increasing the international competitiveness of the economy, reducing dependence on imports and substantially increasing exports of non-oil products.

In this regard, in order to expand the export potential of Azerbaijan in such a difficult situation and have a positive impact on the export potential, the relevant structures, such as the Ministry of Economy, aimed to simplify export procedures, export promotion mechanisms, as well as export lending branding, logistics, export potential stimulation . To this end, a state program in the foreign trade sector must be developed and implemented, taking into account the potential of economic resources in the lands liberated from Armenian occupation. The quantity that characterizes the share of exports in the country's GDP, export quotas should stimulate and implement various sectors of the economy, as well as goods and services for enterprises, based on world experience. This quantitative indicator is the set volume of production, shipment of products for the export of certain goods, in which case the export quota is aimed at regulating foreign economic activity at the national and international levels, in world trade. Export quotas are also used to regulate the supply and demand of certain types of goods in the domestic market. In the current situation, international multilateral or bilateral trade agreements may be the basis for export quotas. It should be noted that today the efficient use of export tariffs is of particular importance. The use of export tariffs in the Republic of Azerbaijan is based on the task of ensuring protection against uncontrolled exports of goods, which are the basis for the potential of the Azerbaijani market and guarantee the bulk of foreign exchange earnings [1]. In general, we believe that the stimulation of export potential, the use of export tariffs, the application of tax and customs benefits in accordance with the decision to promote investment, this condition, which is important for the development of entrepreneurship, will have a positive impact on the development of both regions and non-oil sector. This is because when entrepreneurs engaged in investment activities in priority areas receive investment incentives, the imported machinery, technological equipment and facilities are exempted from customs duties for a period of one year.[2] We would like to highlight the Export and Investment Promotion Fund, which supports the development of the country's export potential in today's conditions. It should be noted that even at a time when the pandemic is straining the stimulation and realization of exports, the country must improve living standards and welfare in such a difficult period, creating conditions for increasing foreign exchange earnings and accelerating the pace of development of all sectors of the economy.

2. PRIORITIES AND DEVELOPMENT PROSPECTS OF FOREIGN TRADE IN AZERBAIJAN

The primary goal of any national economy that enters the path of independent development is to assert itself at the forefront of the international division of labor. The modern world system strengthens the interdependence of countries. The main conditions for this are the economic and political independence of each national economy, market competitiveness, antitrust policy, the level of state regulation of the economy, tax and bank interest rates, favorable investment climate, political stability, etc. depends to a large extent. Separated from the former Soviet Union, Azerbaijan's national economy, like many other national economies, has undergone extensive transformation processes in the foreign trade sector, as well as in other areas. In this process, it was possible to form the mechanisms of activity of the foreign trade sector and the stimulating state policy. It is an activity based on free agreements accompanied by economic freedom, economic relations based on international norms. In modern conditions, as in other areas, the priority issues in terms of effective regulation of activities in the international trade sector must be brought to the fore and implemented. This is especially important in a pandemic. In our opinion, the most pressing issues today are: improving the structure of imports and exports, increasing investment, achieving the development of the non-oil sector through innovative methods, stimulating the inflow of foreign capital, increasing the purchasing power of the national currency, ensuring stability against foreign currencies , to provide employment in the export sector, to further develop cooperation with international financial institutions to

ensure its sustainability, to increase state control over some problems, especially the level of foreign debt, dependence on foreign capital and oil revenues, the level of modernization of creative society and economy. In the center of the country's foreign trade concept, in our opinion, economic competitiveness should be brought to the fore in all areas. After gaining economic independence, Azerbaijan's foreign trade sector was hampered, first of all, by the current socio-economic and political situation, the potential assessment of the potential as soon as possible, the development of a system of measures to achieve the goal and the collapse of traditional production ties with the collapse of the USSR. regulate the normal recycling process [2]. Despite the fact that the positive trends in the development of foreign trade relations in Azerbaijan are undeniable. However, it should be noted that the commodity structure of imports and exports is still not very efficient. Although exports are still raw material-oriented, they are mainly consumer-oriented. In our opinion, among the priorities of foreign trade, first of all, export stimulation and effective systematization of state support, ie state support for exports should be integrated in economic, informational and organizational order, and state support for export stimulation should be promoted, lending to export-oriented production Factors characterizing foreign trade relations should be highlighted and regulated. These include economic, production-technological, social and legal factors. On the basis of the foreign trade strategy, the close connection of foreign trade with economic development should be taken into account, the possibility of applying the relevant industrialization strategy to the mutual industrialization strategy should be explored and conditions should be created for export-oriented industrial strategy. To this end, the state must implement protectionist measures in trade for the necessary goods and services and systematically and effectively use the possible opportunities of strategic foreign trade policy. It is this approach that has led to a conceptual generalization of the problem of foreign trade efficiency [3]. One of the main problems facing the country in the context of rapid implementation of modernization policy in all areas is the sustainable growth of foreign trade turnover and increasing economic efficiency. This will create conditions for the structural improvement of foreign trade relations by ensuring the production of competitive goods and services, their introduction to the world market through the effective use of the achievements of scientific and technical progress of foreign trade relations. As we know, as an element that creates a trade system, in addition to playing an important role in the implementation of sustainable development of the country, it is associated with most elements of socio-economic problems of the country and is directly related to GDP. We believe that the liberation of 20% of our lands under Armenian occupation today, the natural resources of these territories will have a positive impact on the resource-rich foreign trade sector in this regard. We would like to note that the foreign economic policy pursued since 2003 has resulted in the intensification of large-scale investment flows to the country since 2003, rapid growth of oil production and exports, acceleration of economic development, income growth, poverty reduction. provided. It is no coincidence that the growth of exports in the country reached its peak in 2008. This growth continued until the pandemic. Compared to 1991, to this day, along with this growth dynamics of foreign trade turnover, fundamental changes continue in the commodity structure of exports and imports, as well as the number of countries with which trade relations are established and trade turnover. However, when we analyze the commodity structure of foreign trade relations, we see that the tendency to monostructure in the country's import-export operations still prevails. In the context of globalization, in addition to increasing the foreign trade turnover of the state, it is important to systematically address the production of competitive goods and services, ensuring their free access to international markets, using modern achievements of scientific and technological progress to increase its economic efficiency. The decree signed by the state in connection with the "Development Concept of Azerbaijan 2020" has significantly highlighted the need to modernize the socio-economic life of the country as a whole [4].

Examples of such documents are the "Long-term vision for the period up to 2025" and "Targets for the period after 2025". Each of these documents was a state call to stimulate the export potential of non-oil sector products, which were measures aimed at expanding foreign trade relations and increasing the export potential.

3. TAX POLICY IN THE STIMULATION OF AZERBAIJAN'S EXPORT POTENTIAL

As we have noted, economic integration into the world economy, the expansion of foreign trade relations is one of the main advantages of the modern world and has a rapid impact on the economic development of these countries, which have become economically integrated into the world economic system. Changes in the world market affect the development of national economies and the quality and quantity of participation of national economies in the world market. Even in highly developed countries, the weakening of foreign trade can lead to declining exports, creating socio-economic problems, creating political problems in the country, economic tensions, economic downturn, inflation and rising unemployment. From this point of view, export support is an important factor in national economic development within the framework of state interests, regulatory mechanisms of the state, stimulating policy in support of exports, foreign trade, effective organizational-economic, legal policy. Many factors affect the foreign trade, ie export potential of each national economy. These factors include improving the use of production assets, scientific and technological progress, improving the workforce, discovering minerals, further expanding international economic integration, and so on. includes. However, these factors do not initially affect the specific export potential as a whole, but the individual components that make it up, and thus the export potential is formed on the basis of the export potential of its internal components. It is no coincidence that we also agree with this statement: "In developing countries, export stimulation is especially important for the realization of development" [5]. As in all areas, the tax system is the basis of the mechanism of state regulation of the economy in the foreign sector. The efficient operation of each country's economy depends on an efficient and well-organized tax system. The tax system aimed at improving the socio-economic welfare of the country's population is aimed at creating a transparent environment for the development of economic activity, stimulating investment in the economy, fair distribution of the tax burden among taxpayers, lowering tax rates, etc. Such factors form the basis of tax policy. However, as we know, in world practice, tax policy is implemented in two main ways. This is:
a)   economic development policy;
b)   maximum tax policy.

In economic development policy, the state seeks to stimulate taxpayers by taking into account their interests by ensuring its fiscal interests. It provides softening concessions to economic entities engaged in entrepreneurial activities. Reduces its costs and spending on social programs. The main goal of this policy is to prioritize the development of capital and stimulate investment. In contrast to the tax on economic development policy, in the maximum tax policy, the state sets high tax rates, does not go for tax breaks and increases the number of taxes. The state, which implements such a tax policy, thinks not of its citizens, but of its own expenses, and thus has a negative impact on economic development. However, it should be noted that the maximum tax policy is applied by states in special cases of war, economic crisis and emergencies. We can say unequivocally that a stimulating tax policy is applied in Azerbaijan. The purpose is to stimulate the development of technoparks by developing innovations in economic development, discounts on investments in the territory of technoparks, if the entity is a new resident and continues the project, tax benefits are applied until the end of the project. Unfortunately, we would like to note that there is no significant provision in the Tax Code of the Republic of Azerbaijan to stimulate exports or specific foreign trade, but even if this is not

the case, we consider it expedient to pay attention to some issues related to income tax. It should be noted that the state pays special attention to the development of the private sector. According to this course, simplification of licensing, suspension of inspections in the field of entrepreneurship, introduction of investment and export promotion mechanisms, reduction of preferential lending rates, measures to develop small and medium enterprises, expansion of e-services, improvement of tax, customs and social payments will increase the share of the private sector. serve. The share of the private sector in industry was 83.2% in 2018 and 82.5% in 2019. [6] They play an important role in the development of the non-oil sector in the country. The application of new models of advanced mechanisms such as industrial parks and neighborhoods, agro-parks opens up great opportunities for the creation of innovative enterprises, the expansion of production of export-oriented products. Incentives are applied in the field of tax policy, as well as customs. Accordingly, residents of industrial parks are exempt from labor, land, income or profit taxes for a period of 7 years from the date of registration. They are exempt from VAT and customs duties when importing machinery, technological equipment and installations imported for production purposes. Modern infrastructure is being created in industrial parks at the expense of state funds, thus stimulating entrepreneurship to invest. The results of recent years allow us to say that 300 million manat of the 1.5 billion manat worth of products produced in the country's industrial parks are exported to foreign countries. It should be noted that these successful measures also create new jobs in the country and its regions. An effective tax policy also stimulates the application of the investment promotion mechanism as a progressive method in the country, the legal entity that obtains this document is exempted from 50% of profits for 7 years. It accelerates the development of import-substituting export-oriented industry in the country.

4. CONCLUSION

According to our brief analysis, we can say the following. Stimulation of export foreign trade is regulated by economic interests in the national interests of each country. Tax regulation in the country is carried out taking into account the existing structure and potential of the country's economy, which has the effect of effectively regulating the problems associated with foreign trade or exports. It is not expedient to apply tax incentives to increase the export potential of the oil sector in the country. The low share of the non-oil sector in the country's export structure makes it necessary to apply a preferential, stimulating tax policy in these areas. Application of tax incentives for all types of export-related activities of export-oriented industries in the country. Stimulation of tax incentives for all types of activities aimed at the development of industry in the country.

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DISTANCE EDUCATION AND ITS APPLICATION FEATURES

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ABSTRACT
This article is devoted to the distance learning or education which implies an approach to learning a foreign language in universities. This form of learning allows the students to choose the time and place for training, as well as to use new informational technologies in training. Informational technologies of distance education allow conducting classes in a foreign language in a videoconference mode and provide to control independent work of students. Today new information technology influences on students' knowledge level. Distance education becomes more and more popular in the form of education; it allows the student to study in their pace where they are. It is clearly differentiated from the traditional education in terms of a student's or teacher's physical presence and live communication. Distance education increases topicality of problem development private methods of application of technical training tools. These are primary contradictions between tradition and distance education. The bases of the educational process in distance learning is purposeful and controlled intensive independent work of the student, who can study due to an individual schedule having a set of special training tools and agreed opportunity to contact to the teacher by phone, e-mail and regular mail. Distance education it is type of training based on educational interaction of teachers and student, who are remote from each other and implemented using telecommunications technology and internet recourses. Foreign language learner has an opportunity to communicate with varies communicants and this process is not limited to any time. Advantages and disadvantages of distant education, differences and similarities of traditional and distant education are indicated in this article. Also some difficulties of distant education such as lack of distant learning experience, preferring classical education, insufficient of computer literacy, poor using of standards of distant learning, the problem of finding specialists are noted. Synchrony and asynchrony formats of distant education are differentiated and explained. As a result, it was concluded that distant education has a positive impact on academic achievements of sturdents in terms of reduces costs, saving time and increasing accessibility of education as well as enhances academic performances.
Keywords: *distant education, individual approach, remote teacher, technology, traditional education*

1. INTRODUCTION

Today people all over the world are connected with each other in a big way through social networking sites. This has led to increase popularity of online education. The only requirement is a computer system with the internet connectivity. The power of computers and the internet in the current century enables all learners to study at their home without having to attend a regular face-to-face course or school. In other words, recent developments in Information and Communication Technologies have brought about various improvements, facilitating people's lives.

Developments in science and technology are fundamentally altering the way people live, connect, communicate and transact (Humbatova S. and Abidi S., 2021). Distance education appears in the educational field as a new technic because of the increasing demand for the flexible and convenient aspect. Learners who are unable to attend classes for one or another purpose can study at their own pace independent from time and place. The global student community grabbed the opportunity with both hands and millions globally are currently taking online education. Having created the terms in which every student is able to get necessary knowledge by using his cognitive opportunity (Симеонова Н., 2018). Distant education is a type of learning based on the educational interaction of teachers and students, who are remote from each other and implement to use telecommunication technology and internet resources. Distance learning also called distance education, e-learning and online learning, form of education in which main elements include physical separation of students and teachers during instruction and the use of various technologies to facilitate student and student communication. Reconstruction of high education is the catalyzer of tradition education system changes. Today non-state educational institutions appear offering services which headily diversify on increasing not only innovation of pedagogical methods but also informational technology. These are the stimulus on increasing student's motivation in this case. It gives great opportunities to everyone: the student have new mechanism of multidiscipline realization and social culture connection by using the most modern forms of information exchange of system and multisystem interaction. A learner who is willing to educate must get necessary knowledge. Didactic features of given informational technology must be use to this purpose (Курбанов А., 2015).

2. LITERATURE REVIEW ON DISTANCE EDUCATIONS

The reality of communication entails the desire of the leaner to communicate more in a foreign language. The mechanism of such communication is an information learning environment based on hypermedia technology with access to the global Internet. In the process of distance education in different programs, students take varies courses depending upon their majors. Actually, students' thoughts and perceptions about this courses and whether this courses meet their needs or not of great importance for the success and motivation of students. They can take various courses for diploma, certificate or a degree via distance education in a more flexible and interactive atmosphere. The introduction of multimedia technologies and the internet in learning in many universities has been observed as a means of improving accessibility and quality of delivery and learning among the student and teachers. Research on the attitude of the students towards distance language learning is limited (Glisan et. al). Two aspects of distance language learning are realized by the researches: achievement and attitude. Distance programs could have a positive effect on achievement and attitudes. The result of the research indicates that there is a positive attitude toward distance learning. Female students' attitudes are found to be more positive compared to males (Ali Hakan Işık et al.). The main advantage of distance education as well as the technology on the internet is the shift of emphasizes from verbal methods of teaching a foreign language to the methods of search, creative activity. Distance education should not replace text books and manuals, the should form the basis for the organization of educational and cognitive activity of students. The emergency of distance education has led to the need to develop and implement distance learning technologies. Many researchers believe that technology is a tool that used to remove geographical barriers and to facilitate learning (Ho, C.-L., and Dzeng, R.-J. 2010). Nowadays bright examples of distant education is an educational platform. A lot of platforms are existed in the world, which give the students the opportunity to get education at any time, in any place. The major approach of education process in modernity increases knowledge level through self-education (Пичугина Г.А., 2018) without using a new learning technology, it is impossible to get qualified specialists. The major problem of distant education in learning English is a personal-orientation approach

to a group of student as to an individual schedule. "It is necessary for us to know not only skills and opportunities of each student, however his physically features" (Гарбузова И.В., 2014). Distance education of a foreign language presents a set of educational-computer program. They are intended for solution of definite educational issues. Such approach to education implies an individual approach either. Some students with upper level of knowledge receives educational information quickly, but the majority of students with the low level of knowledge very slow. Such systems allows all student to achieve high results regardless their initial level of knowledge. It allows to study in any distance from small auditory, completing in different countries. Distance education concentrates the followings:

- to work with delivered material
- the assistance of a remote teacher
- to deliver educational material on time
- to increase informational culture
- possibility of getting knowledge in any accessible place of the world, any time you like
- accessibility of a person, removed from educational institutions of high education

The delivered materials must contain:
a) educational methodical program
b) educational facilities
c) the list of literature
d) questions and tests for practical work
e) exercises and tasks are given to consolidate the material
f) summarizing the control work.

The delivered educational materials are printed in the form of electronic hypertexts aids. Some companies are specialized in the producing of materials for self-education and self-preparation. In this case text books are the supplements to the common educational material, but not the main study guide. Depending on the approach, it can be text books or education methodical facilities. Learning English by books has negative and positive sides. Students cannot spend time on the way to the tutor or can study in a convenient place in free time. We prefer such distance courses, which offers feedback. For example, after reading the text by the students on the learned theme, it is necessary to do exercises on a reading text which is controlled by the remote teacher. To teach the speech activity can be possible only by communication (live communication) (Иванова И.В., 2012). The teachers are recommended from time to time to produce circularization of educational material and to organize an access to informational channels.

3. THE FORMATS OF DISTANCE EDUCATION

Distance education has two formats: synchronous and asynchronous types. Both of them requires strong technologies. These types of distance education are the two formats of conducting lessons. Synchronic education is the format of education in the regime of real time, the lessons are not held in the definite place. Synchronous distance education are offered by the instructors of the lesson and it includes:

Figure following on the next page
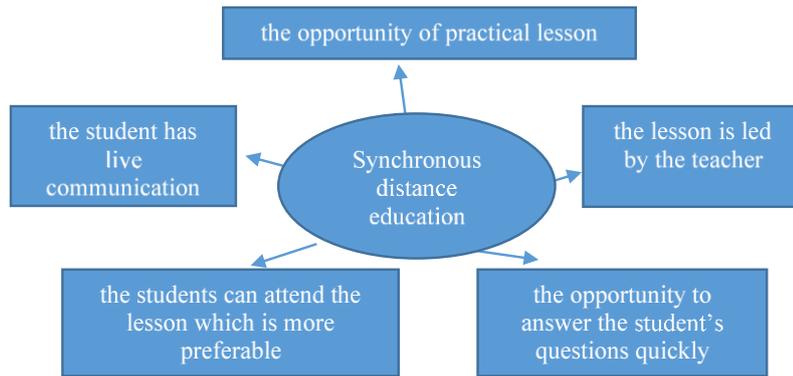
Figure 1: Features of Synchronous distance learning
(Source: Prepared by the author on the basis of theoretical materials)

Asynchronic education is a format of education when the delivering process of knowledge transmission or ability is not connected with the definite place. This type includes:
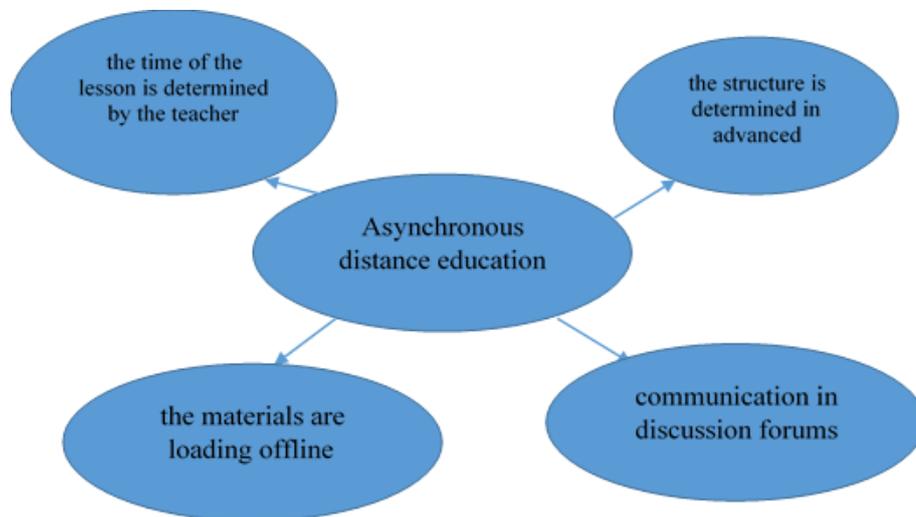
Figure 2: Features of Asynchronous distance learning
(Source: Prepared by the author on the basis of theoretical materials)

4. ADVANTAGES AND DISADVANTAGES OF DISTANT EDUCATION

Distant education has vast potential. It has advantages and disadvantages while understanding it. The advantages are:

- distant education is cheaper;
- the student can pursue a job with along studies: a student who does not want to give up their jobs, but want to get higher education. They can study on the weekends when they are back from work or even in the middle of the night;
- the student can save time and money: students who are looking economically options can go for a distance learning program. There is no wasted time in going to and from collage. Your classroom is right in your bedroom – the study material on your desk or the material in your computer;
- the student can study whenever and wherever: the student can go to study in his garden or in the comfort of his own bed;
- flexibility: student mostly do not attend regular classes in the form of lectures and seminars. Everyone can learn as much as they want personally necessary for the development of the discipline and getting the necessary knowledge on the chosen specialty.

The disadvantages are:
- hidden costs: the student might have to incur some initial expenses like installing a computer and getting a reliable internet connection. The student need to buy additional resources, such as a printer, a web camera and so forth. Lack of direct face to face communication between a student and a teacher, when there is no person who could emotionally color knowledge, it is a significant disadvantage for the learning process. It is difficult to create a created atmosphere in a group of students. The need for a personal computer and access to the internet, the necessity of constant access to information resources;
- high costs: high system of building the system of distance education. At the initial stage of creating a system significant costs of creating distant learning. Systems, purchase of technical equipment.

5. DIFFERENCES AND SIMILARITIES OF TRADITIONAL AND DISTANT EDUCATION
There are a great amount of differences and similarities between online and traditional learning. The differences in distant education are:
- the courses are taken online, which does not restrict the student to particular location
- it requires more self-education and discipline in order to get coursework completed on time
- online feedback can be slower
- the student must not leave his place that makes the system accessible for students from remote inhabited locality
- a student economy his time, expenses and can combine his work with activity
- it is also a proses a transmission of knowledge it leads self-education
- no personal factor
- the role of technology and virtual interactive is great
- virtual visual aids are prepared in advance

The traditional education:
- live communication
- getting more qualitative education
- the process of the lesson depending of teacher's methods
- the presence of individual factor
- the formal environment is classroom
- the system is based on a fixed schedule where students and teachers must coincide in a physical space

Similarities:
- the preparation of the lesson by the teacher and student in advance
- the knowledge evaluation of the student by the teacher
- the lesson meets the requirement of a qualitative educational standards
- the teacher demonstrates his skills and knowledge during lessons
- communication needs are implemented
- there are some similar aim of the education
- motivation of students

6. THE MANAGEMENT OF THE LESSON
The major workload is undertaken by the teacher in management of the lesson. The teacher contacts the students before the lesson. He is open and concrete during the communication in order to create correct relations with the students the teacher must pay attention to his

communication tone and to be open to discussion. He is the organizer of the education process. He plans active learning opportunities and uses active tools, creates effective communication process. The level of the lesson depends on the teacher's qualification and skills. The teacher chooses the time and the place himself. They discuss the aim of the lesson in advance. The teacher gives instructions to determine the place where the students can get technology support. Both sides understand the responsibility during the process of the lesson. The teacher demonstrates his technical ability, explains the aim the structure of a lesson and usage of technical facilities. How and which theme will be thought are also indicated by the teacher. He selects educational material (the material must be complied very attentively).

7. CONCLUSION

Distant education problem is not enough researched topic. The major basic constructive component is the teacher's technical discipline ability in order to distinguish the main regularity which is under consideration of pedagogical phenomena, taking into consideration the problems and goals of professional activity by using psychological and pedagogical methods of teaching in educational activity of technical profile (Черкасова О., 2017). The organizer of all educational process is a teacher. He plans the lesson and students level depend on the teacher's skills. University teacher's goal is produce highly-skilled specialists of industry and different economy. Respectively, a foreign language is not only necessary tool for such specialist but also the most important component of cultural and humanistic activity (Пичкова Л. and Чертовских О., 2019). We think that computer is a great facility to learn English which allows to make some changes in traditional process of education. Given method of getting education is used with great popularity, the goal is to possess English when such factors as remote location of education centers and unstable schedule cannot become an obstacle to achieve necessary objectives. The rapid spread of distance education in the world not only offers students and teachers great opportunities, but also brings a lot of challenges. Learners are unsupervised, self-directed, independent and expected to be more autonomous. As a result, it can be noted that the choices of system education are depend on student's consciousness and opportunities.

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IMPROVING THE METHODOLOGY FOR ASSESSING THE ECONOMIC EFFICIENCY OF ECONOMIC ENTITIES DURING A PANDEMIC

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ABSTRACT

The main purpose of this publication is the research and study of the impact of the global coronavirus pandemic on the financial statements of companies since the beginning of 2020. Especially the probability of "continuity of operations" used in International Financial Reporting Standards, recognition of income, valuation of inventories, determination of fair value, impairment of goodwill, etc. such as issues are discussed and recommendations are made to reduce the risks. According to the article because of the ongoing uncertainty due to the pandemic, to maintain the quality of the financial statements the effects that are expected and likely to occur due to the application of skepticism should be detailed in the financial statements. The article conducted a regression analysis of gross profit using linear multiplicity and nonlinear multiplicative of econometric modeling methods to assess the relationship between the gross profit of the organization, cash flows, current assets, current liabilities, private capital and debt capital. As a result of the research, it was found that "Azersu" OJSC (The organization in charge of state policy and strategy in the field of water supply, drinking water supply and sanitation services to consumers in a centralized manner) has a negative linear relationship between cash flows, vehicle assets and total capital and total profit, as well as between current liabilities and total profit, a positive linear relationship. The article can play a positive role in enriching the scientific and practical knowledge of experts involved in accounting and auditing. To avoid the research limitations more practical information and reporting indicators is required. The need for econometric modeling, based on the regression equation of dependencies, the audit of the financial statements of the audited entity and its improvement.
Keywords: continuity of activity, econometric modeling, fair value measurement, financial statements, profit, regression analysis

1. INTRODUCTION

Restrictive measures taken in connection with the coronavirus pandemic have brought almost all sectors of the economy to a standstill around the world, including the Republic of Azerbaijan, which in turn has affected many activities, including financial reporting. The economic consequences of the crisis are already looking serious. Due to the simultaneous shortage of supply and demand, economic activity in key European, North American and Asian markets declined more than during the 2008-2009 global financial crisis. According to the OECD (The Organisation for Economic Co-operation and Development) forecast, subject to the development of events according to the baseline scenario, world GDP this year will decrease by 4.5%. The contraction of the economy is expected in all G20 countries, excluding China. In 2021, a recovery is projected at an estimated 5% volume. This means that global GDP at the end of 2021 will reach a level roughly corresponding to the end of 2019: a decline approximately equivalent to 7.5-8% of world GDP, which roughly corresponds to the combined

annual GDP of France and Germany. In a less favorable development of events, the size of losses in two years will approach 13% of world GDP, in a more favorable scenario, they may be limited to 4.8%. Such a prospect, for all its grimness, represents an improvement over the spring: the authorities managed to react and soften the initial blow. As the quarantine restrictions were lifted, many were able to resume economic activity. However, in many countries, it appears that stagnation is already beginning, and confidence in the future is far from growing, given the new outbreaks of the virus practically around the world. The economic impact on the Eastern Partnership countries is compounded by the recent drop in oil prices, as it directly affects Azerbaijan and Belarus, and also affects other EaP countries, especially Armenia and Georgia, as it affects trade and remittances. The fall in oil prices for the second time in five years has pushed Russia into recession: the EBRD predicts a 4.5% decline in real GDP this year (COVID-19 crisis response in Eastern Partner countries, 2020). In order to ensure the implementation of the Order of the President of the Republic of Azerbaijan No. 2300 dated September 5, 2016, which approved by the Resolution No. 257 by the Cabinet of Ministers of the Republic of Azerbaijan dated June 4, 2019 "Assessment of the effectiveness of the activities of legal entities in which the control package of shares (stocks) belongs to the state" evaluation of the results of the activities of these enterprises is carried out periodically by calculating the efficiency indicators and efficiency indicators are based on the ratios obtained from the financial statements. The aggregate efficiency coefficient is calculated on the basis of the forecast efficiency indicators submitted to the regulatory authorities before November 1 of the year preceding the reporting year, after the ending of the reporting year, the actual ratio and the forecast ratio are compared and the satisfaction of the enterprise is determined depending on the scale of the deviation. As can be seen, in Azerbaijan, as in the rest of the world the coronavirus pandemic by affecting the financial statements of enterprises and causing sharp changes in efficiency indicators has created certain risks in assessing the performance of enterprises.

2. IMPACT OF THE CORONAVIRUS PANDEMIC ON FINANCIAL STATEMENTS

Although China first time had informed the World Health Organization about the presence of an unusual coronavirus on December 31, 2019, the world's population had begun to receive more detailed information about the symptoms and risks of the virus in 2020. In Azerbaijan, restrictive measures against the pandemic had begun to apply in early March. From an accounting point of view, the main impact of the virus began to be felt in most parts of the world in January-March 2020, so it did not create an "adjustment" effect for the 2019 financial statements. This effect should be fully reflected in the financial statements for the period ending 31 December 2020 (Abdulshakour, Saddeq, 2020). To understand the effects of the coronavirus pandemic requires grouping the effects into first, second, and third degree. Also, the assessment of these effects is a very complex process and because of that a comprehensive approach is needed. Direct economic effects reflected in the financial statements of enterprises are primary effects. Uncertainties regarding the valuation of assets and liabilities may be classified as secondary effects. Tertiary impacts are related to the probability of "continuity of activity" in International Financial Reporting Standards and audit issues (Pulejo, Massimo, and Pablo Querubín, 2020). Because of the large fluctuations in market prices all three of accounting, financial reporting and auditing activities is widely affected and because of the widely scale of the impacts and given the need to make greater use of accounting probabilities, enterprises should first be interested in preparing interim financial statements-IAS 34 Interim Financial Reports (Guidelines of the International Accounting Standards Board, 2021). Economic conditions force businesses to defer non-essential secondary costs, also enterprises pay salaries to employees when they do not receive income, and apply various benefits to customers and borrowers.

From this point of view, when preparing financial statements, there is a need for complex calculations, and in this case, the issue of quality of financial statements comes to the fore. In this regard, after the end of the reporting period, accountants may be required to provide an opinion on whether the events that occurred are "corrected" or "uncorrected". The interpretation of accounting standards for revenue recognition is of particular importance in the context of declining revenues in a pandemic. In this regard, the signed contracts should be re-evaluated against the background of price discounts, refunds, etc (Bettner, Mark S. , 2018). Before the recognition of income it is important that the terms of the contract are fully understood in accordance with IFRS 15. Recognition of loss created by impairment of assets because of assets prices fall sharply in financial markets should be more closely monitored. Temporary closures of production facilities due to the coronavirus, restrictions on travel, import and export operations can be considered as a sign of impairment of assets, because it is not possible to restore the value of these assets through their use and sale. In other words, the company is considering decreasing incomes, breakage of supply chains, and so on. must regularly test assets against impairment. Another sensitive point in financial reporting is the impairment of goodwill. If the amount of goodwill reflected in the statement of financial position of enterprises operating in areas most affected by the pandemic is large, the impairment loss of goodwill will have a greater impact on the profitability of the enterprise. At the same time, direct government subsidies to mitigate the effects of the pandemic, such measures as tax cuts, soft loans, etc. one of the points of interest is the study of the impact on the financial statements (Shodiev, Dr. Tursun, 2020). Measuring fair value is also one of the most affected activities due to uncertainty and price fluctuations in the markets. Statements about the impact of the pandemic in measuring fair value must be reflected in the financial statements. In particular, the measurement of the fair value of financial instruments and investment property is of particular importance. When measuring the fair value of these assets, changes in market participants' expectations about future cash flows from assets or liabilities caused by the coronavirus pandemic should be investigated in detail. The profit and loss statements of the enterprises such as energy, heavy engineering, automobile production, etc. operating in capital-intensive areas will be more affected because of removal of material and goods and uncertainty regarding income recognition. One of the activities where the significant negative impact of the coronavirus pandemic will be felt is valuation of inventory. Compulsory closure of some areas, a sharp decline in demand, a decrease in the net realizable value due to non-performance of sales contracts should be taken into account in the assessment of inventories. If it is not possible to calculate the balance of the warehouse, the subjective approaches of accountants will be of particular importance. "The Expected Credit Loss" model is usually used to create provisions for bad debts. This model predicts expectations based on the company's historical data so due to the coronavirus pandemic, this model will lose its relevance and a new model will need to be built. Delayed taxation is one of the issues affected by the coronavirus pandemic. This includes the recognition of deferred tax assets and liabilities, the method of reversal and the interim reporting tax rate. If an entity has made a profit in previous years, it is possible to recognize a deferred tax asset without dispute. In other entities, a deferred tax asset should only be recognized when there is strong evidence that it will be taxable in the future. So, it will not be possible to recognize a deferred tax asset in an environment of uncertainty about future profitability (Fathutdinov R. A., 2014). On the other hand, the Effective Tax Rate must be applied as required by International Accounting Standards (IAS) 34. Intensification of government programs aimed at mitigating the effects of the pandemic will increase uncertainty about the composition of taxable income in this regard (Seago, W. Eugene, 2018). One of the problems caused by the coronavirus pandemic is the probability of business continuity. To clarify this probability, auditors will need more documentation and evidence during the pandemic.

According to the instructions of the International Accounting Standards Council, the management of the enterprise is responsible for assessing the probability of continuity of activities. To this end, the probability of continuity in the sectors most affected by the pandemic (travel, media, hotels, etc.) should be reconsidered (Sage, Andrew P., and William B. Rouse , 2011). Another issue related to the continuity of operations is related to cash flows. In other words, the answer to the question of whether the amount of money received can last for 12 months is one of the most important points (Acikgoz, O., & Gunay, A., 2020). In this regard, the risk analysis of the probability of business continuity should be reflected in the notes.

3. ECONOMETRIC MODELING OF DEPENDENCIES BETWEEN INDICATORS OF ECONOMIC ENTITIES

As it is known, the main purpose of the audit is to provide a comprehensive assessment of economic and financial performance. In this regard, the use of economic analysis in auditing is a necessity. However, the proper use of economic analysis in auditing is associated with a number of problems. Thus, the analysis of individual factors does not allow to overload the audit materials used in the audit and to draw appropriate conclusions (Hay, David, 2020). From this point of view, economic analysis should be used only in a limited form, in the form of mutual and logical interrelation of factors (Elena V. Sibirskaya, Lyudmila V. Oveshnikova, Lilia A. Mikheykina, Innara R. Lyapina, 2018). Between Azersu OJSC's gross profit (GP), its cash (X1-C), current assets (X2-CA), current liabilities (X3-CL), equity (X4-E) and debt capital (X5-DC) To assess the dependence (using the data of the financial statements from 01.01.2016 to 01.01.2021 (azersu.az.static , 2020). set the specification of the linear multi-regression type econometric model:

$$Y = b\_0 + b\_1\,C + b\_2\,CA + b\_3\,CL + b\_4\,E + b\_5\,DC \qquad (1)$$

Let's clarify the question: to what extent are the quantitative characteristics of the direct relationship of Xi (i = 1.5) regressors with the dependent variable Y (GP) reliable? As a result of econometric analysis conducted on the basis of EViews software package, the following empirical values of $Y = b\_0 + b\_1$ x double regression equations were obtained.

- $Y \rightarrow X_1$ (GP→C)

$$GP = 83{,}72 - 10{,}78C$$
$$P(0{,}00)(0{,}00) R^2 = 0{,}65; E = 0{,}91$$

- $Y \rightarrow X_2$ (GP→CA)

$$GP = 149{,}87 - 1{,}64CA$$
$$P(0{,}00)(0{,}00) R^2 = 0{,}67; E = 2{,}42$$

- $Y \rightarrow X_3$ (GP→CL)

$$GP = -14{,}39 + 0{,}11CL$$
$$P(0{,}10)(0{,}00) R^2 = 0{,}74; E = 13{,}58$$

- $Y \rightarrow X_4$ (GP→E)

$$GP = 18{,}91 + 0{,}13E$$
$$P(0{,}00)(0{,}00) R^2 = 0{,}76; E = 0{,}57$$

- $Y \rightarrow X_5$ (GP→DC)

$$GP = -16{,}16 + 0{,}09DC$$
$$P(0{,}00)(0{,}00) R^2 = 0{,}94; E = 1{,}43$$

So we get according to the pair of regression equations we get:

- In Azersu OJSC, there is a fairly close regression relationship between cash and gross profit, and the established regression equation explains the distribution of the value of gross profit by 65% ($R^2 = 0.65$). The equation shows that as a result of an increase of 1 unit of regressor X1, the total profit in the OJSC decreases by 10.78 units (the value of the coefficient b1 is negative). The value of the elasticity coefficient E = 0.91 indicates that the gross profit decreases by 0.91% as a result of a 1% increase in cash.

- Azersu OJSC has a fairly close regression relationship between the amount of current assets and gross profit. The established regression equation explains 67% of the distribution of the value of the total profit of the OJSC ($R^2 = 0.67$). According to this correlation equation, an increase of 1 unit of current assets in the company leads to a decrease of 1.04 units of gross profit. As a result of a 1% increase in current assets according to the elasticity coefficient E = 2.42, the total profit of Azersu OJSC decreases by 2.42%.

- In Azersu OJSC, there is a close regression relationship between current liabilities and gross profit, and the established regression equation explains the distribution of the value of GDP by 74% ($R^2 = 0.74$). According to this correlation equation, a 1 unit increase in current liabilities in the company leads to a 0.11 unit increase in gross profit (the value of the coefficient b1 is positive). According to the established regression equation, a 1% increase in current liabilities in society increases GDP by 13.6%.

- In Azersu OJSC, there is a fairly close regression relationship between private capital and gross profit, and the established regression equation explains the distribution of GDP by 75% ($R^2 = 0.76$). The equation shows that as a result of an increase of 1 unit of private capital, the total profit of the OJSC increases by 0.13 units. The value of the elasticity coefficient E = 0.57 shows that the gross profit increases by 0.57% as a result of a 1% increase in private capital in society.

- Azersu OJSC has a very strong regression between debt capital and gross profit (the value of the coefficient of determination ($R^2 = 0.97$) is very close to the unit. The value of the correlation coefficient is r = 0.97). According to the established double regression model, as a result of a 1 increase in debt capital, the company's total profit increases by 0.09 points, and a 1% increase in this regressor results in a 1.43% increase in GDP.

Now let's give a regression analysis of the total dependence of the total profit Y (GDP) on all explanatory variables (X_1, X_2, X_3, X_4 and X_5), which we chose as the variable explained in Azersu OJSC. The statistics of the econometric analysis are shown in the following table:

Table following on the next page

Dependent Variable: UMT
Method: Least Squares
Date: 04.05.2021 Time: 20:50
Sample: 1998 2021
Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.914659	115.3903	-0.016593	0.9870
Cash	-4.342606	0.207565	-20.92170	0.0000
CA	0.128184	1.390293	0.092199	0.9278
CL	-0.037006	0.118086	-0.313386	0.7583
E	-0.035807	0.006747	-5.307269	0.0001
DC	0.114840	0.125998	0.911439	0.3765

R-squared	0.998246	Mean dependent var	44.06667
Adjusted R-squared	0.997662	S.D. dependent var	20.17261
S.E. of regression	0.975462	Akaike info criterion	3.023146
Sum squared resid	14.27290	Schwarz criterion	3.321581
Log likelihood	-25.74303	Hannan-Quinn criter.	3.087914
F-statistic	1707.658	Durbin-Watson stat	0.487504
Prob(F-statistic)	0.000000		

Table 1: Regression analysis statistics
(Source: Prepared by the author on the basis of the website https://azersu.az/az/static)

Thus, the multivariate regression model of dependence is as follows:

$$GP = -1{,}91-4{,}34C + 0{,}13CA-0{,}04CL-0{,}04E + 0{,}11DC$$

P (0.98) (0.00) (0.92) (0.76) (0.00) (0.38) $R^2 = 0.998$ (2)

Analysis of the statistical characteristics of the regression model (2) shows that despite the high value of the determination coefficient, the coefficients b_0, b_2, b_3 and b_5 are statistically insignificant in this model, and model (1) cannot be considered a generally satisfactory and highly adequate model. On the other hand, according to the statistics of the model, the value of Darbin-Watson statistics is DW = 0.49, so the model also has a positive autocorrelation. In model (2), let's move away from the study of any of the regressors whose coefficient is considered statistically insignificant - for example, the explanatory variable X_5(DC). The statistics of the econometric analysis conducted for this option are shown in the table below.

Table following on the next page

Dependent Variable: UMT
Method: Least Squares
Date: 04.05.2021 Time: 20:59
Sample: 1998 2021
Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	103.2276	2.689186	38.38621	0.0000
Cash	-4.316703	0.204519	-21.10659	0.0000
CA	-1.138591	0.034439	-33.06138	0.0000
CL	0.070576	0.003420	20.63578	0.0000
E	-0.031233	0.004485	-6.964423	0.0000

R-squared	0.998149	Mean dependent var	44.06667
Adjusted R-squared	0.997686	S.D. dependent var	20.17261
S.E. of regression	0.970289	Akaike info criterion	2.981810
Sum squared resid	15.06336	Schwarz criterion	3.230506
Log likelihood	-26.30901	Hannan-Quinn criter.	3.035784
F-statistic	2157.187	Durbin-Watson stat	0.377916
Prob(F-statistic)	0.000000		

Table 2: Regression analysis statistics for the new composition of regressors
(Source: Prepared by the author on the basis of the website https://azersu.az/az/static)

Based on these statistics, the following multi-variable regression model is obtained for the correlation dependence between the indicators studied in Azersu OJSC.

$$GP = 103.23-4.31C-1.14CA + 0.07CL-0.03E$$

$$P\ (0.00)\ (0.00)\ (0.00)\ (0.00)\ (0.00)\ R^2 = 0.998\ (3)$$

Elimination of positive autocorrelation in econometric analysis can be obtained by logarithmicization of all indicators of the model (3):

Table following on the next page

Dependent Variable: LOG(UMT)
Method: Least Squares
Date04.05.2021 Time: 21:57
Sample: 1998 2021
Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.476266	0.758307	4.584245	0.0003
LOG(PV)	-0.436259	0.059399	-7.344581	0.0000
LOG(CA)	-1.298170	0.132546	-9.794083	0.0000
LOG(CÖ)	1.094821	0.094105	11.63401	0.0000
LOG(XK)	-0.136450	0.030051	-4.540551	0.0003

R-squared	0.984056	Mean dependent var	3.659231
Adjusted R-squared	0.980070	S.D. dependent var	0.547924
S.E. of regression	0.077353	Akaike info criterion	-2.076628
Sum squared resid	0.095735	Schwarz criterion	-1.827932
Log likelihood	26.80459	Hannan-Quinn criter.	-2.022654
F-statistic	246.8765	Durbin-Watson stat	1.286463
Prob(F-statistic)	0.000000		

Table 3: Regression analysis statistics based on complete logarithmization
(Source: Prepared by the author on the basis of the website https://azersu.az/az/static)

Then the following equation is obtained as a model of nonlinear regression of dependence:

$$Ln\,(GP) = 3.47-0.44Ln(C) -1.30Ln(CA) + 1.09Ln(CL) -0.13Ln(E)$$

$$P\,(0.00)\,(0.00)\,(0.00)\,(0.00)\,(0.00)\ R^2= 0.984\ (4)$$

To test the multicoloniality between the explanatory regressors included in model (4), compile the VIF matrix:

Variance Inflation Factors
Date: 04.05.2021 Time: 21:57
Sample: 1998 2021
Included observations: 21

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.575030	2018.178	NA
LOG(PV)	0.003528	20.48335	1.863545
LOG(CA)	0.017569	1065.204	1.694423
LOG(CÖ)	0.008856	1193.214	3.641594
LOG(XK)	0.000903	78.46789	3.447880

Table 4: VIF matrix
(Source: Prepared by the author on the basis of the website https://azersu.az/az/static)

As can be seen, the VIF <5 condition is met for all indicators, ie there is no millikolleniarity among the explanators of the model.

One of the conditions of the Gauss-Markov theorem is that the mathematical expectation of the residuals of the econometric model is zero. Otherwise, the normal distribution of residues is disturbed, either due to specification error or instability of variances. Let's use the Jarque-Bera test to determine whether the remains of model (4) are subject to normal distribution.
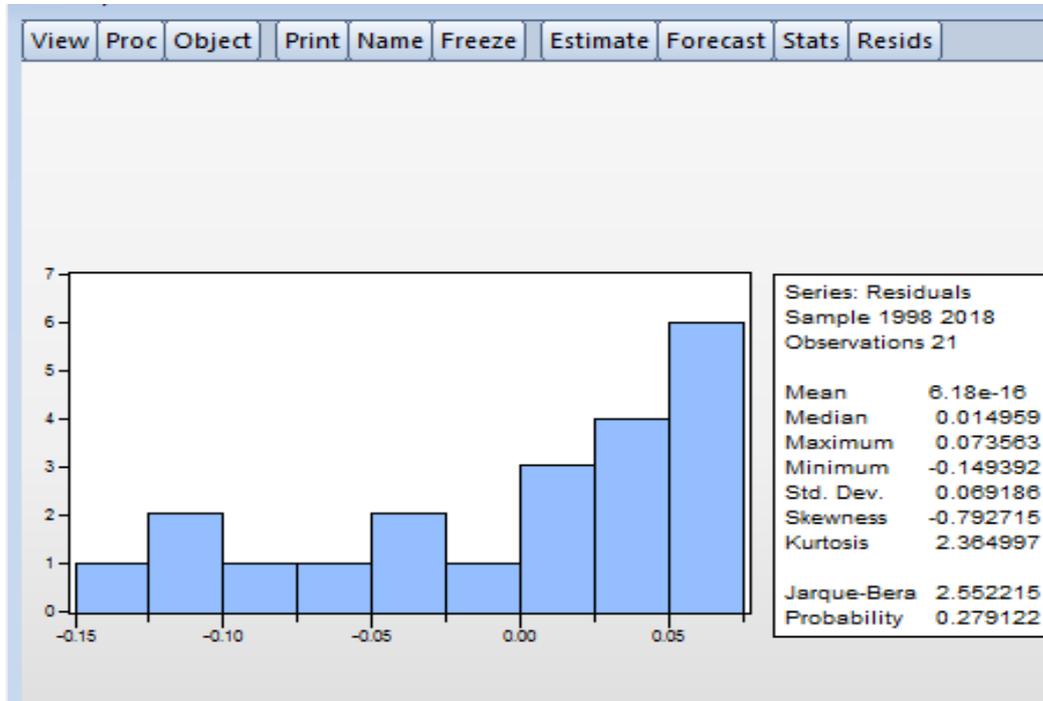
Figure 1: Jarque-Bera test
(Source: Prepared by the author on the basis of the website https://azersu.az/az/static)

4. RESULT

The P-statistic of the Jarque-Bera test is 0.28. Since this value is insignificant at the reliability level $\alpha = 0.05$, the remainder of the model is subject to normal distribution. Thus, the econometric model (3.18) is qualitative in all its statistical characteristics and adequately reflects the dependences on the economic object under study. According to this model, Azersu OJSC has a negative linear relationship between cash (PV), current assets (CA) and gross return on equity, and a positive linear relationship between current liabilities and gross profit. As for the quantitative characteristics of dependencies, there is a positive linear dependence. As for the quantitative characteristics of dependencies, a single increase in cash in the OJSC reduces gross profit by 0.44%, a single increase in current assets reduces gross profit by 1.30%, a single increase in equity reduces gross profit by 0.13%. A single increase in liabilities increases gross profit by 1.09%. Undoubtedly, the impact and scale of the global coronavirus pandemic on the world economy is enormous. In this regard, financial markets face a variety of risks. The financial effects of a pandemic on financial statements are significant and must be reflected in the financial statements in detail and in a timely manner in order to gain or lose the confidence of the parties involved (Drobotova O.O. , 2018). In order to ensure the implementation of the Order of the President of the Republic of Azerbaijan No. 2300 dated September 5, 2016, approved by the Resolution No. 257 of the Cabinet of Ministers of the Republic of Azerbaijan dated June 4, 2019 "Assessment of the effectiveness of the activities of legal entities in which the control package of shares (stocks) belongs to the state" risks associated with the application of the rule show the importance of studying the impact of the pandemic on financial statements in Azerbaijan.

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MAIN ASPECTS OF FINANCING THE ECONOMIC DEVELOPMENT OF THE REGIONS OF THE REPUBLIC OF AZERBAIJAN

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ABSTRACT
The article outlines the essence of the state's regional policy and determines its main directions. Specifically, the criteria for determining the backward regions, which are of crucial importance in the formation of the regional policy of the state, have been substantiated. The article also substantiates the directions of financing the social and economic development of the regions. These justifications cover energy, transport and social development issues. The article outlines the factors that necessitate the state support to the development of the rural areas. The density of the population was noted as the main factor supporting the development of rural areas. Thus, in rural areas, due to low population density, both production and sales of products require large expenditures in comparison with urban areas.
Keywords: *Regional policy, spatial inequalities, financing rural development, state programs*

1. INTRODUCTION

Provision of regional development at the present stage of Azerbaijan's economic development is one of the most important priorities. Development of all regions of the country leads to overall development and increase of living standards of the population. Regional development policy is aimed at ensuring economic growth and sustainability of economic development. Based on the detection and elimination of structural problems in the country, state policy focuses on forming the necessary conditions for the development of regions and raising their competitiveness. The state's regional development policy, direct and indirect coordination of long-term economic decisions in order to address the challenges posed by regional development, in some cases, income, consumption, employment, investment and so on in regions can be seen as the conscious attempts of the state directed to control over the parameters. This policy is, first of all, related to the amount of public spending on the objectives of eliminating the differences between the regions on the development of regions and the level of socio-economic development. Thus, reaching any of the goals depends on decisions about the distribution of limited economic resources. This applies directly to one of the functions of finance. Second, regional development policy covers the impact of economic agents' decisions on the location of production and investment activities. So, the activity of any subject is related to the location. From this viewpoint, the state will have the opportunity to influence the selection of such a space. By Influencing the formation of income of farmers, the state affects their decisions regarding the location of production.

2. METHOD

The method of the research is based on a technical-economic analysis of the statistical data on local and regional progress and material well-being in Azerbaijan. The article uses an application-oriented approach to define areas of financing for regions.

3. SOCIO-ECONOMIC DEVELOPMENT OF REGIONS IN AZERBAIJAN

Space is an integral part of economic, social, ecological, political and cultural attitudes and processes, and their geographies define the conditions and forms of societal methods of how these processes can be developed (Markusen A. (1987) Regions: The Economics and Politics of Territory, Rowman and Allenheld, Totowa, NJ.). The unevenness or differentiation of the economic space has a significant impact on the state structure, the structure and efficiency of the economy, the intuitional changes and the tactics of socio-economic policy (p.41) (Regional development: the experience of Russia and the European Union. / A.G. Granberg, Moscow: ZAO "Izd-vo" Economics ", 2000, 435p.). Local and regional progress and material well-being depend on the continued growth of employment, income and productivity, which is an integral part of economic development (STORPER M. (1997) The Regional World. Territorial Development in a Global Economy. Guilford, London.). From this point of view, the concept of "regional development" is related to the change in the number of population, employment, income and value-added regional productivity. It also means social development, which includes the health and well-being of the community, the quality and creativity of the environment (Theories of Local Economic Development: Perspectives from Across the Disciplines/Edited by Richard D. Bingham and Robert Meir. London: Sage Publications, pp. 319. C.27). In our view, the socio-economic development of the country is related to the socio-economic development of the regions and the elimination of differences between them. Regional development depends on geographical and demographic factors, specialization and productivity, physical and human capital, infrastructure and innovation. As the factors on the regions differ, their developmental levels also differ. This situation is widespread even in developed countries. For example, in Belgium the gross domestic product (GDP) per capita in the capital is 2 times more than in the province of Flanders, 2.8 times than in the province of Wallonia, and in the Netherlands this indicator in Antwerp is 1.8 times higher than the province of Eno (Regional policy of the EU countries. IMEMO RAS, Moscow: 2009, 230 p. from. 14.). Studies carried out in 1995-2007 by member states of the Organization for Economic Cooperation and Development (OECD) have shown that 32 percent of economic growth has been achieved by about 4 percent of the regions. The emergence of such a situation affects the geographical position of certain regions, their natural vulnerability levels, climates, and the quality of land, but in many cases market forces deepen regional inequality. The main purpose of the regional economic (or socio-economic) policy is to express the compromise between economic efficiency and social justice, although it is expressed in different ways in different countries (A.G.Granberg. Bases of regional economy. Moscow: State University Higher School of Economics, 2003, 495 pp., P. 350). For example, in most OIC member countries, regional equilibrium (justice) and efficiency (growth and competitiveness) are based on regional policies. Examples of regional balances include the priority of the development of the backward regions in Denmark, the regional balance in Finland, the territorial integrity of France, and the equal living conditions in Norway (pp. 14) (Regional DevelopmentPolicies in OECD Countries. Paris:OECD Publishing, 2010, 388 p.). The scale of the development of the regions has a significant impact. It is assumed that the rural area has a higher position in the distribution of economic resources than cities. In such a situation, the development of infrastructure for improving the competitiveness of vulnerable regions can be ensured by the allocation of economic resources to the benefit of vulnerable regions due to the state's funding.

Thus, the region's competitiveness has a significant impact on the speed and value of material, financial and information flows in that region.

4. RESULTS, CONCLUSIONS AND RECOMMENDATIONS

According to the socio-economic development of the forces, the role of the market in reducing regional inequalities is limited and this usually causes concentration of production in separate regions. Therefore, the state implements the redistribution of economic resources in favor of the regions with low development levels to reduce disproportions in the territorial structure of the national economy. In such circumstances, it is necessary to determine the criteria for the implementation of the resource allocation. For example, in the European Union, these criteria are the gross domestic product per capita, the unemployment rate and the rate of job creation, rural and agrarian regions (9. A. Cappelen, F. Castellacci, J. Fagerberg, B. Verspagen. The Impact of Regional Support on Growth and Convergence in the European Union. Eindhoven Centre for Innovation Studies, The Netherlands Working Paper 02.14, September 2002, 27 pp, p. 7.). Thus, in the European Union, if the per capita Gross Domestic Product in the region is 75% of the average, this region is considered to be the backward. Also, the gross domestic product per capita and the share of agriculture in employment is one of the factors that are considered in determining the state support to the regions. From this point of view, it is possible to identify the regions in Azerbaijan that need to be supported. Although the gross domestic product is not calculated in the regions, the gross output per capita on key areas in the regions in 2012 varied from 5.1 per cent to 39.1 per cent of the country's average (Except for the Nakhchivan economic region, this figure is 95.8 percent in this region). As you can see from this criterion, all regions (except for the city of Baku only) are included in the category of regions that must be supported. Also, in 2012, 37.7 percent of the employed population accounted for agriculture, forestry and fishing, which is mainly covering the regions. In this regard, supporting the development of agriculture in the regions, as well as the development of non-agrarian spheres should be prioritized. At present, the Azerbaijani government has the necessary capacities to finance the development of the regions. Successful implementation of oil strategy has increased the volume of revenues in the country. An important part of these revenues remains at the disposal of the state. So in 2011, 50.1 percent of the remaining revenues in the country were aimed at saving and only 42.4 per cent of these resources were directed towards implementing investments across the country. Also, 62.0 percent of total savings in the country in 2011 were at the disposal of the state, of which only 44.3 percent were used. Over the recent years, the state's overfulfilment of the consolidated budget revenues has led to an increase in the assets of the State Oil Fund of Azerbaijan. Thus, the resources of this fund will be $ 34.1 billion USD by the end of 2012, which is approximately half of the gross domestic product. Limitations of financial opportunities in the regions of Azerbaijan and poor development of institutional structures significantly increases the role of the state in regional development. Despite the implementation of two regional development programs in the country over the past 10 years: State Program on Socio-Economic Development of the Republic of Azerbaijan (2004-2008) and State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan in 2009-2013, the difference between Baku and other regions has not diminished significantly. Taking this into account, the Government of Azerbaijan has adopted the State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan for 2014-2018. In our view, the precise definition of regional development programs is crucial in terms of the effectiveness of the limited economic resources distribution. These goals are different in different countries. For example, the goal of a regional policy in the UK is to achieve a high and stable level of economic growth and employment across the country by providing full use of the existing potential of each region. In Poland, regional policies are aimed at supporting economic growth pole (large cities), in addition to stimulating the development

of the backward regions, especially southern regions. In general, in the European Union, regional programs covering 2007-2013 include goals such as mergers, competitiveness, employment and foreign co-operation (Governing Regional Development Policy: The use of performance indicators. Paris: OECD Publishing, 2007, 198 p, p.34.). From this point of view, it is important to identify the objectives of regional development programs. The main objective of the "State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan for 2014-2018" is the continuation of measures to develop non-oil sector, diversification of the economy, rapid development of regions, especially infrastructure and social services as well as further improvements. In our opinion, the main goal here is to accelerate the rapid development of the regions (including the development of the non-oil sector and the diversification of the economy). Nevertheless, the mentioned program would provide a high tempo of economic growth by identifying development poles in the country and directing resources to the development of these poles. To achieve the goal set out in the "State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan for 2014-2018", it is intended to achieve further improvement of the provision of infrastructure in the regions, including the provision of communal services to the population, accelerating the development of entrepreneurship in the direction of export-oriented and competitive products, increasing the employment rate of the population, especially the rural population, and the continuation of measures to reduce the poverty level. One of the most important tasks facing the government is to increase employment in the regions. Thus, by the end of 2012, the population in the country increased by 33.2 per cent compared to 1989 and 17.6 per cent in comparison to 1999, while the number of able-bodied population increased by 66.5 per cent and 43.4 per cent respectively. As a result, the share of those who are able to work in the total number of the population increased from 55.4 percent in 1989 to 56.8 percent in 1999, and to 69.2 percent in 2012. It should be noted that this figure reached its peak, 69.3 percent in 2011. As you can see, at present, the country has entered into the most aggressive period in terms of employment. In 2012, the share of Baku in the country's population was 23.0 percent, while its share in hired workers was 44.7 percent. Also, the latter figure increased by 1.8 percent compared to 2000. In 2012, the share of hired workers in the total number of the population was 30.7 percent in Baku, whereas in economically distant regions this figure was 11.4 percent. In particular, the rate of natural increase in rural areas in the country being relatively high, increases the importance of rural development and employment promotion. For this purpose, the following measures are envisaged in the field of employment in the State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan for 2014-2018:

- expansion of regional economic relations;
- Formation and development of a fair competition environment, ensuring compliance with labor legislation;
- directing a portion of revenues from oil exports to human capital development and applying advanced technology and innovations to the development of science-intensive industries;
- Creating a balance between the proposed workforce and the number of jobs available;
- Reduction of population migration through further development of social and communal infrastructure in rural areas;
- Increasing the level of employment of women and youth.

In general, the creation of new jobs in the country is one of the key factors that determine the economic policy of the state and it will depend on the measures taken to improve the competitiveness of the regions. One of the main directions of raising competitiveness of the regions is related to the development of infrastructure. One of the important areas in the development of the regions is the development of transport. Investments in transport infrastructure increase the region's internal and regional ties with other regions.

This leads to the improvement of conditions for production, tourism and commerce, as well as the increase in competition and concentration across the country by reducing the time of transportation as well as the quality and price ratio of transportation services. The development of transport infrastructure in the country is also a necessary condition for the specialization of regions. It should be noted that the development of transport infrastructure has a direct, indirect, and derivative influence on the development of employment in the regions. Direct and indirect impacts are related to the creation and operation of transport infrastructure, whereas indirect impacts result from the impact of transport infrastructure on the region's competitiveness. As a result of the development of transport infrastructure, the time and cost savings, increased access to transport services, and reliability increase productivity in production. For example, the increase in the quality of motor roads can increase the vehicle lifetime and reduce its current operating costs. Also, increasing access to markets leads to increased productivity by creating new opportunities for business and raising competition. Thus, the development of transport infrastructure has a significant impact on employment and economic growth by increasing labor productivity. The energy supply is crucial in the formation of competitiveness of the regions. Expansion of the electricity grid causes a reduction in system costs associated with investment projects in the regions. Over the past 2004-2013, 17 power plants with a total capacity of 2000 megawatt have been built in the regions, more than 10,000 kilometers of power lines and more than 1,500 substations have been constructed or reconstructed. During the mentioned period, 40,000 kilometers of gas lines were constructed or repaired in the field of natural gas supply, and the level of gas supply in residential houses reached 83.4 percent from 34 percent. At the same time, economic growth in the regions may require additional energy resources. One of the key priorities in the development of the regions is the financing of housing and communal services. So, in most regions of Azerbaijan, in housing and utilities sector, the current level is significantly below the established norms. For example, in 2012 the average per capita housing area in Azerbaijan was 13.1 m2, whereas in Sweden this indicator was 52 m2, in the UK 34.5 m2 and in the US 96 m2. Also, the proportion of housing commissioned in the country in 2012 was about 1.9 times less than in 1990. Also, if we accept the amortization period of a residential building for 50 years, then we come to a conclusion that the depreciable part of the country's housing stock is more than 2141.2 thousand square meters of housing put into use in 2012. As it is evident, increasing the housing construction is needed to improve the living conditions of the population in the country. Also, according to a survey conducted by the State Statistical Committee in 2010, an average household in the country consumed 2966.7 kWh of electricity in 2009. This figure was less by 907.6 kWh in Nagorno-Shirvan economic region, 772.4 kWh in Guba-Khachmaz economic region, 1040.8 kWh in Sheki-Zagatala economic region, 505.8 kWh in Ganja-Gazakh economic region, 412 kWh in Nakhchivan economic region and 756.8 kWh in Lankaran economic region. In the mentioned year, the average gas consumption per household was 2143.0 cubic meters, which was less by 619.9 cubic meters in the Nakhchivan economic region, 68.0 cubic meters in the Ganja-Kazakh economic region and 426.7 cubic meters in the Lankaran economic region m, and 345.2 cubic m in the Aran economic region. In 2012, 54.8 percent of households lived in urban areas, 45.2 percent in rural areas, while households with central heating systems account for 12.8 percent, households with network gas - 75.2 percent, the water pipe share of households was 78.8%. Also, one of the priorities is the implementation of measures to improve the population's housing coverage in conditions of population growth. In this area, the continuation of reforms in the housing and communal sector in the regions, supporting the development of the real estate market, provision of low-income citizens in need of housing in the regions, including young families, reconstruction and improvement of the water supply and sewerage system measures are planned to be implemented in 2014-2018. For example, within the project "Reconstruction of water supply and sewerage system of Lankaran city", it is planned to build ultrasonic cleaning plant based on a new

technology with the output of 30,000 cubic meters per day. The project envisages construction of 15,000 cubic meters of water reservoir, pumping station, 200 km of various diameter distribution network, 180 km long sewerage network and 8 sewage pumping stations. In recent years, large-scale investments have been made in education in the regions, but this sector still remains a priority. In particular, the coverage of regions with pre-school institutions is low. For instance, in the Lankaran economic region, the level of provision for kindergartens is 15 per cent, in Nagorno-Shirvan economic region - 8.2 per cent and it is 23 per cent in Sheki-Zagatala economic region. Also, the calculations show that the number of seats in the regions is smaller than the numbers specified in the standard (AzDTN 2.6-1). From this point of view financing of construction of cultural facilities is one of the priority areas. It should be noted that, in addition to investment costs in the aforementioned areas, a substantial part of maintenance costs should be provided through the state budget. From this viewpoint, it is required to link the revenues of state budget with increasing costs. In 2012, 60.9 percent of the population in the economic regions of Azerbaijan (excluding Baku) was made up of rural population. In this regard, the social well-being of a significant part of the population depends on the development of rural areas. As already mentioned, geographically, economic growth is mainly based on scalability and concentration in certain regions and cities. That is, the regions that can not mobilize enough opportunities to obtain employment and income are left behind. From this point of view, rural areas have a number of shortcomings. Thus, rural areas do not have a density which has a positive impact on the growth of the economy in a certain space. For example, according to the definition of the Organization for Economic Co-operation and Development (OECD), if less than 150 people fall per square meter, then such communities are considered as rural communities. If the share of the rural population exceeds 50 per cent in the region, then such region is mostly considered rural, if this share is less than 15 per cent then it is considered an urban region, and finally if it is between 15 and 50 percent, then such region is considered to be a middle-sized region...(OECD Rural Policy Reviews: Germany. Paris: OECD Publishing, 2007, 200 p, p.31.) In general, the American economist J.Makal has included the following factors limiting the development of rural areas (Magill, John (2003), "Rural Economic Development" in Sammis B. White, Richard D. Bingham and Edward W. Hill (eds.), Financing Economic Development in the 21st Century, M.E. Sharpe, Inc., New York, pp. 266-276.):

- Great distance to markets;
- Individual meetings of people living in rural areas (these meetings differ in comparison with towns);
- Limited access to capital (low competition among the rural lenders causes the capital price to be high);
- Limited scalability capabilities;
- Limited network of entrepreneurs;
- Deficiencies in information and business services;
- Restrictions on the relationships of rural economies with the rest of the economy;
- Lack of qualified personnel.

The above mentioned bring the state promotion of rural development to the fore. Also, agriculture is a key element of rural livelihood and is closely linked to other economic, environmental and social development forces in these regions. From this point of view, the development of agriculture affects the well-being of the rural population. In 2012, 37.7 percent of the employed population accounted for agricultural, fishing and forestry, whereas those employed were 38.4 percent of those living in rural areas. Also, about 59.1 percent of the working-age population living in rural areas operated in this area. In 2012, the economically active population in the country was 50.4 percent of the total population. Given these figures, estimates show that around 76 percent of the economically active population in rural areas are

involved in agriculture, fishing and forestry. It should be noted that in the countries included in the Organization for Economic Cooperation and Development, only 10% of existing labor resources in rural areas are engaged in agriculture and forestry, and their support is needed (The New Rural Paradigm: Policies and Governance. Paris: OECD Publishing, 2006,168 p, p.13.). At the same time, income per capita in agriculture is typically lower than in other sectors of the economy. So in 2012, an average of about 135 AZN added value was created per month for a person engaged in agriculture, fishing, and forestry, then we come to the conclusion that in rural areas income from employment is relatively small. From this point of view, the state is required to support rural areas as well as agriculture. The measures to support the development of the agricultural sector are multilateral. Thus, the development of the agricultural sector affects food security, raw material supply, and ecological status. Thus, in 2012, 55.1% of the country's land was used for agricultural purposes, and 29.9% of these land areas were irrigated lands. From this point of view, agriculture has the potential to reduce land quality and to seriously affect water pollution. In such circumstances, policies for agricultural development should include environmental protection and biodiversity conservation. Also, since rural areas are at a distance from major markets, due to the low concentration in these places, infrastructure density and development levels are low, thus causing additional costs comparing to urban areas. Therefore, it is necessary to provide a state support to the development of rural areas, especially the agricultural sector. A modern approach to rural development envisages the implementation of large-scale investment projects, along with granting subsidies to the development of regions dominated by agriculture. These investments are made in order to create favorable conditions for living in the regions and to increase their competitiveness. This is related to the provision of necessary production and social infrastructure to rural areas. Also, the competitiveness of the agricultural sector depends largely on the development of the fields serving this area and staffing. In this regard, establishment of warehouses in the regions, agro-services serving agriculture, improving the quality of veterinary and phytosanitary services, seeds, fertilizers and pesticides, development of necessary sales channels, such as the organization of information and communication services for agricultural producers, are factors that determine the competitiveness of the agricultural sector. Development of agricultural products processing industry in regional centers and rural areas plays an important role in the provision of developing rural areas. There are great opportunities for the development of the food industry in the republic. Thus, in 2012, the volume of production of food products, including beverages, amounted to about 25 percent of the 1990 level and this decline was mainly due to a decrease in the production of export-oriented food products. Also, the complex processing of raw materials in the food industry is of crucial importance. Thus, in the processing of agricultural raw materials, products and production waste are also obtained along with the main product. For example, except for meat products, the waste of cut animals - hair, nails, horns, bones, gut, blood, etc. are also obtained in meat production. These waste products are used in various types of products (combinations, buttons, brushes, musical instruments etc.) and more than 40 medicines, animal feeds and so on. can be produced by using these wastes. The absence of waste recycling facilities reduces the efficiency of production. Therefore, the complex development programs for separate areas of food products should be developed in the republic, and this program should take into account the processing stages of agricultural raw materials. In general, the development of small and medium-sized businesses on the basis of administrative district centers is crucial for the creation of developmental poles in the country. Meanwhile, the specialization of agricultural products in separate regions, the creation of specialized warehouses, transportation economies and processing facilities can play an important role in the development of the regions. Along with the food industry, there are available opportunities for the development of light industry, mechanical engineering and metallurgy industry, building materials industry in the regions.

It should be noted that the development of local raw materials based on the "State Program on socio-economic development of the regions of the Republic of Azerbaijan in 2014-2018" has been identified as a priority in this area. Nevertheless, it would be expedient to further define industry development opportunities within the framework of the mentioned program.

In our view, it is required to conduct research in the following areas to identify industry development trends:
- available natural resources and their estimated quantities in the country;
- structure and volume of agricultural production;
- volume of future demand for certain consumer products;
- volume of import;
- successfully developing industries in countries with similar volume and structure of existing financial, labor and natural resources;
- possible interaction of the existing fields in the country with local and foreign related areas;
- opportunities for development based on vertical or horizontal integration of existing production;
- possible diversification of existing production;
- capacity to increase production volumes due to the scale of production.

It should be noted that there are limited opportunities for the development of many areas of industry at the expense of only domestic market. Only industrial products that are oriented to the domestic market ultimately lose capacity to scale-up and are not competitive in the long term. Therefore, it is possible to develop the country's industrial potential by creating relatively large industrial companies. At present, the creation of such industrial companies in the country is mainly possible with state participation and financial support. In such circumstances, certain actions can be taken in specializing in certain industries of separate regions in the country. In recent years, the black and non-ferrous metallurgy industry in the country has been primarily developed in the Ganja-Gazakh economic region. In our opinion, while the areas of food and light industries are mainly developed in line with their specialized agricultural products in the regions, it is advisable to develop industrial production based on raw materials and employment factors. The role of staff in achieving success in the above-mentioned direction is crucial. Therefore, the training of staff and raising their knowledge and skills in the country should be one of the main directions of government policy. In recent years, state funding of education in foreign countries, the development of vocational education and etc. steps are among the measures taken in this direction. Nevertheless, the development of separate regions should be clearly defined and the training of personnel in these areas should be financed. Thus, direct and indirect financial support of the state is required in these areas. Determination of the role of the state in the financing of socio-economic development of the regions is also made based on the evaluation of the opportunity to participate in this development of the private sector. Thus, regional policy in Azerbaijan is aimed at raising competitiveness in the regions, creating new jobs and increasing social security. Measures in this direction cover both economic and social and environmental issues. Since 2004, regional development programs in Azerbaijan have led to an increase in the overall level of development of the regions, but did not substantially reduce the difference between Baku and other regions due to the level of income. Meanwhile, five-year regional development programs implemented since 2004 have played a crucial role in mobilizing financial resources and promoting regional development.

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OPPORTUNITIES AND PROSPECTS FOR ECONOMIC RECOVERY IN AZERBAIJAN IN THE POST-PANDEMIC PERIOD

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ABSTRACT

2020 was mainly a year of struggle against the global COVID-19 pandemic. The dramatic contraction in global trade, supply chain disruptions, job losses, and growing uncertainty have negatively impacted global economic activity, causing sharp fluctuations in commodity prices. According to the World Bank, the economic slowdown caused by the COVID-19 pandemic last year will increase by 4 percent in 2021. However, it will still be 5 percent lower than the pre-pandemic level. After the damage caused by the pandemic, economic growth is expected to slow to 3.8 percent in 2022. In particular, the impact of the pandemic on investment and human capital is expected to disrupt growth prospects in emerging markets and developing countries and undermine key development targets. A comprehensive policy effort is needed to revive strong, sustainable and equitable growth. A series of reforms aimed at increasing investment in human and physical capital and increasing female labor force participation could help prevent the expected impact of the pandemic on potential growth over the next decade. The World Bank's "Global Economic Prospects" says economic recovery is possible only if countries implement economic reforms that contain the pandemic and increase investment. Azerbaijan's GDP in 2020 amounted to 72.4 billion manats (42.6 billion dollars). Compared to the same period last year, the gross domestic product decreased by 4.3 percent. The main goal of the article is to determine the prospects for economic recovery in Azerbaijan in the post-pandemic period in accordance with the state program "Azerbaijan 2030: National priorities of socio-economic development."
Keywords: *economic recovery, COVID-19, investment, human capital, economic policy*

1. INTRODUCTION

Despite the slowdown in global recovery in the short term caused by the re-acceleration of the spread of COVID-19 virus, trust in the ongoing vaccination, the gradual improvement in consumption and trade suggest that economic recovery will advance in 2021-2022. In 2021, strong growth in East Asia and the Pacific and China, and the weakest in the Middle East, North Africa, and sub-Saharan Africa are predicted. The COVID-19 pandemic has brought about major disruptions in the global economy. Economic activity has declined due to both lockdowns and individual decisions made by private entrepreneurship; uncertainty surrounding the post-pandemic economic landscape and policies has hindered investment; delay in continuity of education has slowed the development of human capital; and the existence of global value chains and concerns about the course of the pandemic have exacerbated the situation in international trade and tourism. A comprehensive policy effort is needed to revive strong, sustainable and equitable growth. Several reforms to boost investment in human capital and physical capital and increase the participation of female workforce could help prevent the expected impact of pandemic on potential increase over the next decade. In 2021, global GDP is projected to be 5.3 percent lower than pre-pandemic forecasts, or about $ 4.7 trillion. Global trade collapsed last year due to the suspension of international supplies of goods and services

because of border closures and supply disruptions. Commodity trading has recovered and revived more rapidly than it did during the global financial crisis, while trade in services remains weak. Global trade is projected to rise in parallel with the recovery in global activity. This growth is expected to fall to 8 percent in 2021, and then to 6 percent in 2022. The lasting barriers to international travel and tourism have led to continued poor services. Although international travel has been restored to some extent, it is much below pre-pandemic levels. The tourism industry lost about $ 1.3 trillion in export earnings in 2020. The recovery of the travel sector will be slow since the new COVID-19 strains cause governments to keep using travel bans to prevent the virus from spreading. Travel experts are now very cautious about their predictions, and most do not expect the turnover rate of tourism to return to pandemic levels by 2023.
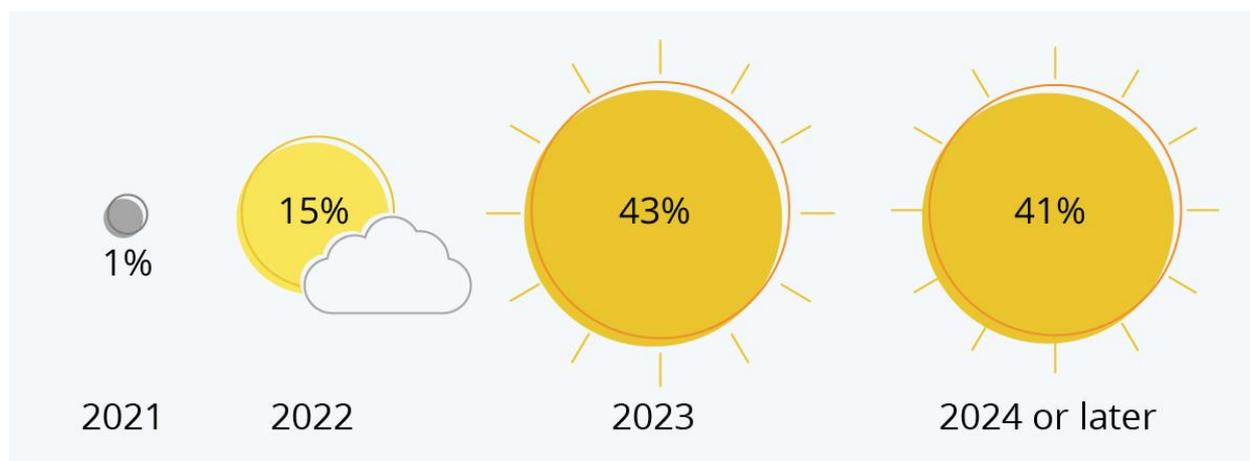
Figure 1: Duration of tourism recovery in the pre-pandemic period, prepared via a survey by experts of the World Tourism Organization
(Source: World Tourism Organization)

The food and raw material need of the world's growing and wealthy population will stimulate demand for agricultural products over the next decade. According to the FAO forecast, total food consumption is expected to grow steadily by 2028. According to the projected income growth in high-income countries, by 2029, the share of food in total household spending is expected to fall from about 8% in the base period to 6%. The population is the main determinant of total food consumption. Income, relative prices, other demographic factors, consumers' preferences and lifestyle, a person's desires determine the food basket. Considering the significant gains per capita income in all regions, the expected 11% increase in world population (842 million increase between 2017-19-2029) stipulates 15% increase in total food consumption by 2029. The Asia Pacific region, the world's most densely populated region, will continue to play a key role in shaping global food needs as it is projected to reach 53% of the global population (4.5 billion people) in 2029. According to the IMF's Global Economic Review, published in January 2021, uncertainties and risks to the global economy still remain topical even though vaccination process against Covid-19 has begun. In general, international financial institutions note that the following are the main risks for the global economy:

- Liquidity and insolvency risks;
- Growing unemployment and poverty;
- Belated commencement of vaccination in developing countries and low economic activity in these countries;
- Rising interest rates and risk premiums.

The World Bank's "Global Economic Prospects" report says economic recovery is possible only if countries implement economic reforms that overcome the pandemic and increase investment. The political and economic priorities for the near future are to control the spread of the Covid-19 pandemic and to ensure the rapid and extensive spread of vaccination. To support economic recovery, the authorities need to facilitate reinvestment centered on sustainable development, which is less dependent on public debt. The greatest opportunity a pandemic can provide is to realize the potential of a global digital society for states and individuals. Due to the transition of the global economy to digital base and platforms, significant changes keep happening in the structure of world commodity, service and labor markets - many traditional industries, services and products are losing their significance and being replaced by new ones. The global economy is going through a period of profound structural change, which has a serious impact on consumer tastes. In this regard, the ability to consider global challenges and changes and respond to them quickly is an important feature of national socio-economic security. The 21st century is a century of destructive innovations, high technologies and deep knowledge and competencies. The main drivers of the 21st century economy are personnel with high intellectual capacity, modern technology, "smart" products, knowledge and experience gained by national science and education centers, and regional integration. The international competition has further increased while the revolutionary technological changes were observed in the world economy in recent years. In the future, life will be characterized by profound digitalization, active application of new technologies and the rapid development of the most modern areas without human intervention. In the future, the digital society, which supports the state-of-the-art technologies and innovations, will become a leading force in development.

2. THE CURRENT MACROECONOMIC SITUATION IN AZERBAIJAN

In 2020, Azerbaijan's GDP was 72.4 billion manat ($ 42.6 billion). Compared to the same period of the last year, gross domestic product decreased by 4.3 percent. The industrial sector mainly accounts for the gross domestic product. So, in 2020, 33.7% of GDP belonged to industry, 11.5% trade and **v**ehicle repair, 7.7% construction, 7.1% transport and warehousing, 6.9% agriculture, forestry and fisheries, 2.0% information and communication, 1.2% tourist accommodation and public catering facilities and 20.2% other sectors. Net taxes on products and imports made up 9.7% of GDP. The GDP per capita was 7262.8 manat (4272 USD).

Figure 2: GDP growth forecast of the World Bank and Fitch Agency
(Source: Author)

Azerbaijan has a strong fiscal resilience, with total debt liabilities of $ 8.9 billion in 2020, or 21.3 percent of GDP. The total foreign-exchange reserves of the Central Bank and the State Oil Fund together amounted to $ 50 billion. Foreign trade turnover in 2019 amounted to $ 24.2 billion, $ 13.5 billion or 55.7% of trade turnover was the value of exported products, and $ 11 billion (44.3%) was the value of imported products. As a result, there was a positive balance of $ 2.7 billion. In 2020, Azerbaijan had trade relations with 184 countries. 14% of foreign trade was with the CIS member states and 86% with other foreign countries. Compared to 2019, foreign trade turnover decreased by 26.8% in actual prices, 21.9% in real terms, including 36.0% in imports and 12.0% in exports. The main export products are oil and oil products, and from the non-oil sector tomatoes, gold, cotton, fruit, electricity, plastics etc. The main export countries in the non-oil sector are Russia, Turkey, Switzerland, Georgia and Ukraine. In 2020, the main import products included precious metals, pearls and jewelry, machines, mechanisms, electrical equipment, vehicles, lubricants, iron, steel, cereals, medicines, tobacco products etc.
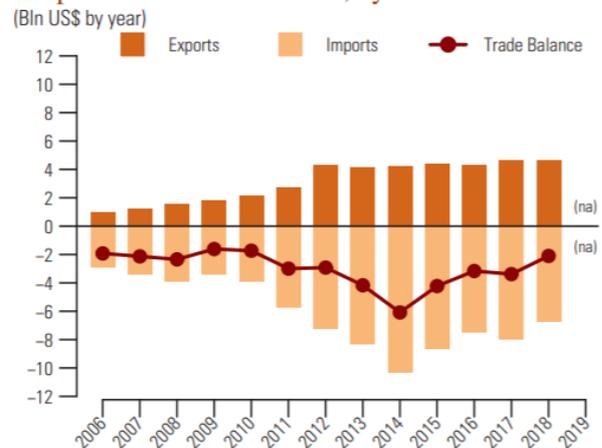
Figure 3: Trade turnover on goods and services for 2006-2019
(Source: UN Comtrade)

The total amount of foreign investments in the form of direct investments was $ 4.3 billion. The share of the oil and gas sector in the structure of direct investments in the country's economy was 78.3%. According to estimates, the total amount of direct investments in the non-oil sector was $ 930.1 million. In 2019, Azerbaijani companies made direct investment of $ 2.4317 billion abroad (an increase of 38.1%), including $ 978.8 million in the oil and gas sector (an increase of 54.5%), $ 1.4529 billion in other sectors (an increase of 28.9%). Foreign direct investments in the non-oil sector in Azerbaijan were made by Turkey, Great Britain, the Netherlands, Russia, the United States, the UAE, Switzerland and others.

Countries/ years	FDI inflow						FDI outflow					
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Azerbaijan	4430	4048	4500	2867	1403	1504	3230	3260	2574	2564	1761	2432

Table 1: FDI inflow to Azerbaijan (in millions of US dollars)
(Source: World Investment Report 2020)

In January-December 2020, 17 billion manat was invested in fixed assets from all financial sources for the development of the economy and social spheres in the country.
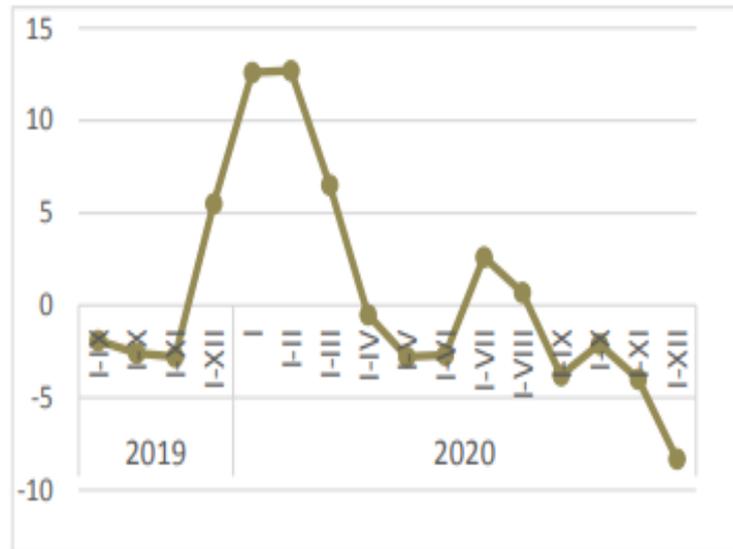
Figure 4: Real growth rate of total investments in fixed assets in 2020, in %
(Source: Central Bank of Azerbaijan)

69.9% of the fixed capital investments were domestic investments and 30.1% were foreign investments. During the corresponding period, 11 billion manat (65.5%) of the total investments in fixed assets were used in the development of the non-oil sector, and 5.9 billion manat (34.5%) in the development of the oil sector. The President of the Republic of Azerbaijan signed Decree No. 1950 dated March 19, 2020 "On a number of measures to reduce the negative impact of the coronavirus (COVID-19) pandemic and, consequently, sharp fluctuations in world energy and stock markets on the economy of the Republic of Azerbaijan, macroeconomic stability, employment and entrepreneurship". The Action Plan covers three areas - support for economic growth and entrepreneurship, support for employment and social welfare, and macroeconomic and financial stability. So, the areas in need of state support and the principles of state support for these areas have been identified starting from the first period of the pandemic. The Azerbaijani government has allocated $ 2 billion to support businesses and individuals facing serious economic problems during the pandemic. The government has undertaken to create social jobs on a paid basis (at the expense of the state) as an obligation. Return of part of the value added tax to consumers should also be considered as a tax deduction for consumers. All this has allowed minimizing the impact of the pandemic on the Azerbaijani economy compared to other countries. There was no significant decrease in the average monthly labor force, and the decline in GDP was around 4 percent, and unemployment rose from 5 percent to 7 percent.

3. WAYS AND PROSPECTS OF ECONOMIC RECOVERY IN AZERBAIJAN IN THE POST-PANDEMIC PERIOD

Currently, economic recovery in all regions is moving at different paces, depending on many factors, such as income group, the rate of vaccination, economic support mechanisms and dependence on the tourism sector. Economic recovery is particularly difficult in countries with large share of tourism and exports. The recovery process in the labor market also faces problems due to the lack of clear criteria for unemployment. Despite social support mechanisms through stimulus packages around the world, unemployment has risen, and it has increased to an average of 1.5 percent in all developing countries. The projected recovery process varies depending on the severity of the country's health crisis, the degree of economic imbalance (due to countries' dependence on highly affected areas), cross-border trade spills and, most importantly, the effectiveness of economic and political policy support to limit permanent damage.

The main scenario of economic recovery and future economic growth trajectories in the post-pandemic period of Azerbaijan are defined by the "Azerbaijan 2030: National Priorities for Socio-Economic Development" approved by the Decree of the President of the Republic of Azerbaijan dated February 2, 2021. National priorities cover 5 areas that fully meet global challenges: a steadily growing, competitive economy; a dynamic, inclusive society based on social justice; areas of modern innovations and competitive human capital; the great return to the territories liberated from occupation; a clean environment and a country of "green growth". The adopted national priorities are in line with the goals of the concepts of developed countries for the future. So, the EU Cohesion Policy adopted in the European Union for 2021-2027 sets 5 goals - Smarter Europe, Greener Europe, Connected Europe, More Social Europe, Europe closer to citizens. In general, the first priority for all countries in the post-pandemic period should be to avoid the economic crisis. Close international cooperation is essential to achieve these goals and for emerging markets and low-income countries to continue to bridge the gap between their living standards and the living standards of high-income countries. First, a fair distribution of vaccines is mandatory in the health care system, and the nationalization of vaccines is absolutely unacceptable. In addition to addressing issues rooting from the pandemic, countries need to work harder to increase efforts to reduce climate change and address economic issues caused by trade and technological tensions, and to close gaps in the rules-based multilateral trading system. Based on the latest trends in international tax policy, efforts should be continued to limit the change in cross-border profits and prevent tax evasion. Although the goals of economic policy are similar, the policies needed to achieve them must be tailored to the individual conditions of the countries. These policy priorities are divided into certain stages according to the order of implementation: urgent measures; initiatives to ensure recovery; and measures to build a more sustainable, inclusive, and environmentally sustainable economy for the post-COVID-19 world. The next priority should be investing in the future. Increasing economic growth and productivity can be one of the main goals in this area. The International Labor Organization (ILO) has identified labor productivity as one of the most important conditions for economic growth, competitiveness and living standards. According to the ILO 2019 report, Azerbaijan ranks first among the South Caucasus countries in terms of labor productivity. However, despite our achievements in this area, labor productivity in our country is lower in comparison with developed countries. Although it is difficult to investigate the root causes of low labor productivity, we need to increase investment in education, research and infrastructure to increase productivity and efficiency. One of the main problems in the post-pandemic period is the reduction of unemployment. Unemployment may remain high due to workers who are discouraged by the effects of the crisis in the early days (Blanchard and Summers, 1986). Accumulation of human capital and future earnings are also affected by long-term unemployment, skills depletion, late entry of young people into the labor market and failures in education. Targeted stimulus assistance, productivity support and increased investment can boost labor market activity.

4. CONCLUSION

For Azerbaijan, 2020 will be remembered not only as a year of pandemic, but also as a year of victory - the liberation of our lands after the 44-day war, which were occupied for 30 years. Unlike the other countries, 2021 and the further period require not only post-pandemic recovery but also post-war economic recovery. As noted in the 4th direction of "Azerbaijan 2030: National Priorities for Socio-Economic Development", the Great Return to the territories liberated from occupation for the next 10 years is one of the most important issues facing the economy and society of Azerbaijan. Noted that the great return to Karabakh has a two-way effect on the economy. So, the process of returning to Karabakh is not only a goal of economic recovery, but also a driver of economic recovery.

Every manat invested in Karabakh will provide conditions for accelerating economic recovery and increasing economic activity, creating added value with a multiplier effect. Investments in these areas, especially in construction, agriculture and tourism, will play a special role in increasing employment. On the other hand, the new realities in the region after the great victory will increase Azerbaijan's prestige in the South Caucasus and neighboring regions, making it a key part of many projects of international importance in the future. The soon-to-be-implemented Zangazur Corridor will provide Azerbaijan and regional countries with access to the Persian Gulf and the Gulf of Oman and the Indian Ocean via the Iranian port of Bandar Abbas, the Middle Corridor, and the Istanbul-Islamabad railway. Finally, the economic crisis caused by the pandemic opens up new opportunities for countries along with negative effects. The key issue in the post-pandemic period is whether countries see these opportunities. Azerbaijan can achieve rapid economic growth by appreciating these opportunities, fully responding to the new challenges of the world economy, reintegrating Karabakh into our economy, applying digital transformation in all areas and building a modern governance model.

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CHANGES IN THE APPLICATION AREAS OF ICT IN HUMAN RESOURCE MANAGEMENT IN AZERBAIJAN DURING THE PANDEMIC

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ABSTRACT

During the COVID19 pandemic, companies faced great difficulties in adapting their business processes and employees. In addition to the ability of employees to work remotely, the lack of software to support the ongoing implementation of existing processes also played a major role. Despite all this, during the pandemic, companies have already managed to reorganize their activities. The new form of employment - home-office / remote work - brought with its new forms of application in software and tools. This article examines the changes in software requirements during the COVID19 pandemic, the functionality of the tools needed by HR managers, the limitations of current software, and the impact of this experience on the post-pandemic period as a result of a survey of human resources professionals in Azerbaijan. It is undeniable that the experience gained by employees during the pandemic will play an important role in the post-pandemic period. During the pandemic period, the assignment of tasks to employees, the application of methods and tools used to monitor the implementation of tasks during the pandemic period was of great importance. Ensuring the observation and monitoring of the remote work process during the pandemic has also revealed very complex ethical dilemmas. This article aims to compare the current situation in Azerbaijan with relevant approaches in other countries.
Keywords: *Covid19 Pandemic, Human resource management, Use of ICT*

1. INTRODUCTION

Remote form of work is a way of organizing work, in which the employee performs the most important functions related to his work, using information and communication technologies, while being at home. The development of ICT has created opportunities for alternative ways of organizing work, including telecommuting, which means a new and evolving way of organizing work outside of production facilities or workplaces. According to the International Labour Organization Employers must provide employees with the appropriate tools, materials, equipment and technical means that are necessary to perform tasks in the conditions of the distant working, unless otherwise provided by the provisions of labor contracts, collective agreements or internal regulations (An employers' guide on working from home in response to the outbreak of COVID-19, 2020). Since March 2020, the management of the activities of remote employees in Azerbaijan has become vital in enterprises and organizations due to the pandemic. The organization of this remote activity depended on several factors. The first of these was the establishment of a fundamental connection between employees and the enterprise. The situation was not kind of a situation, in which people and businesses in the country were prepared in advance. Therefore, it took some time for employees to adapt to the new work structure and to carry out most of their activities remotely. The second important factor was to provide employees with hardware and software to organize remote activities. And finally, the most important factor was the new mindset of management, which was 180 degree different from the classic type of management. By the new mindset, we mean, even managers in the beginning of the pandemic, could not easily adapt to the new type of work model, which was nothing like from 9 a.m. to 6 p.m. physical presence at office.

The lack of the new mindset made physcological aspects of distance work more crucial. Because of COVID-19, many managers have switched to remote control, which requires different skills than working in an office. The transition was so fast that almost no one was ready. Adaptation was easy in some industries, while others were found to be unsuitable for remote work. As a result, the new work regime seemed more difficult for some managers - they could not cope with their work, and thus put greater stress on their subordinates. In general, even before the pandemic, it was not easy to manage remote workers. Studies show that leaders who do not see their subordinates sometimes think that they have done nothing. In this case, they demand that people be in constant contact with them. Thus, they upset the balance of work and personal life of employees and lead to greater stress.

2. MANAGING REMOTE WORK

It will be easier for employees to work remotely / from home at the point where companies make their current processes as much as possible that do not require manual load and paper work (Hope, 2020). Therefore, focus on this form of employment will continue. Skype, Webex, Microsoft Teams, Zoom, etc. are the tools that provide communication such as virtual. The function of these tools is to both ensure business continuity and help employees to establish professional and social interactions that they are accustomed to accomplish in their daily lives by ensuring seamless connection. One of the prominent headlines among the return to work approaches that came to the fore with the normalization process is the partial return of employees to the office. Due to various reasons, especially the health and safety of the employees, it is not right for all employees to be in the office at the same time due to social distance rules and physical conditions. In this context, the remote working model that entered our lives with the COVID-19 crisis seems to be one of the elements that will shape the future of the working world. It is clear that using this new working model in the long term brings some difficulties with it.

According to EY, there are 3 main obstacles in implementing distance work form (Why remote working will be the new normal, even after COVID-19, 2021):

- Structural implementation of working from home: Institutions' rapid transition to remote working model without structural adjustment risks causing productivity loss among employees and stakeholders.
- Ensure teleworking infrastructure security: The telework paradigm has transformed and digitized our working environment. This digital transition has resulted in some security concerns. Organizations are more vulnerable to cyberattacks than ever before in this period, where the majority of interactions take place online. In this context, increasing cyber-security has become indispensable in order to avoid attacks and reduce risks.
- Balancing the work and private lives of employees: With the rapid introduction of remote work into our lives, the boundary between work and private life has blurred for employees. The decrease in the time spent in the office, on the one hand, pushed employees to establish order at home, on the other hand, caused the loss of the line of business and private life.

When we mention the benefits of performing from home from an employers' point of view, we must underline certain points. one among them is that the ability to hire staff both locally and globally. The second important factor is that employees who work on the offices get distracted more often than remote workers. Performing from home, helps employees to focus and dedicate themselves to certain tasks. And therefore the final factor, that impacts employers' decision-making is, the significantly lower costs compared to the traditional work (Bloomberg - Are you a robot?, 2021).

Employers are encouraged to create a dedicated technical support (help) or email address where employees can contact with questions regarding production tools, equipment and technology for assistance if needed. At the same time, it should be clearly indicated that the equipment and tools received from the company for working remotely should be used by the employee himself/herself and only to perform the work entrusted to him.

2.1. Monitoring employee activities

Employees have been under surveillance by their employer for a long time, but as the pandemic has forced many jobs to be remote, that surveillance has now followed employees home. Eemployee surveillance has boomed during the pandemic. and the software that goes along with it is flying off the virtual shelves and these tools do more than just watch and plays, they analyze, rank and report on their productivity. Monitoring the activities of employees in the workplace is quite simple, because employees are physically in the office. Even in the traditional form of work, many enterprises paid special attention to the measurement of time spent by employees in the workplace. Many organizations even use biometric scanners or data from employee computers. In the current situation, due to the need to work remotely, enterprises began to use alternative methods to monitor employees. Because employees work from home and office, their activities can only be checked through special tracking software. Once the software is installed on an employee's computer, administrators and managers have the opportunity to find out how many hours the employee works during the day, whether or not he or she completes tasks, check browser history, track emails from a corporate email, and view screenshots or videos. The features of this software help to eliminate any annoyances that may arise later by notifying employees in advance.

According to our survey, respondents who stated that, their organizations use special software to monitor employee activities, categorised the functions of that kind of software as follows:
- Time tracking
- Tracking your browser memory and tabs
- Record a screenshot / video of the screen at certain intervals
- Tracking programs used on your computer
- Recording of written emails / messages
- "Idle time" measurement
- Measuring employee productivity
- Upload and monitor downloaded files

Unlike the most commonly used employee monitoring programs, the applications used in Azerbaijan do not have a keylogger function and employee tracking with a webcam. The use of ICT in a remote mode of operation carries an increased risk of getting hacked and giving access to the unauthorized people, and also increases the risk of bullying via the Internet.

To counter this, most businesses have data protection, privacy and computer security, and disaster prevention policies (Обзор международной повестки, 2020):
- All telecommuters must read, understand and comply with applicable ICT guidelines to ensure data protection, privacy, and computer security.
- All teleworkers are required to complete remote training in the use of ICT, which is available to all employees.
- All remote managers and employees are required to take all measures to avoid damage to the enterprise when using communications for production purposes, including with the help of ICT technical means.

3. SURVEY QUESTIONS AND ITS RESULTS

An online survey was conducted to analyze the organization of remote work activities of employees during the pandemic.

The research questions that this survey raises and tries to answer are as follows:
- What software does your company use to track assignments during a pandemic (while working remotely)?
- Does your company use special software that monitors your work during the day?
- During your remote work, did you feel distrust and constant control from your supervisors towards you and your activities?
- Do you think you work more in remote work than in traditional work?
- How has your productivity changed during remote work compared to the period before COVID-19?
- On what basis do you want the organization of work at the enterprise where you work to be carried out after the end of the pandemic?
- If the company you work for after the pandemic has a hybrid work week, how many days per week would you like to work from office?

Non-probability samgling was used to gather the sample for this research. Non-probabilty sampling means that not all individuals have an equal chance to be represented in the sample. (Kothari, 2004). Voluntary sampling was used to choose the sample as the study used Google Form's online survey tool. People from different sectors that worked from home for certain period, due to the COVID-19 pandemic, were asked to take part in this survey. 105 people have volunteered to answer the questionnaire online. The survey data has been analyzed using descriptive statistics. The software that has been used for this analysis is IBM's Statistical Package for the Social Sciences version 23. The biggest limitation in conducting this survey is that the current pandemic situation in the country still persists, so it is not possible to organize a survey to cover a wider range of respondents in enterprises. Due to the pandemic, it was problematic to organize the face-to-face interviews required for a qualitative analysis. Thirty one of the participants belong to the age group of 18-25, thirty five of them are in age group of 26-35, thirty two are in age group of 36-45 and seven are in the age group of 46-55. It is clear from Table 1 that 39% of the survey participants' daily activities are monitored by the enterprise they work for through special software. 80% of the respondents whose work activities were daily monitored by the program, said that they did not feel mistrust and constant control over their activities by their supervisors, during the pandemic. In comparison, only 59% of the respondents whose daily activities were not monitored by any software, stated that, they did not feel constant control or distrust. 76% of the participants, who expressed insecurity and constant control during the remote work, said that the company where they currently work does not monitor their activities through any software. In organizations where monitoring is not conducted or where the monitoring process is impossible, managers face the problem of not believing that employees they do not see in the office every day, work with the same efficiency and duration during the pandemic.

Table following on the next page

Count		During your remote work, did you feel distrust and constant control from your supervisors towards you and your activities?		Total
		Yes	No	
Does your company use special software that monitors your work during the day?	Yes, it is used	8	33	41
	No, it is not used	26	38	64
Total		34	71	105

*Table 1: Does your company use special software that monitors your work during the day? * During your remote work, did you feel distrust and constant control from your supervisors towards you and your activities? Crosstabulation analysis*

When asked "How do you assess the role of the software you use in the transition from traditional to remote work?", 35 percent said, their existing software weakened the transition. 56 percent of respondents said that their software was fully ready for this transition. The percentage of respondents who said they gave up some of the software during the transition was 9. The most important part of organizing remote work was the creation of communication channels between employees. According to the survey, the software used as a means of communication in Azerbaijan during the pandemic were identified: Whatsapp groups (55 respondents), MS Teams (46 respondents), Slack (22 respondents), Telegram (8 respondents), Mail (2 respondents)), Skype (5 respondents) and Zoom (3 respondents). Figure 1 shows the percentage of video conferencing platforms used by survey respondents.
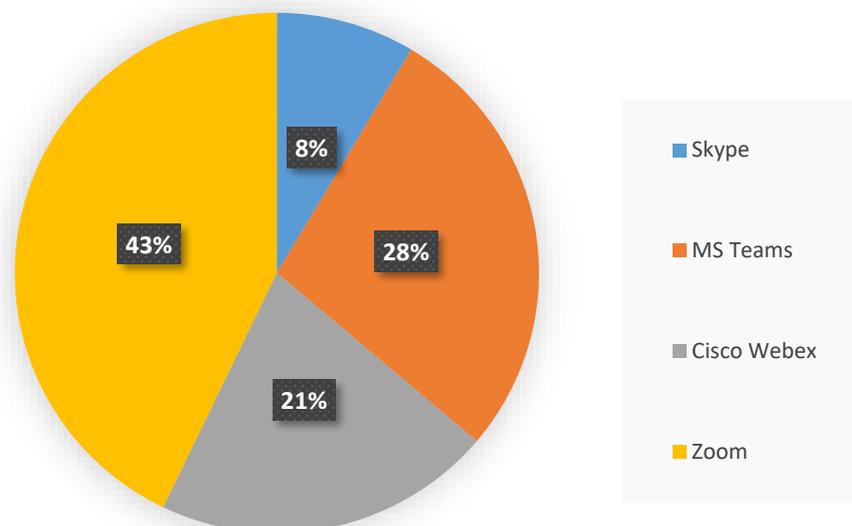
Figure 1: Software used for video conferences during the pandemic

Following the establishment of communication channels between employees and management, task tracking plays an important role in the organization of remote work activities. Platforms for distributing tasks among employees and monitoring their performance and the overall work process were widely used by enterprises even before the pandemic. However, after the onset of the pandemic, when the traditional form of work was no longer possible and employees were forced to work from home, enterprises expanded the use of this software and began to apply it at all levels of the organizations.

Count		What software does your company use to track tasks/assignments during a pandemic (while working remotely)?						Total
		No special software is used	Asana	Bitrix	Jira	Evernote	Trello	
Sector	Bank or or non-bank financial institutions	9	7	5	13	0	2	36
	Construction	4	0	0	0	0	0	4
	Education	3	0	0	0	1	0	4
	International organization	0	0	1	0	3	0	4
	Oil and gas sector	5	3	0	0	0	0	8
	Public sector	11	3	0	0	0	0	14
	Retail sector	3	0	0	0	0	0	3
	Service sector	14	0	6	4	2	6	32
Total		49	13	12	17	6	8	105

*Table 2: Sector * What software does your company use to track assignments during a pandemic (while working remotely)? Crosstabulation analysis*

According to our survey, there is a difference in how organizations implement task monitoring programs depending on their area of activity, size and sector.It is clear from Table 2 that the pioneer sectors in the implementation of these programs in Azerbaijan are banks, nonbank financial institutions and service sectors. In other sectors, the application of this category of programs is not very widespread. However, in the post-pandemic period, the application of these platforms in other sectors will come to the fore. This is because these applications, regardless of the workplace and form, lead to increased productivity while maintaining transparency in the monitoring of tasks. All the software stated above, have the common concept of task tracking realized in different form of graphic user interfaces. Because these applications do not limit users to just desktop computers, their use is possible from all mobile devices. The mobility brought by these applications will, over time, lead to more widespread usage of these applications by users and businesses. In an online survey, 62 respondents said they would like to work in hybrid form after the end of the pandemic. 10 people preferred distance learning, and 33 people preferred the traditional form of work. 59% of respondents see hybrid as an alternative form of traditional work as a form of future work (Table 3).

Count		On what basis do you want the organization of work at the enterprise where you work to be carried out after the end of the pandemic?			Total
		Traditional	Hybrid	Distant	
Sector	Bank or or non-bank financial institutions	8	27	1	36
	Construction	1	3	0	4
	Education	3	1	0	4
	International organization	0	4	0	4
	Oil and gas sector	2	6	0	8
	Public sector	11	3	0	14
	Retail sector	0	0	3	3
	Service sector	8	18	6	32
Total		33	62	10	105

*Table 3: Sector * On what basis do you want the organization of work at the enterprise where you work to be carried out after the end of the pandemic? Crosstabulation analysis*

The main reason for the tendency of people to this new type of work is the information and communication technologies and the software used in the enterprise, which supports remote operation.
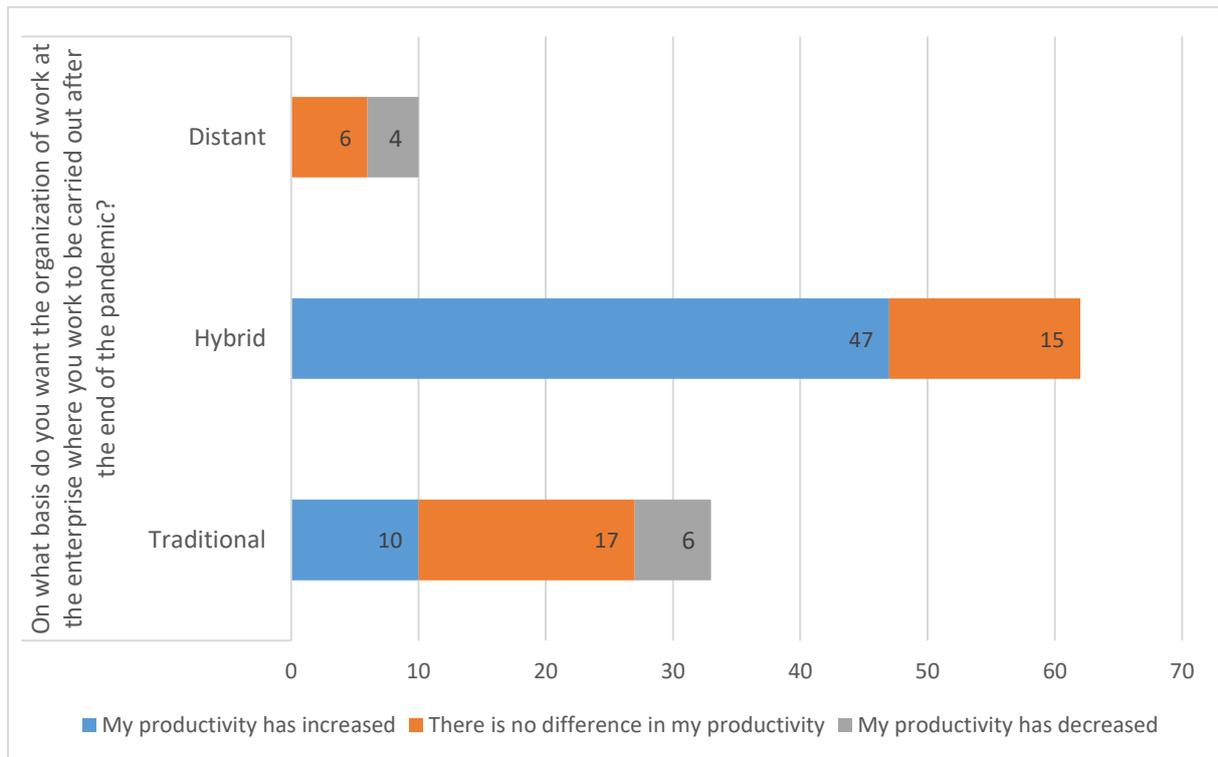
*Figure 2: How has your productivity changed during remote work compared to the period before COVID-19? * On what basis do you want the organization of work at the enterprise where you work to be carried out after the end of the pandemic? Crosstabulation*

In the post-pandemic period, businesses will also be interested in switching to hybrid work mode. Because during the pandemic, employees have shown that they can perform their tasks more efficiently when equipped with the necessary software and hardware. Thus, 54% of respondents stated that, their productivity increased during distance work (Figure 2).

4. CONCLUSION

It is expected that the experiments, methods and tools gained during the pandemic period will be used in the post-COVID period in the enterprises where the remote work was successful. To this end, enterprises will redesign their workflows to make their organizational structures more flexible and adaptable to the hybrid form of work. Businesses will review their structures and mechanisms to be prepared for such uncertain scenarios in the future. With the increasing impact of COVID-19, we have witnessed that many organizations have switched some or all of their employees to the remote working model. With the start of the normalization process, institutions need to adapt to the current situation in order to ensure operational sustainability. In this context, the real question is how will the return to work be in this period of many innovations. The new global study commissioned by Kaspersky of 8,000 SME employees from various industries revealed that almost three-quarters (82%) of employees reassess their pre-COVID-19 working methods. Employees now want to shape the future of the business world on their own terms, with opportunities such as spending more time with loved ones (53%), saving (39%) or working remotely (38%) instead of returning to work as they used to (Three-quarters of employees in Turkey do not want to return to traditional working models, 2021).

Home working led to a 13% performance increase, of which 9% was from work-ing more minutes per shift (fewer breaks and sick days) and 4% from more callsper minute (Bloom, Liang, Roberts and Ying, 2014). "Remote" as an ad hoc option for all employees and a permanent work format for some will gain a foothold in the corporate practice of many companies after the pandemic, since the crisis made it possible to assess the advantages of this format for both employers and employees. The ICT sector will become a pioneer in the formation of the "new norm". Large tech companies turned out to be the best infrastructurally prepared for the "telecommuting" format, as they had practiced it before. However, in connection with the pandemic, "remote work" has become widespread: Google and Facebook have extended their work hours from home until mid-2021 (Facebook extends Coronavirus work-from-home policy, 2021). Twitter announced that if they wish (and if the specifics of work permit), employees can remain "remotely" indefinitely. (witter Will Allow Employees To Work At Home Forever, 2021) Companies see the benefits of telecommuting both for corporate costs and employee motivation, so over the next 10 years, Facebook CEO Mark Zuckerberg predicts that 50% of his company's employees will work remotely. (Disparate pay, 2021)

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ISSUES ON DETERMINATION OF PUBLIC TRANSPORT FEES AND METHODS FOR THEIR IMPROVEMENT IN AZERBAIJAN

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ABSTRACT

It is almost impossible to imagine a contemporaty society without intensive communication processes. While overcoming obstacles related to public transportation system, it is difficult to evaluate social importance of them for all classes in society. It is essential to mention a role of public transport in developing cities and regions, improving environmental situation and increasing safety of passengers. In order for public transport system to work effectively, a regulatory base, an involvement of several public and government entities to development process actively and an increase of effectivenes of financing are required. One of the fundamental needs for people is to provide a mobility of themselves, which is one of the symbols of freedom and higher standards of living. According to experts worlwide, public transport changes economical development of cities and regions in a high scale. Public transport is a driver and a tool of increasing effectiveness of economy. Meanwhile, it is one of the fundamentals of ecological and road safety. It can be confidently said that there is no city or entity in world that can operate without public transport. In the article, the process of regulation of tariffs in public transportation system by government has been evaluated. At the same time, the ways of shaping and regulating public trasport fees in Azerbaijan has been analyzed. Taking the interests of corporations operating in trasnportation field into consideration, the samples for calculation of minimum fees in carrying passenger process. The calculation has been made in a cost method which considers financing the value of a passenger's economically justified travel cost and profitability of a servicer company. Actuality and relevance of the topic is determined with requirement of methods in setting fees in public transportation system, of new approaches to prices which allow adjustment of government's tariff policy in a field of passenger carrying in a competitive market to contemporary economical and social environment. The purpose of the article is to determine the features of shaping and regulating public transport fees in Azerbaijan and the mechanism in order to improve effectiveness in the system of passenger carrying.
Keywords: *Public transport, Transport system, Tariff, Tallinn model, Tariff determination*

1. INTRODUCTION

The development of transport system is highly significant for Azerbaijan. Along with energy, communication, education and healthcare, transport plans a vital role in achieving social, economic, foreign policy and the other governmental priorities in order to meet the needs of the community. After regaining independence, Azerbaijan entered a new stage in the development of the transport systems. The process contributed to creation of a legal framework for transport in market economy and strong demand-centered activities that reflect the demands of a market economy. Dynamic development achieved recently in all fields of public life in Azerbaijan has increased the geopolitical importance of our country. Together with that, it is essential to actively participate in the ongoing socio-economic processes taking place in the global economic sphere, get effective access to foreign markets and have a competitive national industry. Globalization, rapit integration, and sustainable development which are at the core of the global agenda today are especially relevant for our country. Public transport plays a crucial role in meeting people's needs and it is a driving factor in a development of living conditions of people. The development of public transport contributes to economic development, decreases the intensity of traffic jams by reducing the use of private cars, affects the parking lot problem in central parts of the city and helps to reduce CO_2 emission. Transport companies should use forms of passenger service that will change the lifestyle of citizens and become a preferred form of public transport. One of the main tasks today is to assess the attitude of public transport passengers to innovations in the field of transport services in order to develop an integrated approach to the development of the urban transport system. The efficient functioning of the transport system of the area creates the necessary conditions for the development of the economy and the social sphere. The growth of the world's population has led to a significant increase in the number of private vehicles. The existence of sufficiently limited opportunities for the development of road infrastructure has led to a sharp decline in real traffic speeds in cities, ie, the deterioration of urban mobility. Due to the redistribution of traffic flows and the widening of the road, the opportunities for optimizing the road condition have been largely exhausted. Under these conditions, a qualitative improvement in road conditions and an increase in the mobility of citizens is possible, if and only if car owners abandon the use of their private cars in favor of public transport. In order to achieve it, public transport must attract new passengers and be able to meet the changing needs of existing passengers.

2. METHODOLOGY

In general, it was not possible to determine modern and high-quality public transport tariffs in the country due to factors such as non-compliance with the optimal tariff policy, lack of a competitive environment and subjective approaches, and incomplete fulfillment of obligations of regulatory entities. Currently there does not exist any effective mechanisms for setting such tariffs on public transport. Therefore, passenger tariffs are applied for social security and quality of service for different social groups without taking into account. This is considered one of the weakest links in social policy and prevents the formation of a suitable environment for more effective funding. The economic elements of the organizational and economic mechanism are the regulation of passenger transport tariffs, economic analysis of carrier costs and algorithmization of the process of tariff formation. Tariff regulation of passenger transport considers not only the calculation of an economically justified tariff, but also the calculation of a social tariff. Taking into account the social significance, the tariffs for transport services to the population are being improved. Algorithmization of the tariff formation process summarizes the economic analysis of tariff regulation and costs and consider the creation of a mechanism for the formation of passenger tariffs. Subsidization of public transport systems varies significantly around the world.

One of the main directions is to investigate the issues arising from application of the model, used to determine public transport tariffs in Tallinn, Estonia, to the post-Soviet countries, as well as to Azerbaijan.

3. RESEARCH MODEL

The choice of mechanisms for managing the mobility system depends on the target. Using the Tallinn model, we can consider those that help reduce traffic congestion and create sustainable consumption patterns. Certain tariff models are used in our country to determine public transport tariffs.

4. ANALYSIS

To solve the problem of tariff formation, it is proposed to use an optimal model taking into account the interests of participants in public transport service market. Optimization problems are an important mathematical problem class, because in any field of activity a person tries to choose the optimal solutions aimed at saving costs, time and resources. Choosing optimal, justified decisions is one of the important resources to increase quality and efficiency. A model is a simplified copy, an artificially created object on which certain features of a real object are reproduced. In order to study these images and transmit the results to real-world objects and events, a model is created by replacing real objects or events with clearly simplified images (models). The process is also known as modeling. Public transport in Azerbaijan consists of public and private sectors. Baku Metro is a natural monopoly in the field of subway passenger transportation. Public (Baku Bus LLC) and private sector operate in parallel in bus transport. Public transport tariffs in the country are regulated by the government (Tariff Council). Passenger transportation is an activity that requires a special permit (license). Despite the implementation of a number of state programs so far, it has not been possible to create a public transport system in the country that meets modern requirements. In 2015, the Baku Transport Agency was established under the Cabinet of Ministers of the Republic of Azerbaijan to implement state policy and control in the field of passenger transportation in Baku (https://president.az/articles/17196). Demand for public transport services has increased in recent years due to factors such as natural population growth, urbanization, development of the tourism sector, rising fuel prices and traffic jams in Baku. In 2017, the passenger turnover in the transport sector was 1,973.4 million people (the corresponding figure for 2007 was 1,148 million), of which 84.7% or 1,672.2 million people were carried on buses, 11.6% or 228.8 million people were carried on the subway. In general, 96.3% of passenger in the country was carried out by bus and subway. During 2007-2017 years, from bus transport 487.7 million manat, from metro transport 44.3 million manat was obtained, and as a result, the total income was 532 million manat. It should be noted that bus revenues have quadrupled since the last price change in 2007. After the price change in 2011, subway revenue increased by 54%. The increase in revenue is due to the increased transparency of the sector compared to previous years, rising prices for intercity passenger transport and increased passenger turnover.

Table following on the next page

	2014	**2015**	**2016**	**2017**	**2018**	**2019**
Total passenger turnover	**26316**	**27125**	**27650**	**28289**	**28714**	**29533**
Transport by land						
Passenger turnover	22992	23825	24429	24886	25276	25950
Share of transport by land on total passenger turnover, %	87.4	87.8	88.4	88.0	88.0	87.9
Private cars						
Passenger turnover	1296	1370	1413	1455	1494	1550
Share of private cars on transport by land, %	5.6	5.8	5.8	5.8	5.9	6.0
Public transport in cities						
Passenger turnover	15191	14214	14369	14628	14845	15241
Share of public transport in cities on transport by land, %	66.1	59.7	58.8	58.8	58.7	58.7
Intercities public transport in cities	6505	8241	8647	8803	8937	9159
Passenger turnover	28.3	34.6	35.4	35.4	35.4	35.3
Share of intercities public transport in cities on transport by land, %	28.3	34.6	35.4	35.4	35.4	35.3
Mass Rapit Transit - MRT (metro)						
Passenger turnover	2378	2450	2400	2525	2549	2611
Share of MRT on total passenger transport, %	9.2	9.0	8.7	8.9	8.9	8.8
Passenger turnover per a person, km	2759.91	2811.08	2833.63	2870.80	2888.80	2981.80

Table 1: Passenger turnover in public transport field (mln. passenger-km)
*Passenger turnover = the number of passengers carried * the distance the passengers were carried.*
(Source: https://www.stat.gov.az/source/transport

The flow of passengers is growing every year. In 2019, the passenger flow amounted to 29,533 million passenger-km, which is 2.7 times more than that in 2000. Urban and intercities public transport take a large proportion of passenger turnover (82.6% of passenger turnover through all transport vehicles) in the country (Figure 1).
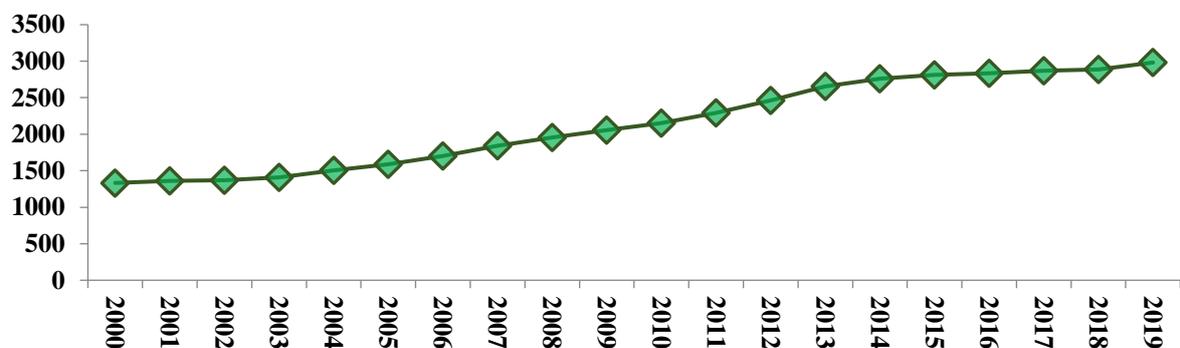
Figure 1: Passenger turnover per a person (mln. passenger-km)
(Source: https://www.stat.gov.az/source/transport/)

Statistical analysis shows that there was a significant increase in passenger turnover costs between 2007 and 2017. However, no increase in tariffs was noted during this period. Factors driving the growth include rising financial costs as a result of rising fuel and electricity prices, upgrading used equipment, and rising wages in the sector (pros and cons of an increase in public transport tariffs, 2018). Statistical analysis shows that there was a significant increase in passenger traffic costs between 2007 and 2017. However, no increase in tariffs was registered during this period. Factors driving the growth include rising financial costs as a result of rising fuel and electricity prices, upgrading used equipment, and rising wages in the sector (pros and cons of public transport tariff increases, 2018). The dynamics of financial change in this direction in 2019 is described in more detail in the diagram below.
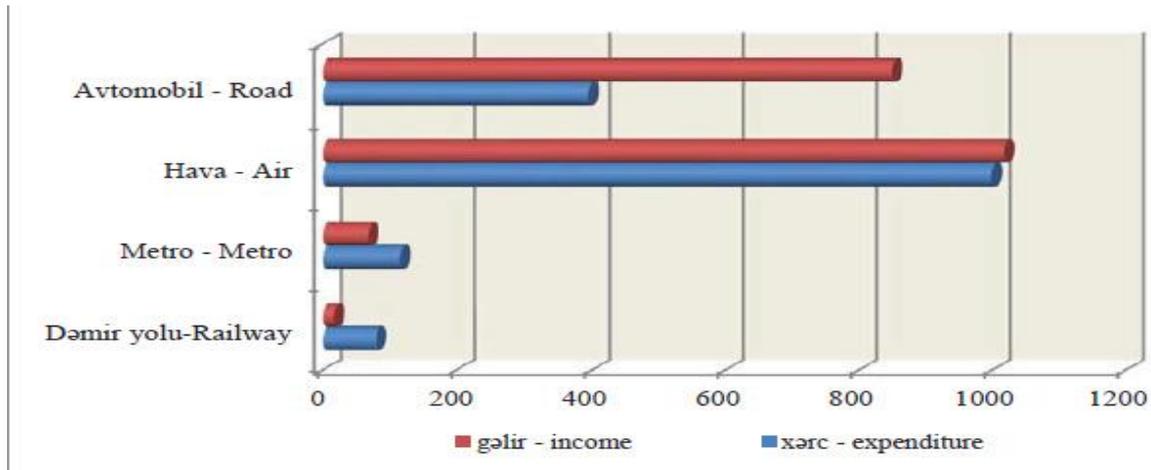
Figure 2: Cost incurred due to passenger carrying service, million manat
(Source: Transport in Azerbaijan, Baku-2020, Statistical Journal, p.76)

It should be noted that a new economic situation has emerged in Azerbaijan, especially in the last three years. Thus, in 2015-2017 years, due to the fall in oil prices, the national currency (Azerbaijani manat) depreciated by more than 54%, fuel prices increased by 63.6%, and electricity prices increased by 34%. In addition, the country's consumer price index was 4% in 2015, 12.4% in 2016 and 12.9% in 2017. Under these conditions, along with other industries, new problems have arisen for economic entities operating in the public transport segment. These problems have reduced the investment of businesses operating in the field of public transport. In 2012, 1,038 buses were brought to the country for passenger transportation, while in 2017, the corresponding figure was 6 times less or 187 units. As a result, the sector's profits have declined, the quality of public transport services has weakened, and the transport fleet, including the bus fleet, has become obsolete. In particular, the sharp devaluation of the local currency has significantly increased the cost of modernizing and repairing in terms of technical equipment for the import-dependent transport sector. Taking all these conditions into considerations, certain steps must be taken in the field of public transport services. The most reasonable step among all possible choices is to optimize existing tariffs in public transport. By the decision of the Tariff Council of the Republic of Azerbaijan dated July 30, 2018, the prices for passenger transportation by bus and subway were increased. It should not be considered rational saying that the increase in tariffs in public transport is unexpected. This is because when the subway fare was increased in 2011, officials emphasized that the increase was not enough. In the following years, the news about an increase in public transport tariffs became the subject of public opinion. In 2016, local media citing government sources reported that prices for passenger services will increase by 50%. The decision of raising the price of gasoline in June 2017 caused debates.

As a result, in October 2017, the Baku Transport Agency, as one of the departments implementing state control over passenger traffis, increased tariffs. After the decision of the Tariff Council in 2018, we can see how the prices for different categories of passenger services in Azerbaijan will change.

Type of transport	Previous tariffs	New tariffs	A change in percentage
Subway	0.20	0.30	50%
Bus (within a city)	0.20	0.30	50%
Bus (intercities), for every km	0.16	0.24	50%

Table 2: Changes in tariffs for passenger transportation, manat
(Source: http://www.tariffcouncil.gov.az/?/az/content/184/)

Despite of the necessity of optimization of tariffs, the Tariff Council's increase in public transport tariffs by 50%, and the statement issued by the agency in connection with this increase, in which it is noted that an increase in tariffs was implemented in order to develop transport infrastructure and to alleviate financial security, should not be considered a successful step. One of the main reasons for this claim is the increase in tariffs despite of the fact that quality does not increase, and a negative impact, which resulted from the discrepancy between quality and tariffs, on future positive changes in this area. The second reason may be the lack of price differentiation in terms of social distribution among the population when setting tariffs. Students, pensioners, mothers with many children and etc. are aimed when it is said social distribution. Meanwhile, non-existence of social distribution in public transport tariffs violated the principle of equal distribution of income. Another reason is the increase in tariffs before forming the relevant infrastructure and completing the cashless payment system. It should also be noted that since the current state of public transport in the country does not meet modern standards, the increase in existing prices will further slow down the development of this sector. In addition, it should be noted that the level of transparency in the activities of state-owned companies, especially in the field of passenger transport, is unsatisfactory. For example, the accounting of the Baku Metro, one of the 20 largest state-owned enterprises, is very poorly organized and not even organized in accordance with state standards. Despite the fact that the average annual turnover of this institution is about 100 million manat, only one individual was involved as an external auditor to assess the financial performance. At the same time, the annual financial statements of this institution are not informative. This undermines the ability to monitor high-quality financial performance (http://metro.gov.az/en/about/metropoliten/fin). Incomplete transition to the system of cashless payments for passenger transportation in the transport sector is one of the main factors ensuring the existence of clandestine traffic in this area. Although steps have been taken to introduce a cashless payment system in public transport in Baku since 2011, this process has not yet been completed. Finally, although the Baku Transport Agency announced that the full implementation of the cashless payment system will be completed in the first half of 2018, it became clear at the time that this was not possible. It should be noted that a large number of buses still continue to accept cash payments. According to statistics, currently 2021 buses serve 150 routes in Baku, of which only 500 buses on 25 routes have completed the transition to a cashless payment system. In other words, 75% of buses operating in Baku accept cash payment (http://bna.az/en/ictimai-neqliyyat). Even after the tariffs were renewed, the tariffs for public transport services in Azerbaijan remained lower than most of the existing tariffs in the CIS countries and regions (Hümbətova S., 2018). It should be noted that the current tariffs for subway passengers are 0.80-1.50 manat in Russia, 0.20-0.40 manat in Kazakhstan, 0.48-0.56 manat in Belarus, 0.35 manat in Georgia and 0.44-1.75 manat in Turkey. As for regular bus service tariffs within a city, it is 0.80-1.50 manat in Russia, 0.20-0.45 manat in Kazakhstan, 0.44-0.52 manat in Belarus, 0.35 manat in Georgia and

0.91 manat in Turkey. Tariffs for regular intercity bus routes are 5.2-9.2 manat/km in Russia, 4.2-7.5 manat /km in Georgia, 4.9-8.0 manat/km in Turkey. Tariffs for public transport for citizens registered in Tallinn, the capital of Estonia, where Azerbaijan was once compared, have been abolished since 2013. However, within the city, tourists use public transport by paying the relevant prices set for them. This project implemented in Tallinn is funded from the state budget. Even during the discussion of this decision, 40 out of 60 deputies of the Tallinn City Council voted in favor of this decision. According to average government estimates, this decision will help each family save an amount of 50 euros in their budget. In addition to Tallinn, in some countries public transport has begun to provide free services to its citizens under certain conditions as well. Luxembourg is an example. Since 2019, all public transport in the country has begun to provide free services. The application of this model by several countries and cities has already attracted the attention of other countries. Some countries have even begun researches in this area. In countries such as Belarus and the Russian Federation, fares are partially subsidized to keep the tariffs for passenger transportation below economic costs, and therefore the fare paid by citizens does not fully cover the cost of transportation by the state (Ryazanova, 2016). Subsidizing passenger transport is an integral part of its successful operation.

5. CONCLUSION

Determining and implementing the directions of development of the country's transport system is possible with the availability of extensive and high-quality statistics. For the successful integration of the country's transport into the international transport system, there must be concrete figures for the development of the transport sector of the country and forecasting development directions. It is necessary to create an extensive information network for the development of infrastructure, intensification and planning of transit traffic, development of intermodal and multimodal transport in the parts of international transport corridors passing through the territory of the counry. At the same time, the needs of information users in this area must be met, as the reconstruction of transport infrastructure, the renewal of the transport fleet are the important stages in the development of the transport industry. Therefore, one of the main proposals is that creation of a single information system for the transport and road complex should be one of the main priorities, and that the system should be based on complete and reliable statistics. Subsidizing the state-controlled public transport sector (Baku Metro CJSC and Baku Bus LLC) has also created an unequal competitive environment in the sector. Thus, it has become difficult for private businesses to put cars that meet modern requirements into operation. This, in turn, has created a weak competitive environment, especially in Baku. It is proposed that if conditions in the country allow the implementation of the Tallinn model, instead of providing subsidies to a state-owned company and creating a non-competitive market, the state should become a natural monopolist in public transport and define routes for all buses. The decision to increase tariffs by 50% is believed to have placed a significant cost burden, especially on budgets of families with low-income, and has had a negative impact on social security. According to preliminary estimates, as a result of the increase in tariffs, the population will face additional costs of 260 million manat per year. It is proposed that instead of subsidizing a certain part of public transport costs, the government should fully subsidize these costs in order to apply the Tallinn model for public transport in Azerbaijan. If it is not possible to apply this model, then government should differentiate tariffs of passenger services for different passenger groups (e.g: lower fares for students, pensioners, and the other sensitive groups) and use the optimal mechanism for determining tariffs in general. As a result, the citizen is provided with the opportunity to make his own long-term budget planning by choosing between these packages. It is proposed that the accountability of state-owned companies operating in this area be prepared more professionally and in accordance with state standards

and be made more transparent. It is also proposed to complete the full implementation of the cashless payment system in public transport as soon as possible because this process will also contribute to the formation of the information system.

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EMPIRICAL EVALUATION OF NON-CONVENTIONAL SEGMENTATION METHODS OF APPAREL MARKET IN AZERBAIJAN

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ABSTRACT
If earlier the traditional methods of market segmentation served as an effective method to match consumer needs with apparel companies' offerings, in the era of technological advancements with Big Data becoming a new type of sustainable capital and fashion market facing rapid changes, they no longer suffice. Hence, the use of non-conventional segmentation methods along with traditional can help companies to match with higher accuracy certain value propositions of their products with their customers' profiles, and by doing so eliminate the choice overload, that the customers are facing. Considering that that earlier studies discovered that music affects shopping behaviour and that apparels are hedonic products of high involvement, the following factors of non-conventional segmentation were analysed: psychographic dispositions, physiological factor, and musical choice. This article concerns the empirical evaluation of the effect that psychographic dispositions, physiological factors, and music choices have on consumer needs of women aged 18-35 in Azerbaijan. Once data was collected using convenience sampling method, the following statistical analysis were performed: PCA, EFA, frequency, reliability and convergent validity analysis, linear regression and bivariate correlation analysis. The results demonstrated that psychographic, physiological, and musical factors are substantial determinants of consumer needs. As results suggest, fashion-oriented consumer needs positively correlate with extraversion and rhythmic type of music and negatively - with neuroticism, complex and rebellious types of music, rectangle figure and weight; meanwhile emotion is positively associated with agreeableness, neuroticism, complex music; and negatively – with rebellious music. Appearance-oriented consumer needs have a positive correlation with extraversion and conventional type of music, whereas individuality positively associated with openness to experience, and negatively – with conventional music. The need for novelty positively correlates with neuroticism, and negatively – with conventional music. At last, the need for comfort positively correlates with neuroticism and weight, and negatively – with extraversion, conventional music, and hourglass figure.
Keywords: *fashion industry in Azerbaijan, music choices, non-conventional segmentation methods, physiological factor, psychographic dispositions*

1. INTRODUCTION

In the era of online shopping which constantly undergoes rapid changes due to technological advancements, conventional segmentation methods can no longer serve as an effective method of market positioning of companies and their products. Big Data revolution has prompted the use of non-traditional market segmentation methods by making data and analysis more accessible and easier to execute.

Data collected about customers can be utilized to offer them products tailored to their needs and save them from choice overload, which has become a permanent component of both online and in-store shopping. Although non-conventional methods of market segmentation have been widely researched by international academia and implemented in their marketing strategy by international corporations, companies in Azerbaijan still rely on traditional segmentation methods. Taking into account that non-conventional segmentation methods - in particular psychographic dispositions, physiological factor, and musical choice - are of higher importance for hedonistic products of high consumer involvement, this study focuses on how accurately non-conventional segmentation methods along with the traditional ones can determine consumer needs that are provided in certain clothing items.

2. LITERATURE REVIEW

Segmentation of the fashion market based on non-conventional methods is one of the widely studied subjects by the international researchers. Researchers, namely Rauschnabel P.A., Matzler K., Bidmon S., Grabner-Kräuter S., Guido G., Huy H.T., Gohary A., Hanzaee KH, Choungourian A. in their studies of non-conventional segmentation methods based on the psychographic component found a connection between five main personality traits (Big Five) and customers' buying behaviour. In recent years, the relation between music and fashion has also become the centre of researchers' attention. Studies have shown that there is a correlation between people's musical preferences and their clothing choices: the more people are interested in music, the stronger they are involved in fashion. Researchers Na Y. and Agnhage T. studied effect of background music in stores on consumer behaviour. (Na & Agnhage, 2013). Knoferle K.M., North A.C., Sheridan L.P. and Areni C.S. have proven that the tempo and mode of music affect sales (Knoferle el al, 2012; North et al, 2015). According to a study by Pisut G. and Connell L.J, there is a close linear relation between the clothing choices of female consumers and the degree to which they are satisfied with their bodies (Pisut & Connell, 2007). Women with high self-esteem about their bodies (positive body image) opt for more fitting clothing to enhance their physical attractiveness. They also allocate more funds from their budget for clothing. This article reviewed the work of renowned consumer behaviour researchers like Weine Hoyer, Gunter Barry, and Philip Kotler. The reports of well-known consulting companies such as McKinsey & Company and articles of the international magazine «The Economist» were also used. Statistical data was retrieved from both national (public database of the State Statistics Committee of Azerbaijan: www.stat.gov.az) and international (Statista: www.statista.com) databases.

3. METHOD
3.1. Research model

The methodology of this study is based on a process of systematic integration of various elements of the research and consisted of four main parts. First specialized academic literature was reviewed and a conceptual model that links non-conventional segmentation to consumer needs was developed. To test the effectiveness of the developed conceptual model, an online survey was conducted among shoppers of the same age group and gender in Azerbaijan. At the third stage, the data collected from surveys were analysed using the IBM SPSS Statistics 22 software. At the end, based on the results of the study, recommendations on the use of non-conventional segmentation methods for the clothing market in Azerbaijan were made.

3.2. Working group

Online survey, aimed to determine main characteristics of fashion consumers in Azerbaijan based on the factors of non-conventional segmentation, was distributed via social media to persons of the same age group and gender (women aged 18 - 35 years).

332 respondents took part in this survey. The age of the respondents ranges from 18 to 35 years old. An average respondent is 25 years old, has hourglass body type, weights 61 kg and is 1.67 m tall. The respondents who took part in the survey, on average, demonstrated a high need for novelty (M = 3.72, σ = 1, 03). When it comes to their current engagement, 36% of respondents are employed, 34% are studying, 17% are working and studying at the same time, 13% are recent graduates seeking employment. Social media was chosen as a distribution channel for the survey for several reasons: ease of distribution, convenience of filling it out, higher response rate, wider coverage, etc. In addition, the study focuses on online shopping, which assumes that its main audience are active online - users. The online questionnaire was sent out in the period of three days. Reminders were sent to the participants who did not complete the survey within three days.

3.3. Data collection tools
A standardized online self-completion survey was used for data collection. The survey was compiled using the publicly available online survey tool - Google Forms. Thirty questions of various types were included into the survey: five-point scale questions, single-answer questions, multiple-choice questions, and open-ended questions.

3.4. Collection and analysis of data
The online survey comprised the following six parts:
1) The first part of the survey covered questions about demographic data of the respondents: one open-ended question (age), two single-answer questions (gender and occupational status).
2) The second part included one multiple-choice question regarding music preferences of the respondents. Both in the questions about respondents' music choices and occupational statuses, option of an open answer, namely "Other option", was given for respondents to add their own answers to those already available.
3) The third part of the survey consisted of ten Likert scale questions that evaluated their psychographic dispositions based on Big Five taxonomy of personality traits: openness to experience (O), conscientiousness (C), extraversion (E), agreeableness (A) and neuroticism (N). The questions were based on Big Five Inventory (BFI-10) developed by Rammstedt & John (2007).
4) The model developed by Park & Sullivan (2009) was adopted in ten Likert scale questions aimed at determining main consumer needs. The consumer needs model differentiates between the main benefits that consumers are trying find in products that they are purchasing. For this study, the following consumer needs were developed based on the framework of Park & Sullivan (2009): fashion (F), appearance (A), individuality (I), emotion (E), comfort (C) and novelty (N).
5) The part of the survey that dealt with the physiological factor covered several types of questions: two Likert scale questions regarding consumers' body image (how satisfied are they with their body features), two open-ended questions about respondents' weight and, and one question regarding respondents' body shape. For the last question, a typology of body shapes by Pisut & Connell (2007) was employed. A graphic representation with a detailed description of each type of body shapes were added to the survey in order for the respondents who are not familiar with the typology of body shapes to have necessary information to correctly indicate their body type in the survey.
6) The part of the survey that focused on clothing products and the benefits they offer included multiple-choice question with a set of twenty-four T-shirt images to choose from. The im ages used in the survey were taken from online stores of Mango, Bershka, Stradivarius Azerbaijan for various reasons: availability of a large selection of T-shirts of various styles,

all items of clothing are presented in a unified form on a plain background, availability of shots from various camera angles with and without the model and availability of front and back views of clothing items.

Once data was collected using convenience sampling method, first data cleaning procedures were undertaken in order to remove corrupt data and then the following statistical analysis were performed: PCA, EFA, frequency, reliability and convergent validity analysis, linear regression, and bivariate correlation analysis.

3.5. Findings and interpretation

Data collected on personality traits (BFI-10) and consumer needs (CN-10) was first analysed in IBM SPSS Statistics 22 for underlying structural relations and internal consistency of factors using Exploratory Factor Analysis (EFA) and Principal Component Analysis (PCA). Five factors derived from BFI-10 showed factor loading value higher than 0.7 (lowest – 0.8), eigen value higher than 1 (lowest – 1.13) and accumulated variance of 76%. In case of CN-10, five derived factors displayed factor loading value higher than 0.7 (lowest – 0.9) and accumulated variance of 93%. Taking into the account aforementioned, both personality factors and consumer needs factors can be accepted as representative (Kent, 2015). Kaiser-Meyer-Olkin Test and Bartlett's Test of Sphericity were performed on the dataset to examine its sampling adequacy and test matrix of correlations against identity matrix. For both BFI-10 and CN-10 Kaiser-Meyer-Olkin Test demonstrated sampling adequacy values higher than 0.5, whereas Bartlett's Test of Sphericity showed the p-value of .000. Taking into account that the above-mentioned values of sampling adequacy and correlation indicator, the factor analysis is accepted as valid (Hair et al., 2014)

Kaiser-Meyer-Olkin Test of Sampling Adequacy		0.620
Bartlett's Test of Sphericity	Approxim. Chi-Square	537.913
	df	45
	Sig.	.000

Table 1: Kaiser-Meyer-Olkin Test of Sampling Adequacy and Bartlett's Test of Sphericity on BFI-10
(Source: IBM SPSS results table)

Kaiser-Meyer-Olkin Test of Sampling Adequacy		0.622
Bartlett's Test of Sphericity	Approxim. Chi-Square	1704.985
	Df	45
	Sig.	.000

Table 2: Kaiser-Meyer-Olkin Test of Sampling Adequacy and Bartlett's Test of Sphericity on CN-10
(Source: IBM SPSS results table)

To test internal consistency of BFI-10 and CN-10 Cronbach's Alpha test was employed. Each factor's Cronbach's Alpha value is higher than 0.5 and thus these tests are accepted as reliable (Nunnally, 1978).

Factors	Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of items
Neuroticism	0.755	0.756	2
Extraversion	0.625	0.627	2
Openness to experience	0.700	0.702	2
Agreeableness	0.548	0.549	2
Conscientiousness	0.570	0.572	2

Table 3: Cronbach's Alpha test (BFI-10)
(Source: IBM SPSS results table)

Factors	Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of items
Individuality	0.945	0.945	2
Fashion	0.901	0.903	2
Appearance	0.890	0.893	2
Emotion	0.878	0.878	2

Table 4: Cronbach's Alpha test (CN-10)
(Source: IBM SPSS results table)

Table 5 and 6 indicate Pearson's correlation coefficients that were computed to test convergent validity of BFI-10 and CN-10 tests. Correlation between respective questions is significant at the 0.01 level and thus these tests are accepted as valid (Kent, 2015).

Pearson's Correlation	N_Q2	E_Q2	O_Q2	A_Q2	C_Q2
N_Q1	r =.607 p =.000				
E_Q1		r =.541 p =.000			
O_Q1			r =.457 p =.000		
A_Q1				r =.378 p =.000	
C_Q1					r =.401 p =.000

Table 5: Convergent Validity test (BFI-10)
(Source: IBM SPSS results table)

Pearson's Correlation	F_Q2	A_Q2	I_Q2	E_Q2
F_Q1	r =.824 p =.000			
A_Q1		r =.806 p =.000		
I_Q1			r = .896 p =.000	
E_Q1				r = .783 p =.000

Table 6: Convergent Validity test (CN-10)
(Source: IBM SPSS results table)

After completing the exploratory factor analysis, existence of the relations between consumer needs and various dimensions of consumer profiles, such as psychographic factor, physical factor, and music choices were analyzed. To study the relations between consumer needs and personality dispositions and music taste multiple linear regression model was employed: Big Five personality dimensions, consumers music choices and consumers' body weight were defined as independent variables and consumer needs – as dependent variables. Correlation analysis was used to analyze the relations between consumer needs and the choice of T-shirts, as well as their body types. Table 7 presents the snapshot of all the correlations that were detected between consumer needs and personality traits, music preferences, body types and weight.

Table following on the next page

Consumer needs and factors of non-conventional segmentation	Psychographic factor	Music preferences	Physical factor (weight and body type)
Fashion	Extraversion (β = .254, p =.000) Neuroticism (β = -.159, p =.004)	Complex music (β = -.104, p =.066) Rebellious music (β = -.221, p =.000) Rhythmic music (β = .233, p =.000)	Weight (β = -.153, p =.007) Rectangle body type (r = -.194, p =.001) Positive body image (r = .127, p =.029)
Appearance	Extraversion (β = .105, p =.072)	Conventional music (β = .112, p =.059)	
Individuality	Openness to experience (β = .170, p =.004)	Conventional music (β = -.102, p =.084)	
Emotions	Neuroticism (β = .186, p =.001) Agreeableness (β = .184, p =.001)	Complex music (β = -.151, p =.011)	
Novelty	Neuroticism (β = .165, p =.005)	Conventional music (β = -.112, p =.060)	
Comfort	Extraversion (β = -.159, p =.000) Neuroticism (β = .106, p =.065)	Conventional music (β = -.172, p =.004)	Weight (β = .107, p =.069) Hourglass body type (r = -.116, p =.046)

Table 7: Correlations detected between consumer needs and main factors of non-conventional segmentation
(Source: IBM SPSS results table)

The consumer needs factor of fashion correlates positively with extraversion and negatively - with neuroticism at 0.01 significance level. While complex (at 0.1 significance level) and rebellious (at 0.01 significance level) genres of music are negatively correlated with fashion, as consumer need factor, rhythmic music is positively correlated at 0.01 significance level. When purchasing apparel female consumers with a rectangular figure are not guided by their consumer need for fashion. They also showed greater satisfaction with their overall appearance (positive body image). When choosing T-shirts, they opt for fitting apparel with low body coverage. Women, for whom the factor of appearance plays a decisive role when choosing clothes, also have high rates of extraversion. As for extraverts to engage in social interactions they need to make a good impression first, they tend to focus on their appearance to a greater extent. When it comes to music preferences, they opt for conventional music. According to the results of the analysis, the CN factor appearance does not show any correlation with positive body image, which might be due to the fact that regardless of the degree to which appearance-oriented female consumers are satisfied with their figure, they tend to choose certain clothing items to highlight or conceal certain physical features. Female consumers who try to express their individuality through the clothes they are purchasing similar to the appearance-oriented consumers opt for conventional music. They also tend to score high on extraversion.

As in case of appearance-oriented consumers, no correlation between variables of physical factor and consumer need for individuality was detected. Women, who make their purchase decisions based on their emotions, scored high on two Big Five personality traits: agreeableness and neuroticism. Consumer need for emotion correlates negatively with complex music at 0.1 significance level. In their research, Gohari and Hanzai (2014) identified that there is a positive relation between neuroticism and impulsive buying. They make their purchase decisions impulsively based on the hedonic features of apparel. Female consumers, who focus on novelty do not prefer the genres of conventional music and show high rates of neuroticism (positive correlation at 0.1 significance level). The female consumers that prefer comfortable clothes scored high on neuroticism and low on extraversion and showed dislike conventional type of music. On average, they did not have an hourglass body type. In addition, consumer need for comfort positively correlates with weight. When choosing T-shirts, they opt for apparel of neutral colours with loose fit, high body coverage and plain texture. The approach of combining various non-conventional segmentation dimensions into one framework used in this study, provided evidence that considering consumers from different perspectives, namely psychographic dispositions, music taste and appearance-related physical features, can serve as a guidance and help to identify firstly consumer needs and, as the result – predict their clothing purchase decisions.

4. CONCLUSION AND DISCUSSION

While most of the previous research in this area has examined the relation between psychographic factor and brand image, this article emphasizes the importance of considering all relevant factors of consumer choice, particularly when dealing with hedonistic products of high consumer involvement, such as clothing items and accessories. Analysis of the data demonstrated that psychographic, physiological, and musical factors are correlated with different types of consumer needs and, as a result, influence consumers' choice of clothing. This information can serve as a guideline for fashion companies that can based on the data, they have on their customers, build recommendation systems that will offer a personalized selection of their products. Recommendation systems help customers overcome the choice overload, which often impedes purchase. Use of recommendation systems tailored to the needs of consumers is especially important in the era of Big Data, as it enables a throughout analysis of consumers' profiles.The current study focuses on the clothing benefits that consumers in Azerbaijan are seeking to satisfy by opting for certain apparel, as online retail industry of fashion products has received a little attention from the academia, despite the fact that it falls behind the international standards and requires development. Local consumers prefer purchasing from overseas online stores like Asos, Missguided, Ebay, Amazon Fashion and others. International online stores successfully utilize customer data, such customers' previous purchases, information about their preferences and their physical features, to improve the quality of recommendation systems. Using the framework developed by this study as guidance, Azerbaijani apparel companies will be able to build personalized recommendation systems that will perform analysis of their customer data and will ensure that their product offerings satisfy the needs of their customers on an individual level. This recommendation system tailored to the needs of consumers will improve customer experience and hence will lead to increased customer satisfaction. In the age of social media, when information about customer dissatisfaction is spreading at a high speed, personalized recommendation systems are gaining in importance. In addition to diversifying their product offerings, companies focus on providing customers with overall gratifying shopping experience.

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INFLUENCE OF SPECIFIC FEATURES OF THE CONSTRUCTION SECTOR ON THE METHODOLOGY OF MANAGEMENT ACCOUNTING AND ANALYSIS

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ABSTRACT

The investment attractiveness of the construction business, to a very large extent, depends on providing investors with reliable and transparent financial statements that show the property status of construction organizations, their ability to increase capital, as well as possible threats and risks. Accounting and analytical information reflected in the financial statements allows stakeholders to make timely management decisions. This is necessary for managing the strategic and tactical management. The worldwide experience shows that science and practice have not yet created anything more effective than a management accounting system to generate reliable information. Research shows that the formation and development of management accounting in the construction industry is difficult due to a number of problems. One of the possible ways to solve them is the architectonics of the features of the construction sector of the economy developed by the author, which shows their impact on the organization of management accounting and management analysis in contract construction organizations. Knowing the nature of the impact of the features and factors identified in the course of the study makes it possible to assess the risks of misstatement of the financial statements. The methodological basis of the study is a systematic approach that represents management accounting as a synergistic system. The result of the study was the disclosure of the influence of structured features of the construction sector on the organization and development of management accounting in supplier construction companies. Using the recommendations put forward by the author in practice will give the opportunity to form a reliable information base and increase the efficiency of the business activities.

Keywords: *management accounting, management analysis, technical and economic, production and technological features of construction, management solutions*

1. INTRODUCTION

In today's accounting environment, there is a need for continuous research into the information requests from different user groups in different sectors of the economy. To ensure management with transparent and accessible information for decision-making at all levels of management, a comprehensive methodological approach is needed. At the same time, one should consider the peculiarities of the functioning of a particular sector of the economy, the main directions of its development, trends, long-term prospects, and features of the production structure. Such a mechanism is possible in the management accounting and analysis system. It is in the system of management accounting and analysis that reliable information is generated, which is necessary for making management decisions on-line. It should be noted that at this stage management accounting and analysis in housing companies is not enshrined in law. At the same time, the problematic issues of such accounting are widely covered in the works of foreign scientists. However, these works focus on theoretical aspects. There are very few studies of the industry features of housing companies that influence the organization of management accounting and analysis systems. There are controversial provisions, lack of systemicity, unexplored of certain areas and methods of management accounting and analysis in the construction sector.

The need for a comprehensive study, as well as the enormous practical need formanagement accounting and analysis in the construction sector, confirm the relevance of this study.**S**

2. THE IMPACT OF TECHNICAL AND ECONOMIC FEATURES OF CONSTRUCTION ENTERPRISES ON THE ORGANIZATION OF MANAGEMENT ACCOUNTING AND ANALYSIS

Management accounting in a construction organization is an element of its accounting and analytical system. This system is based on the collection, analytical processing and generalization of information about business processes at all stages of construction and installation works (Abbasova S.A.., 2015). It provides management with data regarding the costs and results of the enterprise, and its financial centers (responsibility centers, cost centers, revenue centers, etc.). Such information is necessary for cost management, its analysis and control in order to make managerial decisions. A review of the literature shows that most researchers only list the sectoral features of construction organizations. We did not limit ourselves to this and structured the sectoral features, which are influenced by factors of the internal and external macro- and microenvironment. This structuring will help to simplify the implementation of management accounting, in accordance with the needs of construction organizations. The architectonics of the features of the construction sector of the economy developed by us is given below:

- Technical and economic features
- Production and technological features
- Organizational and sectoral features
- Management features
- Legislative and legal features
- Behavioral features

Within the framework of this article, we will consider the impact of the first two groups of features on the organization of management accounting and analysis. Let's start with the technical and economic features of construction organizations (see Table 1).

Table following on the next page

Table 1: The impact of technical and economic features of construction enterprises on the organization of management accounting and analysis

№	Features that characterize the specifics of the industry	Impact on the organization of management accounting and analysis in a construction organization
1	**2**	**3**
1.	Territorial isolation of construction objects; location in relation to sales markets, communications. The end product of the construction industry is not transportable. The mobility of the means of production (workers, machines, equipment, etc.) moving from object to object.	There may be: the wrong choice of the accounting object, the wrong capitalization of fixed assets, the erroneous accrual of depreciation, the accrual of depreciation on fixed assets that are not involved in construction, early unjustified write-off of fixed assets, the replacement of assets with less valuable assets. Significantly affects the pricing of an object under construction.
2.	Mandatory use of design and estimates documentation.	• Inconsistency of the design and estimates documentation of the contractors with the design and estimates documentation of the customer, • Failure to perform certain hidden works approved by the design and estimates documentation, • Not for every type of construction and installation work there is an estimate. It is necessary to organize an accounting and analytical system of design costs and deviations from the estimated standards, to apply various methods of calculating the cost of work.
3.	Close interconnection with other sectors of the economy.	Leads to dependence on the volume and stability of production of products (work performed, services rendered) in other fields and types activities. There may be an incorrect calculation of the cost of construction products (works, services).
4.	A large number of complex objects and structures being built. Significant dimensions of construction products. The scale of the warehouse. Lack of concluded agreements on material liability with responsible persons.	There may be an overestimation of the volume and cost of construction, an inconsistency between the actual volumes and accounting data, and erroneous accrual of depreciation of fixed assets. The use of cheaper technologies for the production of works than provided for by the project. Re-presentation for payment of previously paid volumes of work, leads to higher cost price. Untimely inventory of the object. Requires detailed accounting in the context of business processes

Source: Table 1 was compiled by the author on the basis of generalization and structuring of the sources [1, 3, 4, 5]

The technical and economic features of construction require:
- accounting of supply on the construction projects market;
- systematic management analysis (marketing, strategic and competitive analysis),
- analysis of the near and distant environment,
- the need to prepare additional information on the costs of material and financial resources when transferring workers and construction equipment from one site to another

The territorial isolation of construction objects complicates the exchange of information, limits the possibilities of operational interaction and management. It is necessary to organize an accounting and analytical system of income and expenses for each business process of the construction object. In a contracting construction organization, management accounting should be positioned as an analytical accounting of such indicators as income and expenses for the main objects of construction work (Petukhov M. V., Petukhova Zh. G. 2016). The obligatory use of normative estimates is associated with the need to use various methods of calculating the cost of work, assessing the degree of implementation of estimates for individual works and the entire construction project. In the course of the study, it was revealed that there are often no technical and regulatory legal acts reflecting the quality of building materials, products and structures, the reliability of construction facilities, their fire safety, protection from natural and man-made damage. The influence of such a construction feature as a large number of complex objects and structures being built, the significant dimensions of construction products should be taken into account by:

- detailed accounting in the context of business processes associated with the construction of specific facilities;
- comparison of various options for technological and managerial solutions within the boundaries of the accounting and analytical system;
- creation of warehouses and assembly of structures and products

The long service life of construction objects requires the organization of work to ensure warranty service within a specified period. This affects the cost of the final product (Abbasova S.A.., 2019).

3. THE INFLUENCE OF PRODUCTION AND TECHNOLOGICAL FEATURES ON THE ORGANIZATION OF ACCOUNTING AND ANALYSIS IN CONSTRUCTION ENTERPRISES

Consider the impact of production and technological features on the organization of accounting and analysis in construction enterprises (see Table 2).

Table following on the next page

Table 2: Influence of production and technological features of construction organizations on the organization of management accounting and analysis

N.	Features characterizing industry specifics	Impact on the organization of management accounting and analysis in a construction organization
1	**2**	**2**
1.	The duration of the production cycle, dividing it into separate stages (preparation of the zero cycle, erection of the foundation, the underground part of the building, finishing work, etc.). Large amount of construction in progress. Construction time can be several years.	It determines the specifics of the process of its implementation and reflection in accounting and reporting. The delivery of the object to the customer and payment for the work are usually carried out in several stages. This affects the specifics of the formation of revenue and cost. There may be: Excessive and unclaimed construction work. Registration in the accounting of the volume of sales for a smaller amount and the subsequent assignment of funds. Subscriptions in construction work orders. Non-compliance of the provisions of a company's construction accounting policies with regulatory requirements on accounting for the reporting period, including and in the assessment of the construction in progress.
2 .	The need to carry out preparatory work before the start of construction (drainage work, construction of temporary living quarters for workers, etc.)	The accounting and analysis of financial, labor and material costs associated with such work is not organized. Unreasonable attribution of some expenses for the construction of facilities.
3 .	The end product of construction is the creation of a new residential facility, while there is a high resource intensity of production (material consumption - bone, capital intensity, cost intensity, etc.).	Incorrect use of building materials and prices for them. Overestimation of the size of the write-off of building materials. Application of inflated norms of overhead costs, limited costs. Untimely inventory taking. The expenses reflected in the accounting and tax records of the construction company are not confirmed by primary accounting documents. E is a violation of the Law of Azerbaijan Republic "On Accounting"
4 .	The production process consists of a mandatory list of related operations, in which the next process is not possible when the previous one is completed.	Violation of the sequence of operations leads to marriage, distortion of the cost of construction work and the financial result of the construction organization
5.	Long payback periods for capital investments, a relatively high risk factor and uncertainty, as well as changes in the economic situation in the country.	Write-off of expenses for the installation of equipment and the inclusion of their cost in the volume of capital investments for construction projects. Analytical accounting for long-term investments and capital investments is not kept. Manipulation of expenses in terms of write-off and partial write-off of the amount of expenses for construction projects.
6.	High share of overhead costs in the cost of construction products	Failure to comply with the estimate of overhead costs. Distortion of the structure of the cost of objects when accounting for costs for subcontractors. Inconsistency of the provisions of the accounting policy of a construction organization with the requirements of regulatory documents for accounting for the current reporting period.

Source: Table 2 was compiled by the author on the basis of summarizing and structuring sources [1, 6, 7, 8]

Due to the duration of the production cycle in construction, dividing it into separate stages, the formation of the financial result of a construction organization may occur unevenly.

The large volume of construction in progress and its significant share in the total volume of work performed requires the organization of analytical accounting of construction in progress. These features require the organization of an accounting and analytical system for each business process. It is necessary to determine the cost of construction for the entire construction period, conditionally distribute income and expenses to stages of work and specific business processes as they are completed. In order to determine the exact balances of construction in progress, you need to choose the optimal method for its assessment and approve it in your accounting policy.

Great importance should be attached to:
- conducting strategic planning and strategic management analysis,
- analysis of the reasons for deviations from the estimated costs and selected development strategies,
- maintaining internal (management) reporting.

Before construction begins, preparatory work, such as drainage, is usually carried out, and temporary living quarters are built for workers. This requires the organization of accounting for financial and material costs associated with such work. It is also important to conduct a management analysis of the resource potential of a construction organization. The construction of any construction facility is quite resource-intensive: there is a high material consumption, capital intensity, cost-intensiveness of the production process. Therefore, it is advisable to organize an accounting and analytical system for the nomenclature of material resources, budgeting, control over the consumption of materials. Such control should include the planning of material costs according to the norms, for the main groups of equipment, taking into account its design features and operating conditions, as well as the supply of materials - according to primary documents. In addition, the preparation of operational information on the current prices for building materials will help to calculate the economically feasible consignments of their supplies in time. Timely implementation of internal control and audit methods is of great importance. In construction, there is a clear technological sequence of construction work, in which the next process becomes impossible without completing the previous one. This feature requires the organization of operational accounting and analysis of expenses, income, financial results for business processes at each stage of construction work. The omission of defects in any of the processes creates a risk for the selection and distribution of building materials in the next stages. How can I avoid at seemed the situation? It is necessary to establish management control in the management accounting system and separate a separate type of work into an autonomous accounting object. With the help of architectural and technical supervision of construction, the quality of construction production is monitored - acts are drawn up on detected deviations from technology. This helps to quickly identify the costs of correcting marriage and the source of their funding. One of the production and technological features also includes a fairly long payback period for capital investments. This leads to risk factors and uncertainties. Therefore, the constant minimization of the costs incurred and the regular carrying out of their management analysis and audit are relevant. Today, the management accounting system of construction organizations should combine accounting, organizational, economic, managerial and other methods in a certain information space, that is, it is subject to digital transformation. Prospects for the digitalization of management accounting in the construction sector, in our opinion, are as follows. To organize an effective management accounting and analysis system at an enterprise, it is necessary, first of all, to outline the boundaries of its information support. Management accounting is positioned in the information and instrumental space of management of construction companies as a powerful driver of transformation processes. These processes are focused on the implementation of digital systems and technologies (Rojkova N. K., 2020).

The latest advances in technology, such as artificial intelligence, the development of an IT structure, big data, etc., cause structural changes and reboots in many areas of activity, including accounting. At the present stage, blockchain technology is a new tool that should be included in the toolbox of management accounting specialists. Blockchain can already be seen as a prerequisite for a revolution in accounting methods, for example, the accounting system. When using cloud blockchain technologies in the accounting process, a new reality of online accounting opportunities opens up for construction companies.

4. CONCLUSION

In this study, we have not limited ourselves to listing the currently insufficiently studied industry studies of organizations of organizations. We have structured the most important industry-specific features due to factors of the internal and external macro- and microenvironment. This structuring will help to simplify their use in accordance with the needs of construction organizations in the implementation of management accounting. It was found that their services to this area are methods of management and organization of construction work, a special production technology of the organization of management accounting, costs, and calculation of the cost of construction and installation work. Perhaps the considered features of the construction industry do not seem so significant to a non-attracted user of information. However, they lead to the complication of the activities of construction companies on the market, under the influence of numerous and varied factors. Therefore, it is necessary to search for specific approaches to the formation of various aspects of the accounting and analytical system for managing business processes. Risk management in the current activities of construction organizations is a prerequisite for their work. In this regard, the vital need for the organization of the system of management accounting and analysis is put forward at the forefront. Management accounting in the construction organization, as an element of its accounting and analytical system, provides management with data, first of all, on the costs and results of the enterprise, and its financial centers (responsibility centers, cost centers, income centers). This data is needed to manage, analyze, and control costs. In a construction organization, management accounting should be positioned as an analytical accounting of such indicators as revenues and expenses for major construction works. In addition to management accounting and management analysis, internal controls and internal audit are also essential elements of the accounting and analytical management system and it is able to perform large-scale tasks to evaluate internal control processes, risk management, corporate governance. The system of internal control and audit of construction companies, considering industry specifics, accumulates experience and necessary information about the types of risks and measures to eliminate or minimize them. Such a system can actively help risk management at every stage of risk management. In the context of the digitalization of the economy, management accounting is regularly replenished with new processes and competencies. Their introduction into accounting practice suggests a significant improvement in the quality of accounting work at all levels of management of the company. The study showed that the level of digitization of management accounting and analysis in construction organizations is low. It can be improved by improving the collection, processing, and preparation of information, as well as increasing its quality, speed and reliability. Blockchain technology is a new tool that should be included in a set of management accounting tools. Blockchain can already be a prerequisite for a revolution in accounting methods, such as the registration system. With the use of cloud-based blockchain technologies in the accounting process, a new reality of online accounting opportunities is opening for construction companies.

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DEVELOPMENT PROSPECTS AND WAYS OF IMPROVING TRADE AND ECONOMIC RELATIONS

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ABSTRACT
After 1993, the basis for using Azerbaijan's hydrocarbon resources in the interests of the people was laid thanks to the conclusion of the "Contract of the Century." Simultaneously, Azerbaijan started deliberate large-scale economic reforms. It was in those years that the foundation for our country's significant changes was laid. We note among them fundamental institutional changes aimed at replacing the old way of managing new free competition relationships. The purpose of these transformations was to implement political measures to create a market economic system, privatize state property, build new property relationships, and conduct land reforms. In addition, the opening of new production sites and the creation of new jobs in the non-oil sector made it possible to expand the infrastructure of production, transport and utilities and to create modern social infrastructure enterprises. Including increased building of new educational, health, and sports institutions. The foundations of our country's dynamic and sustainable progress as a whole were achieved during this period. It should be noted in particular that great progress has been made in solving social problems effectively over these years. For example, in accordance with advanced international standards, the population social protection system has been rebuilt. A new pension system began to operate and systems were developed and developed for targeted state social assistance and the provision of social benefits. The poverty rate dropped from 49.7% in 2000 to 5.2% in 2018 thanks to a successful social policy.
Keywords: *hydrocarbon resources, "Contract of the Century", economic reforms, fundamental institutional changes, competition relationships, economic system*

1. INTRODUCTION
After 1993, the basis for using Azerbaijan's hydrocarbon resources in the interests of the people was laid thanks to the conclusion of the "Contract of the Century." Simultaneously, Azerbaijan started deliberate large-scale economic reforms. It was in those years that the foundation for our country's significant changes was laid. We note among them fundamental institutional changes aimed at replacing the old way of managing new free competition relationships. The purpose of these transformations was to implement political measures to create a market economic system, privatize state property, build new property relationships, and conduct land reforms.

There was a further deepening of large-scale reforms in our country in the 2000s. These reforms created favorable opportunities for accelerated development, as well as conditions for a higher level of socio-economic progress in society. The country's investment environment has improved, the government has been rebuilt according to modern criteria [1]. Due to an increase in natural resource extraction and export, economic growth dynamics received a new impetus. In the context of the global economic crisis, this continued even in 2009. Therefore, we can confidently say that the Azerbaijani economy's growth is the result of the successful implementation of the strategic course chosen. Oil revenues have been channeled to the non-oil sector along with this. This has led to significant progress in this area's development and over the past ten years, the non-oil sector's average annual growth rate has been nearly 11 percent.

1.1. Problem Statement
In addition, the opening of new production sites and the creation of new jobs in the non-oil sector made it possible to expand the infrastructure of production, transport and utilities and to create modern social infrastructure enterprises. Including increased building of new educational, health, and sports institutions. The foundations of our country's dynamic and sustainable progress as a whole were achieved during this period. It should be noted in particular that great progress has been made in solving social problems effectively over these years. For example, in accordance with advanced international standards, the population social protection system has been rebuilt. A new pension system began to operate and systems were developed and developed for targeted state social assistance and the provision of social benefits. The poverty rate dropped from 49.7% in 2000 to 5.2% in 2018 thanks to a successful social policy. Wages and pensions in particular have been raised repeatedly.

1.2. Aim of the study
The country's successes in socio-economic spheres are also reflected in international rating agencies (Fitch Ratings, Moody's, Standard & Poor's) assessments of the Azerbaijani economy. Every year, these ratings have increased. In the Doing Business Report prepared by the World Bank and the International Finance Corporation, Azerbaijan improved its position, and in the World Economic Forum's Global Competition Report, it rose to a leading position among the Commonwealth of Independent States and the region [2]. As is known, total national income per capita is classified by the World Bank. According to this classification, Azerbaijan entered the category of "high average income" countries and, according to the 2010 UN Development Program for Human Development, left the group of "medium human development" countries and entered the group of "high human development" countries in 2018. Effective government regulation will be guiding principles to achieve these objectives. In a market economy, this regulation should ensure healthy competition, transforming it into an export-oriented economy. It will ensure the rational use of energy, create high added value and ensure the integrated development of socio-economic spheres. Within the concept, the goal is to transform the economy of the country into a productivity-based economy. To achieve this, it will be possible to increase the overall productivity of the factors of production [3]. When talking about improving the national economy's competitiveness, the following areas should be noted: protecting macroeconomic stability, strengthening monetary and fiscal policy coordination, improving the business environment and supporting private initiative, developing the financial services market, and improving foreign trade and investment policies. It is planned to maintain inflation at an acceptable level during this period, making a gradual transition to a more flexible free floating exchange rate of the national currency [4].

2. LITERATURE REVIEW

Measures will also be taken to improve the national economy's structure. This is done to ensure further economic diversification, that is, to create the economy's multi-vector sectors. Priority areas will be: modernization of the oil and gas sector and the petrochemical industry, diversification and development of the non-oil industry, expanding the possibilities of using alternative and renewable energy sources, developing the private sector and enhancing food security, expanding and developing trade and service activities, improving the structure of foreign trade and investment. The goal is set that during the implementation of the concept the average annual real growth rate of the gross domestic product (GDP) in the non-oil sector will be more than 7 percent. Accelerating economic diversification, maintaining high non-oil sector development rates in subsequent years, enhancing the economy's competitiveness and expanding the country's export opportunities are the main task at the current monetary policy stage. An economic model of export orientation is the basis of the development concept "Azerbaijan-2020: A Look into the Future." It is also planned to contribute to the growth of non-oil exports by improving competitiveness and improving the structure of the economy. Promoting and expanding innovation, as well as rapid non-oil industry development, will create a fertile ground for a knowledge-based economy in the country. At the same time, from the financial and credit needs point of view, the Central Bank's International Relations are primarily aimed at international financial institutions, developing the necessary cooperation with donor organizations, expanding the Central Bank's international relations, and strengthening the international image. The Central Bank and the provision of foreign technical assistance to the Central Bank's reforms. There are three main areas for this cooperation:

- Cooperation with financial and credit institutions around the world. This is done to attract financial and credit resources, including the central bank and the banking system as a whole, to the development of the state. Intensive cooperation with international financial and credit institutions is maintained by the country's central bank.

- Cooperation within the Poverty Reduction Program and the Credit Facility is undertaken with the International Monetary Fund (IMF). It is aimed at achieving economic development (PRGF). In addition, the IMF experts provided technical assistance to the Central Bank in setting up the Card Pressing Center, in preparing the State Program for the Development of the Central Payment System, as well as in other areas. Cooperation with the IMF was carried out to prepare the laws "On Banks" and "On the Central Bank of the Republic of Azerbaijan" in full compliance with international standards requirements.

- The European Bank for Reconstruction and Development (EBRD) is working to strengthen Azerbaijan's financial sector. His work in the financial sector is carried out in the following areas: securing credit lines for banks, participating in private banks ' capital and the Microfinance Bank, and privatizing state-owned banks.

- The opening of the Asian Development Bank (ADB) Representative Office in Azerbaijan in 2004 created more favorable conditions for active cooperation with the ADB. ADB experts consulted and discussed the preparation of "Financing Residential Apartments" throughout 2004.

- Cooperation with foreign central banks. To familiarize with existing world best practices and new technologies, to achieve the implementation of these standards and technologies in Azerbaijan's banking system and to determine the Azerbaijan Central Bank's authoritative position among foreign central banks, cooperation has been established with central foreign banks of developed countries Cooperation with the Bundesbank of Germany, the Polish Central Bank, the Swiss Central Bank, the Czech Republic's Central Bank, Turkey's Central Bank, Kazakhstan's Central Bank, France's Central Bank is being carried out in this direction.

- Cooperation with other organizations. The relations of the Central Bank with other international organizations are mainly aimed at providing technical support to the reforms that are held in the bank. For this purpose, close relations were established with the Swiss State Secretariat for Economic Affairs (SECO), the German Development Bank (KFW), the United States Agency for International Development (USAID) [5].

Thus, the Central Bank is a state-to-real economy intermediary bank. The remaining banks are carrying out this mediation. Indeed, the central bank is a regulatory body that combines the characteristics of a bank and a department of government. Nearly all central banks have some methods of influencing the economy. Traditionally they include: discount and collateral policies; minimum reserve policies: open market operations; deposit policies; monetary policies. However, a number of preconditions depend on the content of the standard set of methods and the combination of their use by banks in different countries. Attempts to bring modern central bank strategies of various countries to the traditional monetary policy concepts have shown that neither monetarism nor the theory of government regulation finds expression in the practice of influencing the economy of the country. We can expect an alternative approach to choosing a central bank strategy in the future. At the same time, market mechanisms are increasingly given priority over administrative regulatory methods [6]. An example of this is the liberalization of banking laws in the early 1990s (Austria, Italy, France, and others) in several European countries. The orientation towards regulating the rate of growth of money supply in the national economy or regulating the exchange rate of the national currency in relation to any stable foreign currency is one of the fundamental principles for determining the strategy of central banks. That is, we're talking about changing the discount rate value. The central bank's objective is to increase the cost of refinancing credit institutions to reduce their credit potential. So he has to raise the rate of discount. However, if there is a downward trend in the money market, this event will not bring the desired effect. The fact is that credit institutions are going to prefer interbank loans in this case [7]. The central bank needs to influence the money market by other methods to achieve this goal (by raising rates on minimum reserves, etc.). With other things being equal, refinancing for commercial banks will become more expensive in the event of an effective increase in the discount rate. And this ultimately leads to an increase in the country's loan costs. Note that the latest discount rate changes were made at a Central Bank Board meeting on 14 June 2018. The regulator then rejected abrupt changes and reduced the discount rate to 10 percent by one percentage point. And the corridor's upper limit was reduced from 14% to 12%. The corridor's lower limit remained eight percent. During the year, Azerbaijan's Central Bank reduced the discount rate three times: from 15% to 13% in February 2018, from 13% to 11% in April, from 11% to 10% in June. One of the new achievements in Azerbaijan's foreign economic relations is that a number of authoritative international economic organizations have admitted the country to membership. This is the first condition for the entry of Azerbaijan into international processes of integration. Azerbaijan has become a member of the International Bank for Reconstruction and Development (IBRD) and the International Monetary Fund (IMF), among other international organizations. These organizations were founded in Bretton Woods (USA) in 1945. These organizations ' creators were the United Kingdom, China, the USSR, the United States, France. The purpose of creating these organizations was to create a monetary union between the countries in the post-World War II organization under conditions of economic and financial system destruction [8].

3. RESEARCH METHODOLOGY
In order to stabilize the financial and monetary system, the IMF determines the conditions of assignments for implementation in a specific country. It requires recommendations from the

IMF for its member countries. The IBRD and the IMF currently have over 170 members. In September 1992, Azerbaijan became a member of those organizations. The IMF's quota for Azerbaijan is set at $106.86 million. Membership fee is equal to the quota for joining the IMF. 22.8% of the membership fee shall be paid in hard currency and the remaining fee shall be paid in national currency.

3.1. Considerations based on industry

The IMF is providing Azerbaijan with technical and financial assistance. The Fund's experts analyze Azerbaijan's economy, prepare predictions for its development. The Fund's stand-by loans already have a positive impact on our country's economy [9]. The foreign trade model is not an end in itself. As an integral part of Azerbaijan's overall economic strategy, it should serve as a powerful tool to implement plans to accelerate the transition to a market economy and raise the population's living standards. The Republic of Azerbaijan began to pay special attention to relations with international financial, credit and economic organizations after gaining state independence in its foreign policy. There has been a lot of work in this area over the past period. Azerbaijan can be said to have become a member of all prestigious international organizations. These include the International Monetary Fund, the World Bank, the Reconstruction and Development Bank of the European Union, the Islamic Development Bank and the Asian Development Bank since 1999 [10].

3.2. Model Specification

One of the priorities for the development of Azerbaijan's economy after restoring its political independence was the establishment of foreign economic relations in the right direction. Increased cooperation contributes to the country's economic potential, raw materials and mineral reserves, natural conditions and favorable economic and geographical position. These facts show structural and qualitative changes in recent years ' foreign economic relations. This is an example of the integration of Azerbaijan into the global economy. Cooperation with foreign countries provides advantages to Azerbaijan for its national economy's diversified development. This is why the establishment and development of mutual economic ties with foreign countries is an important factor in the development of Azerbaijan's national economy. The customs tariff [11] is one of the important ways in which the country is involved in foreign trade. For its integration into international processes, the Republic of Azerbaijan is remembered. Thus, on the threshold of the XXI century, it contributed to its further development. In the new century, Azerbaijan has increased its development pace. Another economic success has been achieved by our country. Evidence of this is the adoption on January 25, 2001 of the Republic of Azerbaijan as the 43rd member of the Council of Europe Parliamentary Assembly. The Commonwealth of Independent States, established in the early 1990s, was predominantly of a political nature, aimed at establishing inter-state relations between the former USSR countries. Today, this community is more focused on defining a concrete economic integration framework between the community countries. With a number of CIS countries, Azerbaijan established a free trade regime, a legal framework for free investment was issued. If Azerbaijan only exported fish, caviar, oil and silk to neighboring countries at the beginning of the 20th century, Azerbaijan now has economic relations with many world countries. The Republic of Azerbaijan currently exports oil, petroleum products and equipment, cotton fiber, tobacco, alcoholic beverages (wine), non-ferrous metals and chemical products and exchanges food products (oil, flour, sugar, grain, citrus fruits), metal and forest materials for automobiles and industrial equipment, light industrial goods (clothing, clothing, shoes), mineral fertilizers and household materials.

	January	March	May	July	August
Export	2 130 231.14	957 364.78	665 495.61	1 444 986.20	748 834.80
Import	721 010.85	850 318.77	782 371.08	911 126.18	790 609.00
Balance	1 409 220.29	107 046.01	-116 875.47	533 860.02	-41 774.20
Circulation	2 851 241.99	1 807 683.56	1 447 866.68	2 356 112.39	1 539 443.79

Table 1: Foreign trade turnover (million US dollars) 2020
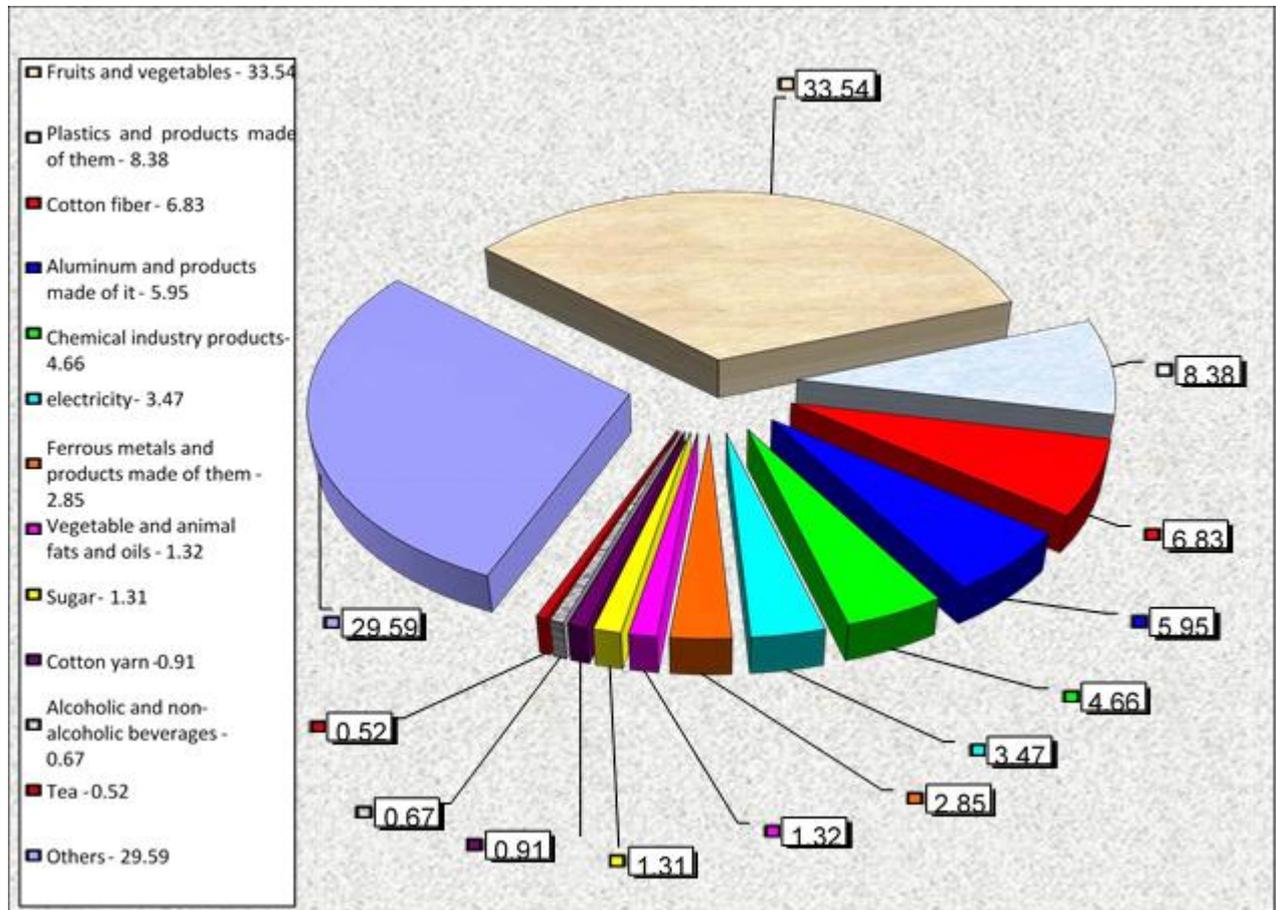
Figure 1: Data shows that exports are more important. And this, in turn, enables you to expand trade. Balance of Payments, 1000 USD
(Source: State Statistics Committee of the Republic of Azerbaijan, p. 401)

Thus, international relations were established in relations with a number of international financial and credit organizations following the restoration of the Republic of Azerbaijan's independence. Our country is a member of the World Bank (WB), the International Monetary Fund (IMF), the Islamic Development Bank (IDB), the European Bank for Reconstruction and Development (EBRD), the International Cooperation Bank of Japan and other international financial institutions. Because of this, Azerbaijan uses international credit facilities for its economic development. These funds support economic projects and finance our country's development-oriented investment projects [12]. At the same time, the Republic of Azerbaijan's trade balance and structure is found in international goods and services markets as well as in financial markets. Here they are closely intertwined, they directly affect the size of a country's national income, the state of employment, inflation rate, and other macroeconomic indicators. Each country's government can not fail to take into account the mechanism of interconnecting macroeconomic indicators in an open economy when formulating economic policy. At the same time, first of all, the main macroeconomic variables that characterize the participation of the country in the international exchange of goods, services and capital should be determined and

measured, and then a macroeconomic model that describes the interrelationships of these variables can be constructed. It is necessary to investigate (analyze) with this model how the economic policies pursued in a given country and in other countries affect the international flows of goods, services and capital. The basis of such a macroeconomic analysis is the balance of payments of the country [13]. As you can see, the figures in Table 2 show the development of the tourism sector (net income 219 378= 2713789-2494411). Net financial assets grew 3.4 times and Azerbaijan's direct investment 1.6 times respectively. Trade and economic relations dynamically developed in 2017. The Republic of Azerbaijan's trade balance has been positive-$ 610.9 million. Bilateral trade and economic relations structure continues to be fairly diverse.

4. DATA ANALYSIS AND INTERPRETATION

At the same time, the use of differentiated excise rates by the Azerbaijani side is a common problem for exporters to the Republic of Azerbaijan of goods subject to excise tax. They are much higher than local production excise rates on similar goods. Accordingly, in accordance with the resolutions of the Cabinet of Ministers of the Republic of Azerbaijan dated 15 November 2005 No. 209 and dated 25 January 2007 No. 16 for a number of goods, including Russian (yachts, sports and recreation swimming facilities and alcoholic beverages), higher excise tax rates are applied. The application of this discriminatory measure, as defined in Article 2 of the Free Trade Agreement, violates the principle of national treatment in mutual trade. Furthermore, it limits the free competition of domestic and imported products set out in Article 7 of the same Agreement [14]. In terms of preparing Azerbaijan for accession to the World Trade Organization, a number of international standards have been adopted in the field of information technology, building materials, agriculture, tourism and some other areas.
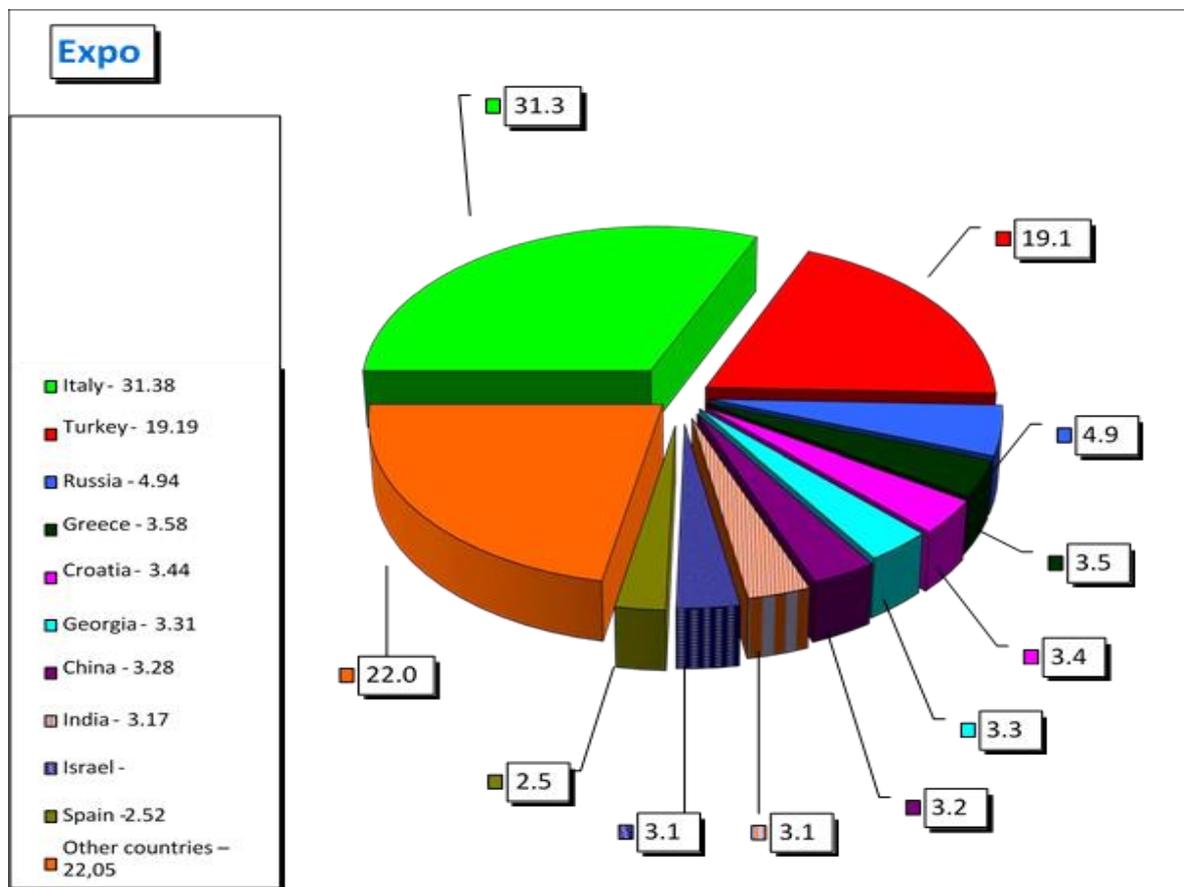
Figure 2: Percentage of main goods in the export of non-oil products

Azerbaijan applied for membership in the World Trade Organization in 1997. In 2007, a bilateral protocol was signed with Turkey on the completion of bilateral negotiations. In May 2008, a similar agreement was signed with Oman and the United Arab Emirates, and in May 2010 with Georgia. In the near future it is planned to sign protocols on the completion of negotiations with Moldova and Kyrgyzstan. Since 2003, Azerbaijan has been represented in the International Organization for Standardization (ISO) as a full member, and since January 1, 2010, in the European Organization for Standardization (CEN) as an observer. From January 1, 2011, Azerbaijan began to implement the World Trade Organization Code of Practice for the development, preparation and approval of standards, technical regulations and standards. Azerbaijan could continue to increase the supply of fruit and vegetable, wine-brandy and other products of traditional exports. In 2020, exports of products amounted to 13,060,548.39I thousand \$, while imports were 9,685,515.80 thousand \$. (State Committee on Statistics, p. 648). Implementation in Azerbaijan of state programs for the development of regions, modernization of road and transport infrastructure, technical re-equipment of the fuel and energy and petrochemical complexes, the sphere of information and communication technologies and other industries, the creation of free economic zones will be accompanied by an increase in Azerbaijan's needs in importing automobile and construction and road construction. equipment, railway rolling stock, various machines, mechanisms and technological equipment, metal, metal building materials, etc. In addition, the implementation of the state program to ensure food security of Azerbaijan opens up additional opportunities for foreign suppliers of agricultural equipment, fertilizers, highly productive seed and livestock material [15]. From table 3 it is clear that Azerbaijan is actively developing its foreign economic relations with its main trading partners. This is primarily evident in the oil industry. There is also a growing export of oil and oil products. The country currently has many proposals for developing cooperation in this sector with Georgia, Turkey, Ukraine, Romania, Bulgaria, in particular for transiting and partly processing Azerbaijani oil through their territory. There are projects on Turkmen natural gas transit, Kazakh oil transit is being conducted. Therefore, in order for Azerbaijan to be more sustainable in the aftermath of the crisis, the country needs to overcome the very high dependence of exports and the balance of budgets on oil prices. Accelerating structural reforms, diversifying Azerbaijan's national economy, improving business conditions, expanding the tax base, attracting foreign investment in the non-oil sector, and strengthening the banking system continue to be priorities for the country's development [17]. Azerbaijan attracted loans from this structure not only for money sake, but also for technical assistance and for the purpose of receiving advice. Our country has accumulated great accomplishments over the past few years in building democratic institutions and a free market economy. Stability and sustainable economic development have provided a solid foundation for democratic reform and combating unresolved social and economic problems. As of 1 January 2018, Azerbaijan's total public debt was 17 billion 7 million manat. 93.9 %-15 billion 978 million manat (9 billion 398 million dollars) of total public debt is external debt, 6.1 %-1 billion 29 million manat (605 million dollars)-domestic debt. Overall, 22.8 percent of gross domestic product (GDP) is the share of external debt, and 1.5 percent of GDP is the share of domestic debt. The total government debt of the country amounted to 24.3 percent of GDP in 2017. The ratio of total government debt to foreign reserves was 23.8 %. "45.1% of external public debt should be repaid within 10 years of the reporting period, 51.2% -10 to 20 years, 3.7% -over 20 years. External public debt will grow in nominal terms in the existing portfolio in 2018, amounting to \$9.42 million.

5. CONCLUSION AND RECOMMENDATIONS
Azerbaijan's relations with international financial organizations are very important not only for the state's current state of development, but also for the possibilities of building a sustainable

economic development model in the long term. The way to integrate Azerbaijan into international economic and political relations is through cooperation with international financial organizations. The development of a market economic system and a model of relationships with foreign partners and creditors based on market fundamentals was central in this direction. The main requirement for implementing relevant programs in this case is the integration of the economy into the world economy [19]. Azerbaijan's relationship strategy with international financial organizations should be based on the national economy's current state. There is also a need for conceptual certainty, which is to include a model of cooperation with international financial organizations and private creditors in the general socio-economic development model. The forms of continued cooperation with such organizations need to be clearly defined in the strategy of relations between Azerbaijan and international financial organizations. It is possible to change the very principles of relations with international financial organizations, taking into account the practice of recent years and the irregularity of financial resources. A possible direction for further building relations between Azerbaijan and international financial organizations is the transition from directly receiving financial resources to obtaining political and advisory support from these institutions [20].

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APLICATION OF INNOVATIVE KNOWLEDGE AND SCIENTIFIC IDEAS TO TEACHING FOREIGN LANGUAGES

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ABSTRACT
Currently, one of the most relevant issues in Azerbaijan is the development of innovations. The knowledge – based innovation is even more important. The role of innovative methods in learning a foreign language is great. The rapid development of the world requires knowledge of more than one language. It plays an important role in bringing people closer together and communicating with each other. Originating in America for the first time, the term "innovation" has been widely used in all fields of developing science and technology. The innovation system is primarily based on scientific knowledge. It comes to life thanks to computers and the Internet. Innovative scientific knowledge is applied in learning foreign language. This article explores how and in what ways scientific ideas based on innovative knowledge are applied in foreign language teaching and attempts to describe the current scene.
Keywords: *science, knowledge, innovation, computer, foreign language*

1. INTRODUCTION
Nowadays, one of the relevant issues in Azerbaijan is the development of innovations, and the knowledge-based innovation is even more important. The role of innovative methods in learning a foreign language is great, moreover the rapid development of the world requires the knowledge of more than one language. It plays an important role in bringing people together and communicating with each other. People who know a foreign language benefit from it in many ways: they learn about the cultures of different nations, they gain career opportunities, they develop individual scientific and artistic creativity, increase their worldview, sharpen their thinking and intellect. Political, economic and cultural relations with the countries around the world, as well as the ties between nations and cultures open new doors in the communication process. This set forth the new theoretical and practical problems in teaching foreign language and requires finding solutions to these problems. "One of the most important aspects in the teaching process is to establish real communication conditions by creating natural situations and discussions in a foreign language*" [1,11].* The traditional method is gradually disappearing due to the development of science and technology, and as in any area the innovative knowledge and ideas are beginning to be applied. But what exactly is innovative and innovation?

2. EMERGENCE OF THE TERM INNOVATION
The term "innovation" first appeared in 1912 in the work "Theoretical Development Theory", written by the American economist Joseph Schumpeter (1883-1950). The concept of innovation does not mean invention and discovery. Here, the common characteristics and sufficient differences are in the form of unity. If discovery and invention are things that already existed and were not known to the public, innovation is novelty. Innovation is a concept that is not based on the assertion of new fundamental truths through expressing cardinal and revolutionary mechanisms. "*For the first time in the United States, the innovative methods have been used to teach this foreign language. In the early 1960s, computers began to be used in foreign language classes at other US universities, as well.*" [1, 13]. In the 1970s, the information and communication technologies began to be used in foreign language classes in Western Europe, Japan, Russia, and Latin America. However, all this does not mean that at that time (1960-1970

years) the information and communication technologies were widely used in foreign language classes. This happened gradually in the countries of the world. Already in the XXI century, the scientific innovations have begun to be applied in Azerbaijan, as well. Of course, since gaining the independence, Azerbaijan's science and technology have entered a new stage of development. Thus, in turn, plays a role in activating the innovation. *"According to the Decree of the President of the Republic of Azerbaijan Ilham Aliyev No. 355 dated August 21, 2004, the preparation of the "Program for providing comprehensive secondary schools in the Republic of Azerbaijan with information and communication technologies (in 2005-2007 years) was of special importance"[4].* Within the framework of the implementation of the program, a lot of work has been done in the field of providing the comprehensive secondary schools of the country with computer equipment and the interactive learning methods with the application of ICT have been developed with increasing attention to the construction of education based on ICT. Based on this, it is possible to move towards development based on knowledge and the use of innovations by making fundamental changes, taking into account modern conditions. In particular, modern methods and techniques are used in the study of foreign languages. The traditional methods are already disappearing. It has already proven that learning using innovative methods in accordance with the requirements of the time is a more effective and affordable method. The methods such as increasing the level of communication, learning by having fun, learning based on hearing rather than reading are innovative methods in learning a foreign language. Because it is required by such elements as education, fundamental science, scientific and technical business, human capital in the broadest sense, knowledge and production of high technologies, which are already part of the infrastructure of the knowledge. The knowledgeable society, the development of innovation is already important in all areas. The goal of Azerbaijan as a state and society is to become a country that produces knowledge, as well. The main task facing the state is not to be left out of the development process of the world. Therefore, it is important to ensure substantial progress of innovation in all areas.*" The National Strategy for the Development of Science in the Republic of Azerbaijan for 2009-2015 years was adopted." This document states that the development of science and technology, the creation and application of advanced innovation systems are among the strategic goals of state policy. The objectives of the strategy include increasing the efficiency of research and innovation policy, technological modernization of the country, the widespread use of innovations aimed at improving the efficiency of human activity in a particular area. One of the important sections of the strategy is devoted to the integration of science, education and production. This section emphasizes that the integration of science, education and industry as components of a perfect system in the Information Society must be based on knowledge.* [5].

3. INNOVATION AND TECHNOLOGY

The innovation is also closely connected to technology. Without technology, there can be no innovative education based on knowledge in science. *According to the Dictionary of Philosophy written by editing T.Frolov,"the technology presents an evolving complex artifact system, production operations and processes, resources, and subsystems of social outcomes that interact with information, management, financing, and other technologies"* [20]. *a large, explanatory sociological dictionary "Collins" explains the presented concept as follows: "Technology is the practical application of science and the methods of its application in the field of production use in the field of productionr"* [19]. The changes and innovations that have taken place in the XXI century, the innovative approaches to the organization of teaching, improvement of the content and methods of teaching, the information and used communication technologies have created conditions for teaching a foreign language. The main work in the teaching process in this area is under the responsibility of trainers and foreign language teachers.

Such factors play a role in increasing their activity and strengthening their creative pursuits. Currently, active (interactive) teaching methods, which are now more widely used in comprehemsive secondary schools and higher educational institutions, lessons based on new teaching methods organized with enthusiasm, and articles that reflect the elements of innovation are evaluated as the results of these searches. Students are highly motivated and interested in teaching based on innovative methods. They aspire to study more enthusiastically. If teaching in the traditional method is teacher-oriented, teaching in the interactive method is student-oriented. Here the teacher communicates directly with the student, and learning through entertainment and application of student-oriented methods of teaching creates the best conditions for students to acquire knowledge. Thus, Students can easily overcome language barriers in this area. Universities should play a leading role in the formation and development of the national innovation system, raising the innovative level of the society, and shaping an innovative culture. Knowledge and information are becoming a decisive factor in the development of the world education system. One of the important issues is the ability of many teachers who teach foreign languages to use information technologies correctly and purposefully, especially the ability of teaching foreign languages with innovative knowledge and skills. The formation of educational institutions, whether they are comprehensive secondary schools or universities, as competitive modern educational institutions should also cover all the directions of innovative activity. Innovations should play a leading role in the activities of all structural units of educational institutions. For this purpose, if necessary, it is expedient to create additional innovation-oriented infrastructure departments within the university. The main purpose of these infrastructure units should be to create and implement innovative products.

4. THE ROLE OF THE INTERNET AND COMPUTERS IN LEARNING FOREIGN LANGUAGE

There are many advantages of using information technology in the process of teaching foreign languages: the Internet network is a rich source of authentic material for learning foreign languages. Here, each of students can gain innovative knowledge in accordance with their area of interest. Pupils and students can enrich their worldviews by getting acquainted with the latest developments in the world through the Internet. The familiarity with authentic materials teaches everyone how to learn a language. Correspondence and conversations between students strengthen their language skills. Internet resources allow pupils and students to communicate with native speakers live. They understand that the foreign language used on the Internet is different from the teaching materials given in the textbooks. The process of learning language can take a different direction and their being motivated is important. Motivation helps students learn faster and more. Both in comprehensive secondary school and in high educational institutions, in the rooms equipped with Information and Communication Technologies the materials are taught through videos, picture dictionaries, audio exercises, listening dialogues, games that will add color and make the lesson more interesting. There are many online resources that we use to provide high-quality teaching of pronunciation, grammar, literature, phonetics, new synonymous antonyms, phrases and their explanations. There are 3 stages of computer-assisted language training. *"The first stage is called language learning with a structured computer covering the 1970s and 1980s. The main leading methods at this stage of computer based language teaching were grammar-translation method and audio-lingual methods. In this case, the main didactic purpose of using computers was to teach the structure of the language and thus perform tasks correctly, and the purpose of the lesson was to ensure the extreme accuracy and precision of the language. The second stage is called computer-communicative language learning, covering the 1980s and 1990s. At this stage, the main method of learning a language on a computer was communicative language learning. Thus, it required the language to be learned logically in the classroom.*

At this stage, the communicative activities on the computers are used, and the main goal was to achieve fluency at the lesson. The third stage is called interactive computer language learning, and it covers the 21st century" [9, 21]. Mastering the foreign languages is extremely important in order to adequately respond to the integrative processes taking place in the XXI century, characterized by such concepts as "globalization and internationalization", "information and nanotechnology". Post-industrial societies and transnational corporations "are also important in modern education. A project to apply modern teaching methods is already being implemented in Azerbaijan. In recent years, our country has accumulated basic experience that is important for the preparation, planning and implementation of active lessons, and teachers have developed basic knowledge, skills and habits. Although, the innovative education is combined with traditional education, textbooks should come in the first place. The textbook is rich in topical issues, focused on the development of oral speech, rich in audio and video materials to develop listening comprehension skills. "*The provided materials serve the development of intercultural dialogue, and have taken from real life. Mostly the textbook consists of materials from the BBC, documentaries and fragments from feature films*" [1,199]. The textbook contains grammatical and lexical exercises for different purposes, which form the foundation for mastering these competencies, in addition to instilling communicative competencies in the reading process. Due to the different approaches to the teaching of grammatical material in the teaching and learning of foreign languages for communicative purposes, the colorful grammar exercises reflected in the *Reading* lessons have served the effectiveness of the reading and comprehension process rather than instilling theoretical knowledge. "*Effective work conducted on written comprehension texts has also created a favorable environment for easier mastering of the Intercultural values rubrica and in this lesson, it has also created the grounsd for more purposeful acquisition of communicative skills.*" [1, 89].

5. APPLICATION OF INNOVATIVE KNOWLEDGE IN FOREIGN LANGUAGE TEACHING

Knowledge of foreign languages is also very important in terms of human formation and integration into secular scientific knowledge. The most important reason for failures in learning a foreign language is the applied traditional methods. Students who start learning a foreign language do not develop creativity and follow grammatical rules, which complicates the learning process. İnnovations, i.e. the innovative methods are based on a student-oriented interactive learning style. New learning methods in language learning, such as psychodrama and sociodrama, are widespread around the world. Differences in the perception of individual learning have been expressed in recent years as an important point in terms of foreign language education. Everyone's learning ability may be different. However, there are different language learning methods that everyone can benefit from.

5.1. Motivation

As in the teaching of any subject, the student must be motivated at first. Motivation is very important in learning a foreign language. The research of Robert Gardner, Richard Clement and others related this issue began 60 years ago. The motivation covers the first 5-10 minutes of the lesson. In this case, the teacher is given the opportunity to attract the interest of students. The student can be encouraged by testing the assignments in a truthful way and for some specific achievement (even if it is small). It can be expressed in the form of "you have a lot of potential," "you seem to put in a lot of effort," and so on. This has to be in a reasonable format. *"In the first weeks of the school year, to create such motivation, using dating games (icebreakers, classbuilding activities), bellwork / do now) strategies, and so on. creates a positive atmosphere in the classroom and improves learning outcomes.*

In general, before applying any methodology, it is necessary to pay attention to three points: 1) the chosen method should be consistent with the purpose of training, 2) the chosen method must meet the requirements of visual, acoustic and kinesthetic abilities of students, 3) the differentiation should be used, if there are sharp differences in the language level of students" [15].

5.2. Working with texts

The main purpose of teaching written meaning in communicative learning is to teach language learners to read unfamiliar text for different purposes and to understand what they are reading. However, reading comprehension in foreign language teaching is closely related to the goals and objectives of each lesson, as well as the strategies for achieving these goals. The open ended and closed questions in the texts are designed to test the logical perception of students. Thus, the questions are designed to instill such skills as testing children's attention and to draw logical conclusions, to connect parts of the text. The designed questions also focused on students' ability to analyze and express their personal opinions. These types of questions are more likely to cover closed-ended test tasks. Text is also a source of information. And this creates interdisciplinary integration. The historical text written in English, the life story of any writer, the medical function of a plant, any scientific text written about the space, the texts on the field of sports (texts related to the history of tennis and badminton), the texts on the history of any sport, even if the texts are aimed at teaching a foreign language, they increase students' worldview by providing them with additional knowledge and information. Therefore, working with texts, instills such skills as vision, comprehension, thinking. The teaching of foreign languages is very different from the teaching of other subjects. The main feature of teaching the foreign languages is the fact that the lessons are based on previous knowledge, the inter-subject chain, which brings them closer to the exact subjects. The development of pronunciation, vocabulary and grammar, reading, writing, listening and speaking skills are in the spotlight when teaching the foreign language and the assessment is carried out according to these criteria. Reading, writing, listening refer to the language skills. In the teaching of Russian, English and any other languages, the attention should be paid, first of all, to the study of new words in context, and most importantly, the attention should be paid to the development of reading skills,on conditions that the correct pronunciation and correct usage are explained in the sentence. It develops both writing, and helps to feel the language, and makes the "repetition" of vocabulary and grammar more meaningful. Language is a means of communication, it consists of words, and pronunciation and grammatical rules come to life in words, it is impossible to speak and understand what you hear without knowing the words.

6. COMMUNICATION SKILLS

In addition to being the means of communication, the language is also a part of the social life. Naturally, the communication established on the live Internet is different from the teaching of a foreign language taught in the textbooks. *Therefore, the use of the communicative method in language teaching has been welcomed by scholars and methodologists. Communicative language training allows students to learn the language in the communicative language environment. [18, 59].* Since language is the means of communication, the main purpose of learning it is to acquire the ability to communicate in that language. The effective way to do this is to allow all the students, to crate the conditions to speak in the foreign language as much as possible during class. The more communication progresses, the faster and quicker the conversation will take place. *"Ioannou Georgioun also states that computer-based communication serves originality, as well. He notes that the language used in computer-based communication activities is original, and that the communication itself is original and Ioannau Georgioun also says that the computer communication motivates the students and gives them*

the positive attitude towards language learning. This will be especially effective if it is organized as a part of a language program, rather than as an additional activity for students". [10, 200] More effective teaching of foreign languages in educational institutions is carried out on the basis of communicative competence. The use of learning tools within the framework of communicative competence has the maximum effect when they are applied in a timely, purposeful and professional manner, and the features of computer programs and the Internet system are mastered in order to listen to the original language and listen to the linguistic features of the speech in audio and visual form, to gain the opportunities for independent distance learning, from audio and vidoe recordings. In addition, the modern cell phones have various language learning programs in the "play store" application. By connecting to the network via the Internet, students can download various applications. One of the most popular applications of recent times is the "Cambly" application. Thus, by joining this program, it is possible to communicate with any foreign language teacher from anywhere in the world. The teachers from all over the world are joining to the application for this purpose. Live conversations and correspondence are available in this program.

6.1. Digital education
The rapid development of technology has resulted in an increase in the number of Internet users among students. The use of computer technology in education develops the teaching process. Recently, the development of digital network infrastructure, ensuring a certain level of coverage of educational institutions with the domestic Internet network and the provision of high-speed internet access is important in the teaching of innovative knowledge. Warschauer, Shetzer, and Meloni call the computer-based communication the asynchronous communication, wherareas the synchronous communication with a computer is described as hypertext. [17, 49]. "In the 1970s and 1980s, computer-assisted language teaching attracted the attention of very few teachers. However, the rapid development of the computer and the popularity of the Internet in the 1990s increased the interest to this field. Initially, English learners can train 24 hours a day with native speakers and other students from around the world. Today, computer-based communication is very important in the society and in the classroom" [18, 31]. Although computer language learning materials share many common features with other language materials, there are also many different aspects of the computer. There are totally seven types of computer language learning activities. These are: writing, communication, multimedia, computer literacy, coordination and reference skills, tests and distance learning. *Jeremy Harmer notes that the use of the Internet in education, and especially in language laboratories, has grown at an extraordinary rate. He considers references, language teaching and testing programs, sharing e-mail information and word processors to be the basis of teaching language via computer.* [3, 145]

7. CONCLUSION
Educational reforms in each country must be based on innovation, forward-looking and should be preventive in nature. In view of all this, it can be said that the Internet is a rich source of authentic materials for learning foreign languages. The materials used in the lessons using Information and Communication Tecgnology are more memorable, the lessons using Information and Communication Tecgnology are more interesting and the lessons explained are clearer and more understandable. In language teaching based on modern technologies, the study of language through communication comes to the fore. In this sense, students can develop their language skills using synchronous and non-synchronous means of communication via the Internet. Using the ICT in a high level is the best way to learn and memorize a foreign language. However, the current level of application of modern information and communication technologies in foreign language teaching cannot be considered satisfactory in terms of

integration into the world educational space. The digital network infrastructure must not be weak. Despite all this, foreign language teaching is already based on scientifically innovative knowledge in many developed countries, including Azerbaijan. In this direction the motivation, working with texts, communication skills, digital education, internet and computer technology, and several innovative methods and techniques play an important role in learning a foreign language and are based on the innovative knowledge and scientific knowledge.

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FINANCIAL PERFORMANCE EVALUATION AND BANKRUPTCY PREDICTION

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ABSTRACT

Research into financial failure and bankruptcy has been continuing by deepening for more than fifty years. The basis of this researches stands on the calculation of the bankruptcy rates, more precisely the bankruptcy risks, by examining the financial indicators of the companies. Calculating the bankruptcy risk of businesses as a result of models is extremely important in both micro and macro terms. Although the actuality of these issues increases even more after each crisis, so far it has not come to a single conclusion. There are multiple reasons why it cannot become a single result. Because bankruptcy can occur for many reasons. These reasons vary due to the place, time, and other factors. The main purpose of the subject is to investigate the causes of bankruptcy, to measure the applicability and linearity of the models as well as to test the predictability of bankruptcy in Azerbaijan banking with Altman Z-score and Springate models. As a result of the tests, the following findings have been reached. Z-score results can reflect real financial performance. So, the scores of the banks that have protected their sustainability are generally distributed between 1.8-3.0 at various times. For z-score, these scores are scores that can be considered normal. In addition, scores of less than 1.8 and above 3.0 are also observed. Unlike the Altman Z-score model of the Springate model, it has been revealed that the scores obtained as a result of applying it to Azerbaijan banking do not reflect the real financial performance. The main one of our scientific and practical conclusions is that bankruptcy models are not always the same in terms of linearity. In our research, we encountered banks that did not go bankrupt even though their z-score was below 1.8. The reason for this is the reasons we have just mentioned. They vary due to local and time factors. For this, before applying the model, the characteristics of the model in terms of the sector, the state of the economy and the region to be applied should be considered.
Keywords: Bankruptcy prediction, Sustainability, Azerbaijan banking sector, Altman Z-score model, Springate model

1. INTRODUCTION

For more than 50 years, modern researches have been conducted and tested at the international level, whether in terms of measuring financial performance or related to bankruptcy. Although much researches have been conducted on the bankruptcy models of businesses so far, no definite conclusion has been reached. Therefore, such sensitive issues should be used with modern data. One of the reasons that increase the actuality of the subject is that the concepts of financial performance and bankruptcy are not used only in limited areas and are valid for all businesses that provide production, trade, and service. Looking at the recent years, the 2008 international crisis and the local crisis in 2015 have fully demonstrated how important it is to regularly control financial performance figures in all areas. The purpose of forecasting bankruptcy is to evaluate a company's financial condition and expectations in its activities. Corporate bankruptcy forecast is a very important phenomenon in the economy. Not only owners but also other participants are concerned with the financial sustainability of the company. Participants and interested parties include the government, investors, banks, internal management and consumers, and the public.

Accurate estimation of the financial performance of companies is of great importance in making important decisions about various stakeholders, relationships, and participation with companies. Bankruptcy forecasting is a great tool at their disposal to avoid significant loss by lenders and investors, banks, and other persons. We can list our goals as follows:

1) Evaluating the applicability of the Altman Z-score and Springate models to our data set
2) Evaluating the consistency of the figures obtained as a result of the application with practical data.
3) Evaluating the applicability of modern modeling methods to the banking sector of our country.

By conducting quantitative research, the data were collected from publicly available sources, analyzed with Altman Z-score and Springate models. The reports of banks operating in the Republic of Azerbaijan, the reports of the Azerbaijan Banks Association, and the Central Bank of the Republic of Azerbaijan were used to conduct research and evidence the validity of the hypotheses.

2. LITERATURE REVIEW

There were no sophisticated statistical methods and computers for predicting bankruptcy in the first half of the 20th century. Financial ratios of successful and unsuccessful companies were compared. By was recording low rates in companies that went bankrupt, it was begun using it to predict bankruptcy in the next years (Fitzpatrick 1932). The first methodological breakthrough came from Durand. Durand published a credit scoring model that works with univariate discriminant analysis. Durand's analysis was established only in terms of credit. Because Durand set up a model for measuring the bank's credit portfolio, saying that the bankruptcy of lending companies was due to "bad loans". What Durand called "bad loans" were overdue loans for more than 90 days. According to Duran, the better loan the company gives, the less risk of bankruptcy and the higher the probability of financial success. So The Author used a large sample of 7,200 consumer loans allocated by 37 financial institutions. These included age, gender, marital status, dependents in the household, salary, and other socio-demographic variables. In addition, loan features such as the borrower's assets and debts and the amount and number of installments were also available. Durand separated the unsuccessful loans and grouped the customers who received them according to the characteristics it is mentioned above. In this way, Durand built a group of customers and the company's credit portfolio began to be scored according to these characteristics (Durand, 1941). This method later became widespread around the world with Beaver's univariate discriminant analysis-based model. We can say that these studies are the last examples of univariate discriminant analyzes (Beaver, William H, 1966). This is because Myers and Forgy, realizing that classifying the observations made using a single variable, did not provide a reliable result, developed a credit rating system for banking customers. They applied multivariate regression analysis and discriminant analysis in their models. Multivariate discriminant analysis showed better results compared to previously applied models in the case of risky customers. Therefore, more attention was paid to the method of multivariate discriminant analysis (James & Edward W, 1963). New York University Professor Edward Altman developed a new model in 1967 called the Altman Z to score formula to develop a tool for predicting bankruptcy. Since Altman Z score and Springate models will be used in our application, they will be studied extensively. Gordon offered another view on corporate financial distress. According to Gordon, a company experiences financial distress is when its earnings fall and the value of its debt exceeds its asset value. In such a case, the bond yields fall below the risk-free interest rate in the market and the firm starts to struggle. (Gordon, 1971). According to Denis, if a company suffers losses for at least 3 years in a row, it is unavoidable that it will experience financial difficulties.

According to their research, when a company is in financial distress, its cash flows become negative and cannot pay dividends. Therefore, the decline in dividend payment, combined with negative net income, forces the company into financial problems (Denis 1995). Platt used the definition of operational to identify corporate financial distress. In his opinion, it is in danger if a company is experiencing one of the following situations: negative net activity for several years, major downsizing, pause in dividend payments, and financial restructuring (Platt, 2002). Purnanandam tried to explain the corporate financial distress in terms of solvency. When a company fails to pay interest or make claims on debt contracts, it falls into financial distress. According to Purnanandam, when the final value of a company's assets falls below the nominal value of its debt, it may fall into financial distress in paying its debts. That is why, in this definition, a company may experience difficulties even while still fulfilling its obligations (Purnanandam, 2005). Ling tried to identify a model that could predict bankruptcy in China. In this study, two groups of companies were tested in 1998 and 1999. A balanced group of financial and non-financial distressed companies has been selected. This study tested 15 financial ratios including profitability, solvency, and liquidity ratios. Using MDA, he reached the model named Z-China Score. On other hand, this score includes asset-liability, working capital, return on total assets, and undistributed earnings ratio (Ling, 2007). Bhumia created a predictive model. This study was conducted in India, it was tested on the data of private sector companies from 1996 to the end of 2005. Five-year reports of companies that failed were received. The selected companies are from the manufacturing sector and were matched between 32 successful companies and 32 unsuccessful companies. It was tested to be significant in the 7-rate discriminant function. The prediction power of the model established with this function was 88% and 94%. This study also proved that although there are more tools to use in predicting a company's failure, MDA can still predict bankruptcy with a high accuracy rate (Bhumia, 2011). A study by Laitinen and Suvas obtained 1,255,768 unsuccessful and 22,594 failed annual firm observations from 26 European countries to determine the impact of Hofstede's original cultural dimensions on financial distress forecast. A logistic regression model was used to predict a company's future financial condition in an international context. The rate of return on assets (ROA) and the equity ratio used to measure the success of the company, regardless of occasional deviations, play a vital role in bankruptcy prediction models. Therefore, according to this study, solvency, and profitability are mandatory predictors of bankruptcy in international financial modeling (Laitinen & Suvas.2016). We can show to the bankruptcy forecast surveys recently conducted with logit analysis, the "Institutional bankruptcy forecast for Kenya listed businesses" study published in 2020. In the research, there are 64 companies currently listed on stock exchanges in Kenya. The study used the ten-year financial statements of companies that existed in the stock exchange. Financial statements are taken from Nairobi Securities as well as the Capital Markets Board. While canonical correlations were used to establish relationships between variables, Logit analysis was used to create a model to estimate the financial distress of a company. As a result of logit analysis, the most common bankruptcy forecast predictor was found in the study as the return on assets (ROA) and return on equity (ROE) ratios. (Ogachi, Ndege & Gaturu, 2020). By analyzing the financial statements of "Thomas Cook Group" which declared bankruptcy for the years 2015-2018 by Akbulaev, Guliyeva, and Aslanova in 2019, with Altman "Z" score, the model was found to be valid (Akbulaev, Guliyeva, & Aslanova, 2020). However, it should not be forgotten that various models have been designed to measure the insolvency of companies around the world. Each model has several deficiencies during its implementation. One of the deficiencies faced by the models is that a model cannot be transferred and applied from one country to another due to the difference in economic conditions between countries. A well-developed model in one country may not work well in another. Therefore, it needs to develop a forecast model that takes into account the specific conditions of a particular economy, using real data on the financial situation.

3. EVALUATION WITH ALTMAN Z SCORE AND SPRINGATE MODEL

The Altman-s Z score model is regarded as one of the pioneers in financial stability and financial performance. We can almost say that most of the models made by discriminant analysis from that on have been made as an alternative to Altman. Although the Altman Z score model has been established fifty years from now, it has been observed that even in the modern economy it predicts bankruptcy two or three years in advance. In addition, after the financial managers tested the level of this indicator, they can prevent the risk of bankruptcy if they take proper steps. (Altman, E. I. 2000). According to Sanobar Anjun, Altman's Z-score model is one of the most influential multi-faceted analyzes researched in the last 40 years. (Anjun, 2012). According to the Altman model, when banks' scores are above 3, banks are financially strong. It was stated that the banks performed close to normal in the 1.8-3.0 intervals of the score. The model score below 1.8 indicates that the probability of the banks experiencing a crisis in the coming years will be high probability and they may go bankrupt.

The Altman Z score model is an analysis of the following variables:
- $Z=1.2*A+1.4*B+3.3*C+0.6*D+1.0*E$
- A (Working Capital) / (Total Assets)
- B (Retained earnings) / (Total Assets)
- C (Earnings Before Interest And Tax) / (Total Assets)
- D (Market Value Of Equity) / (Total Liabilities)
- E (Total Sales) / (Total Assets)

First of all, we will look at the ratio formed by dividing the earnings before interest and tax, which has the highest rate, by total assets. The fact that this ratio gives lower values for several years in a sequence may indicate that the results of core activities of the company have deteriorated. The higher the operating margin, the more added value is generated by the company, allowing this ratio to reach the big levels. According to the model the bankruptcy risk of businesses that reach these indicators is reduced. The second ratio we will describe is the ratio resulting from dividing retained earnings by total assets. This ratio reflects the company's reserves and investment strategy. Lower or decreasing values of the reported results may indicate the downtrend in profits, reserve erosion, or reduced dividend distribution due to the losses of recent years. Because of these reasons, this ratio is given as 1.4 which is considered as strong. The ratio of working capital to total assets reflects the company's liquidity. We know that liquidity often has an important share in bankruptcy, so this ratio is also within the ratios that seriously explain the model. If working capital is a very small part of total assets it can create funding problems for the company. According to Singhania and Mehta (2017). the more stocks the company holds, the higher the risk of market value fluctuation, short-term liquidity pressures. The ratio of total sales to total assets shows how effectively the company uses its assets to make sales. To find out whether this value is more or less, the industry average of the business can be taken as a reference value. Low levels can indicate that too much capital is locked in assets. High values may indicate that the company has too little assets for its potential sales level. The ratio of the market value of equity to total assets is the ratio that affects the model with the lowest proportion. According to our researches, the low ratio of this ratio is not at all because it is less insignificant than the others. This indicator shows the financial structure of the company and its ability to finance itself. Lower values indicate high reliance on external financing and reduced prospects of additional financing. However, if the company becomes over-indebted, this will increase the financial burden, jeopardize business partnerships with suppliers or customers, and increase the risk of bankruptcy. (Turner, j. 2016). For this reason, this ratio is normalized and given with a small proportion, not because it is of little importance. The Springate model was developed in 1978 by Gordon l.v.springate.

It is a multi-stage and multi-variable model like the Altman model. When the model was calculated for the first time, an s value was calculated to calculate the successful and unsuccessful distinction of companies. Reliability was calculated as 92.5% in a study conducted on 40 Canadian companies (Springate 1971). The Springate model is also used frequently in studies on financial performance and financial stability. The fact that it resembles the Altman model, most of the data that is successful in the Altman z score model causes this model to be successful as well. For the Springate model, the validity indicator for the sustainability of the bank is above 0.86.

Springate s model consists of the following variables:
- S = 1.03*A + 3.07*B + 0.66*C + 0.4*D
- A (Working Capital) / (Total Assets)
- B (Earnings Before Interest And Tax) / (Total Assets)
- C (Earnings Before Interest And Tax) / (Current Liabilities)
- D (Total Sales) / (Total Assets)

As it seems, three of the four ratios contain the same ratios as the Altman model. However, since the proportions are different, I think we should touch on a few important points. As in the Altman model, in the Springate model, the ratio with the highest ratio is the ratio of earnings before interest and tax divided by total assets. Unlike the Altman model, the ratio value is 3.07. This ratio, which is considered to be one of the profitability ratios of the company, has been included in both models at a large proportion because it indicates what the company obtains with its assets. This also means that the low ratio in both models means that the business is closer to bankruptcy. That is to say, the main problem of many companies that go bankrupt in the modern business world is that they cannot earn by their assets. By dividing working capital into total assets part of the model, Springate incorporates liquidity too. If we look at the ratio in the model, we can say that Altman gives a ratio of the same weight compared to the ratio.

4. APPLICATION OF BANKRUPTCY FORECASTING MODELS TO AZERBAIJAN BANKING SECTOR

Data of 24 banks were used in the application. 4 of these banks are bankrupt. Bankrupt banks had to be more represented in the data set to measure the predictability of bankruptcy models. But data are severely deficient for many of the bankrupt banks, Therefore, their data couldn't be in the data set. Most of the data of the users are taken from the official websites of the banks and the other data are from the sources of the Azerbaijan Banks Association and the Central Bank. The hypotheses for which we are seeking answers as a result of application are as follows:
- H1a: The results of the Altman Z-score model give results reflecting the financial performance of banks traded in the Azerbaijani banking sector.
- H1b: The results of the Altman Z score model do not yield results that reflect the financial performance of banks traded in the Azerbaijani banking sector.
- H2a: The results of the Springate model give impressive results reflecting the financial performance of banks traded in the Azerbaijani banking sector.
- H2b: The results of the Springate model do not yield results that reflect the financial performance of banks traded in the Azerbaijani banking sector.

Models 8 years of 180-line data have also been exclusively tested and the results recorded. We can describe the years between 2016-2020 as the years in which the banks went towards development in terms of both assets and profits. However, as we know, this situation started to pause as a result of the pandemic that started in 2020. Even though a shocking recession did not begin as in 2015, it is felt from financial demonstrators that development has stalled.

As for Z scores, the lowest Z score is 2.14. If we compare the years when such crises occurred, it is a very good Z-score indicator. However, if we consider the year 2015, we also remember that in 2015, the impact of bankruptcy on financial demonstrators showed itself in the following year, not in the same year. Therefore, to measure the impact of the pandemic crisis on the Azerbaijani banking sector, we should wait and analyze the financial indicators for the years 2021-2022.

Banks	Assets	Credit Portfolio	Liabilities	EBİT	Retained Earnings	Working Capital	Z score	S score
ABB	8187.6	2474.3	4590.5	178.3	297.1	359.7	2.62	0.26
PAŞA Bank	4869	2045.3	3616.2	79.7	132.8	125.3	2.16	0.26
Kapital Bank	5040.6	2210.3	3724.5	323.4	539.1	131.6	2.46	0.46
Xalq Bank	2295.2	1537.6	1539.5	34.1	56.9	75.6	2.58	0.36
ASB	935.2	345.2	662.3	6.8	11.3	27.3	2.14	0.21
Access Bank	902.1	533.7	606.3	4	6.7	29.6	2.44	0.29
Rabitəbank	862	394.8	582.3	5.1	8.4	28	2.31	0.24
Bank Respublika	1070	458	723.7	7.7	12.8	34.6	2.28	0.23
Unibank KB	752.8	556.7	474.1	14.8	24.7	27.9	2.80	0.41
AFB Bank	548.5	434.4	364.8	2.3	3.9	18.4	2.66	0.37
Muğanbank	548.3	334.3	234.5	-1.9	-3.2	94.1	3.60	0.40
TuranBank	551.5	342.8	286.3	1.9	3.1	26.5	3.01	0.31
Yelo Bank	442.2	319.6	286.8	-23.3	-38.9	46.6	2.40	0.18
Bank of Baku	394.2	366.5	180.8	11.3	18.9	21.3	3.77	0.56
Azər Türk Bank	351	167.7	164.6	0.1	0.2	18.6	3.10	0.25
Expressbank	304.4	221.1	112.8	9.8	16.3	19.2	4.22	0.51
Bank BTB	355.8	214.2	127	0.6	1	22.9	4.05	0.32
Günay Bank	231.8	179.5	85.2	0.3	0.5	14.7	4.12	0.38
Bank Avrasiya	153.8	109.6	38.2	0.3	0.4	11.6	5.64	0.37

Table 1: Financial indicators of banks for 2020 (mln)
(Source: Annual reports of banks, reports of Association of Azerbaijan Banks and author's calculations based on research data)

If we consider the general results of the models, we can say that the Altman Z score model predicts bankruptcy correctly at 75% rate. However, the fact that the results of the Springate model is much lower (10% -15%) makes it impossible to apply the model to the market without any changes in the current situation of the model. Therefore, as a result of the tests of the model, for the first H1 hypothesis, the hypothesis that the results of the Altman Z-score model gives reliable results reflecting the financial performance of banks traded in the Azerbaijani banking sector is confirmed. However, the H1 hypothesis will not be correct. The results of the second hypothesis, the Springate model can't give absolute results reflecting the financial performance of banks traded in the Azerbaijani banking sector - that is why the hypothesis has proven to be false. The Springate model tests whether banks will go bankrupt or not with their own score being up or down from 0.86. For almost all banks in our data set, the Springate model has not been able to make absolutely correct predictions.

Now let's have a visual look at how Altman Z score and Springate models have changed over the years and how much they can explain the situation.
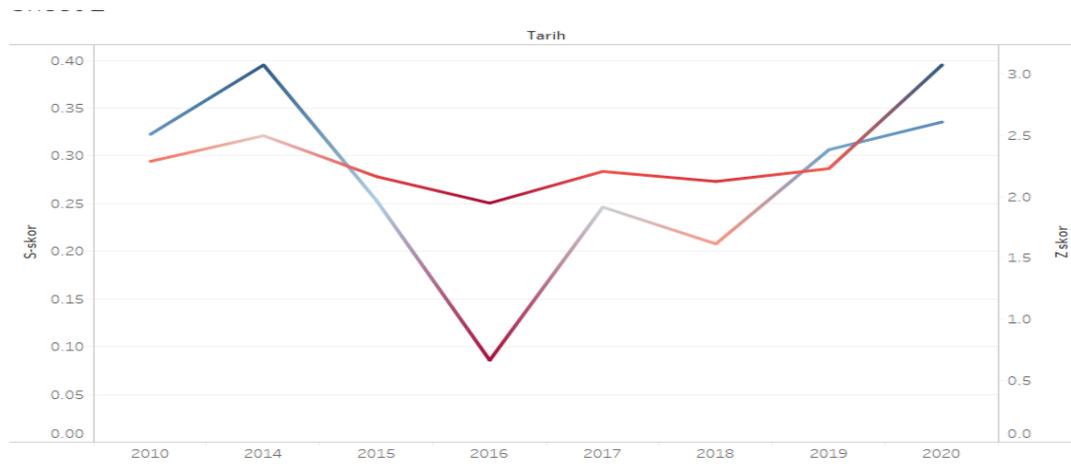
Chart 1: Comparison of Altman and Springate models (2010-2020)
(Source: Author's calculations based on research data)

As we have said, the 0.86-scale qualification indicator of the Springate model is not valid for Azerbaijani banking. However, this situation does not give the conclusion that the Springate model cannot absolutely describe the banking sector of Azerbaijan. When we look at the chart, although the absolute value of the Springate model does not describe the bankruptcy of banks, it can seriously explain the change in the financial situation annually. That is, when we look at the graph, we notice that the middle pointer of the model between the years 2010-2014 increased and decreased significantly in the years 2014-2016. In fact, when we look at Altman and Springate models in the same graph, we notice that the Springate model explains the situation relatively better than the Altman model. That is why we can say that the Springate model can make relatively accurate predictions.

5. CONCLUSION

The following results were obtained in our study. Bankruptcy models are not always the same probability in terms of accuracy, they change due to local and time factors; In some cases, bankruptcy models make estimates that reflect the real situation in terms of numbers based on financial performance, but estimates are not realized due to other factors. There are several reasons for this to happen. In some cases, the state supports large financial characters in order not to change financial balances. In some cases, the shareholders take over and compensate the losses themselves to cover the debts. Since the model does not take such reasons into account, the predictions of the model can differ from reality. The fact that the number of banks whose transactions have been suspended so far in the data set is very low compared to the number of banks currently being traded makes it difficult to determine the accuracy of the models. Although the prediction results of the Altman Z score model can explain the situation of the Azerbaijani banking sector according to various times, the accuracy of the predictions of the Springate model is very low. Although it is not possible to apply the Springate model to the Azerbaijani banking sector by considering the absolute value, it describes the situation in the financial years relatively well. The instability of the financial sector strongly reduces the predictive power of models. At points where existing bankruptcy models do not make accurate predictions, it is necessary to establish a unique model for the sector through machine learning, deep learning, and neural network analysis, which are the leading solutions in today's data processing world.

However, we must take into the important thing here, that to implement almost all of these learning paths, the following must be provided:
1) 1 Large amount of data;
2) 2 It is needed financial stability over the years for machine can learn the data
3) 3 There should be bankrupt banks in the number of banks working in the data set.

When we make the above assumptions, the accuracy amount of the models will increase with significant measure. It will lead to development in financial markets either from a micro or macro perspective.

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DOMINANT CHARACTERISTICS AND TRANSFORMATION FACTORS OF THE HUMAN CAPITAL EVOLUTION IN THE DIGITAL TRANSFORMATION OF THE REGION

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ABSTRACT

At the present Russian economy goes through the stage of transformation and global changes in economic and technological patterns. The situation in the labor market causes the need to change the content of education as ti applies to modern requirements. The role of man has changed, because he has become the main resource of modernization. The sector of digital transformation is clearing up: the balance of the strategy and tactics of business and society development, the issues of involving human capital and society in managing the modernization of the economy in the context of globalization are becoming important. The necessity of forming a multi-component information and educational environment based on the unity of education and human resources policy, which can be considered part of the digital economy, is shown. Human capital is one of the key factors in the development of regions and countries digital transformation situation. Man as the main productive force of economic growth and the main consumer of the results of this growth becomes the highest goal and the main criterion of the quality of economic growth in modern conditions. However, the distribution of population, and, as a consequence, human capital, across territories, on the one hand, is extremely heterogeneous and, on the other hand, is subject to constant change. Studies by various authors have shown that it is possible to make plans for the preservation and development of human capital, to restore state control over this process by using digital transformation technologies for the development of the labor market and education management system, having forecast results of the development of enterprises, regions and the country, as well as to evaluate the performance of the human training system. A person should freely dispose of his main capital - qualification. And for this purpose it is necessary to give him such professional training which will allow to easily master professions in the future, to realize possibility of own development on the basis of digital technologies. The aim of the study is to generalize and develop theoretical provisions in the development of methodological recommendations for managing the development of human capital in the regions under the conditions of digitalization of the economy. The first part of the study presents the dominant characteristics and transformation factors of human capital evolution under conditions of digital transformation; the second part of the article describes the methods for assessing the level of human capital development in the regions in Russia and other developed countries.
Keywords: human capital, human resources, human capital assessment methodology, digital transformation, digital competences, digital technologies, digital economy

1. INTRODUCTION

Modern trends in the development of the economy, the new format of economic relations in the context of digitalization cover all spheres of society, including the process of activating the human factor. The human factor, directly, is an important component of all spheres of activity. Based on this, the trends in the development of human capital become particularly relevant. If we consider the management of a digital enterprise, then it is human capital that is the priority for its further development, regardless of the type of services provided and the region. Nevertheless, it is necessary to study in detail the impact of digitalization on the formation of human capital and its impact on its further evolution, since it is human capital that is the core around which various changes occur that affect the socio – economic development of regions.

2. DOMINANT CHARACTERISTICS AND FACTORS OF TRANSFORMATION OF THE EVOLUTION OF HUMAN CAPITAL IN THE CONTEXT OF DIGITAL TRANSFORMATION

According to the researchers, in the current conditions of digital transformation, it is necessary to study the development of human capital, its formation and reproduction from the point of view of innovative approaches. Digital transformation focuses on increasing the flexibility of data centers, a process that requires moving away from existing (outdated) technologies to new, improved ones, where a clear digital process will be traced. It should be noted that the evolution of human capital is characterized, on the one hand, by the potential of each person, on the other hand, by the methods that are characteristic of the new economic order. The stages of the evolution of human capital date back to the middle of the twentieth century, during the historical period of economic development, when the differences in the rates of economic growth between individual industrialized and backward states sharply increased. From the end of the 18th to the beginning of the 20th century, scientists such as L. Walras, J. M. Clark, F. List, J. McCulloch, G. D. McLeod, A. Marshall, J. S. Mill, S. Say, I. F. Tyunen, T. Winstein, J. S. Walsh, I. Fisher, and W. Farrah definitely played a significant role in the evolutionary development of human capital. We should also note that such scientists as L. Walras, J. McCulloch, I. F. Tyunen, T. Winstein, W. Farr, and I. Fischer believed that it is the individual who acts as human capital, and not its competence. Later, the same position was held by A. Marshall. He introduced the concept of "personal capital", meaning a person who is physically strong, contributes to the growth of labor productivity. Other economists, such as: F. List, J. S. Walsh, J. S. Mill, defined precisely the ability to carry out work, qualification qualities by the concept of "human capital". In their opinion, some types of abilities are natural, others are acquired by a person in the course of their life activity. Researchers such as L. Dublin, F. Cram, I. Fischer, S. H. Forsyth, who deal with the formation and reproduction of human capital, began to make attempts to assess its effectiveness in the economic process. Their assessment began with the use of economic, mathematical and statistical tools in the study of such issues as:

- cost per person;
- assessment of the impact of the national education system on the economic growth of the regions;
- the costs of the family, which are associated with the growth of the economic value of a person;
- the formation and use of public expenditures necessary for the upbringing and education of the population.

Certain provisions of the economic views of these major scientists-economists were used later in the formation of the modern theory of human capital.

In the second half of the 20th century, the theory of human capital acts as an independent scientific direction, which was influenced by foreign researchers. This was facilitated by a special list of socio-economic conditions:

1) High scientific and technical achievements provoked the transition to innovative production.
2) Since the content of the production process in every area of public life began to be subject to profound transformations, the share of labor costs of employees in the intellectual and highly professional orientation began to grow.
3) Creating conditions for the sustainability and credibility of the concept of "human value" at all management levels.
4) The accumulated theoretical and methodological potential of the concepts of human capital in the world economic thought. It made it possible to critically assess the state of scientific thought in the field of concepts of human capital and create on the basis of them, taking into account the new socio – economic conditions in society, a new independent scientific direction – the theory of human capital.

G. Becker made the greatest contribution to the development of the scientific direction of the theory of human capital. This scientist is a recognized creator of the scientific school within the framework of the concept of human capital. In 1962, Harry Becker published his work "Investing in Human Capital". In his opinion, the formation of human capital is due to the investment in the individual. The most important areas of investment, in his opinion, are education and training in the workplace, health care costs, migration, and the search for information about prices and incomes. The Russian researcher A. Tkachenko believes that the theory of human capital is interrelated with the new terminology "information society". The information society requires competent employees with scientific potential and skills to constantly adapt to modern market changes. The development of human capital should allow us to create a basis for improving the efficiency of the organization's activities in any industry, any business process. The competence approach, together with digital competencies, is the key to the development of human capital. At the same time, it should be taken into account that the development of digital competencies of personnel is not enough, it is also necessary to develop digital competencies of the organization (or business competencies), i.e. these are management technologies that allow the company to increase the level of competitiveness and build further promising strategic objectives.

3. METHODOLOGY FOR ASSESSING THE LEVEL OF REGIONAL HUMAN CAPITAL DEVELOPMENT IN RUSSIA AND OTHER DEVELOPED COUNTRIES

In the near future, the enterprises of the Russian Federation are seriously approaching the stages of human capital development, taking into account the impact of digital technologies. It should be noted that the effective use of human capital in the era of digitalization is possible only in workplaces that have high productivity. Today, one of the most priority areas of development of the Russian Federation is the creation of high-performance jobs. For example, the strategy-2020 of Sberbank provides for the following adjustments in the processes of human resource management (Figure 1).

Figure following on the next page

| Formation of the competence of system thinking | Formation of the competence of result management | Formation of innovation competence |

Human capital of Sberbank PJSC»

| Formation of the competence of responsibility | Formation of competence for team development and joint partnership cooperation | Formation of customer-centric competence |
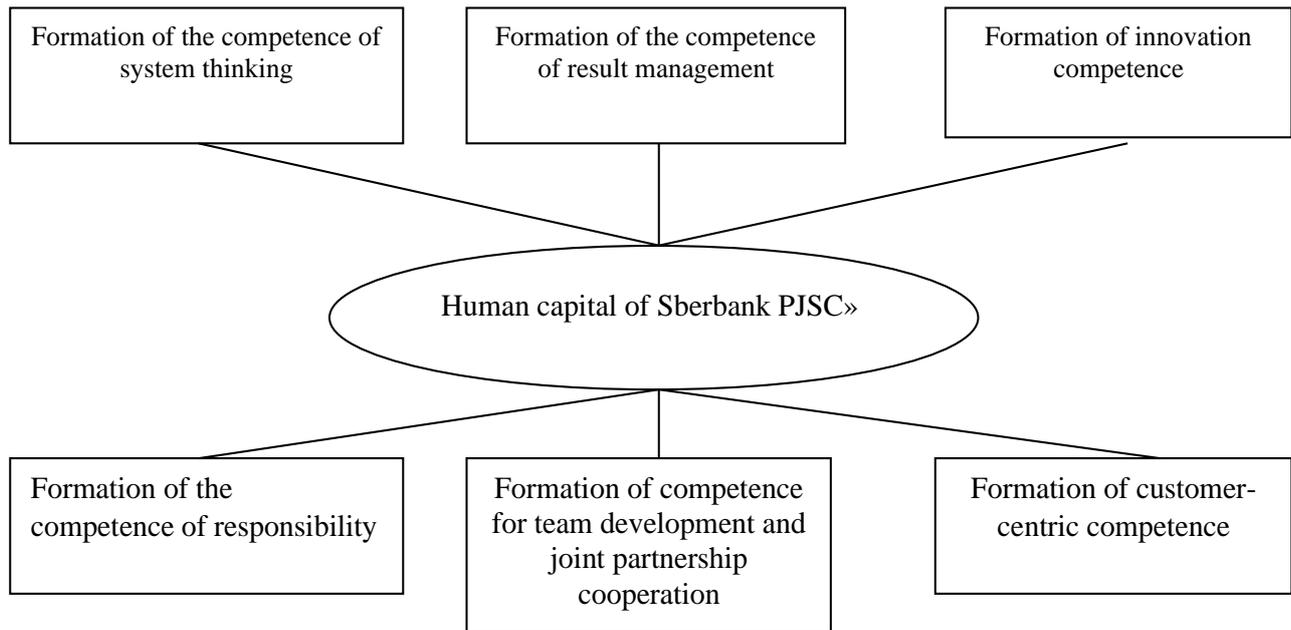
Figure 1: Changes in HR processes

In 2018, the World Bank proposed a "Human Capital Development Project". This project provides a methodology for calculating the index, which is based on measuring the contribution of children's education and health to their future productivity (Figure 19). The norm is the performance value of an adult who has received a full education and has excellent health. This performance is assigned a score of 1, and the final Index values are defined as a fraction of it. The components of the human capital index according to the World Bank methodology are such indicators as:

- the percentage of children who were born in a certain year, whose life expectancy is up to 5 years.
- the percentage of children in the age structure up to 5 years, whose growth is not lower than the average for their age;
- the expected duration of children's education in school;
- test results in the framework of international and regional programs for assessing students ' educational achievements;
- the percentage of persons of the age structure under 15 years, whose life expectancy is planned to be up to 60 years.

Russia is ranked 34th out of 157 countries, and the human capital position is considered high. It is planned that the labor productivity indicator of a person born in 2018 in our country, upon reaching the age of 18, will be 73% of the maximum possible level that can be achieved in the case of obtaining a full education and a full state of health. As for cross-country comparisons, the indicator of the Russian Federation exceeds the values of such countries as China, Brazil and India. However, these results are significantly lower than, for example, in Japan, Singapore and South Korea, which have shown steady economic growth over the past decades, due to the focus of public policy on education and science (Figure 2). If we compare the Russian Federation with other countries, the indicator of the human capital index exceeds the values in such countries as India, Brazil, and China. However, the values of the human capital index in countries such as Singapore, Japan, and South Korea are characterized by sustainable economic development due to their impact on science and education.
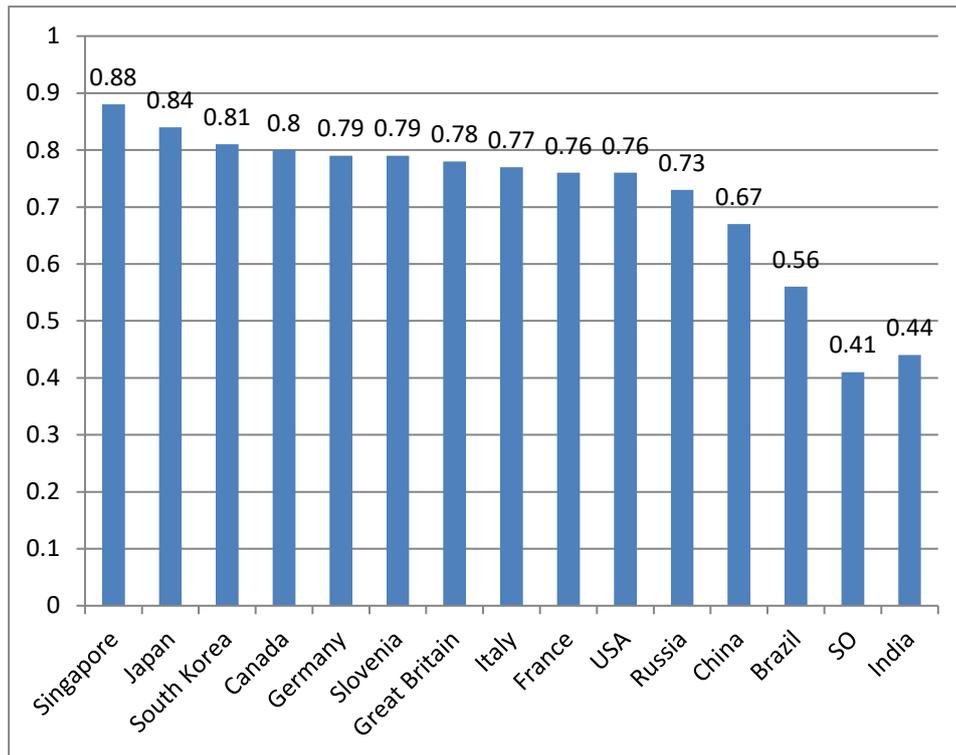
Figure 2: Indicators of the United Nations human capital index for selected countries, grouped by income level (2018)

Based on the results of the World Bank study, the relationship between the country's income level and the values of the Human Capital Index was shown. The developers believe that the value of this indicator can be used by countries to determine the share of income that is not received due to a lack of human capital. The World Economic Forum presented its position on the Human Capital Index in the "Global Human Capital Report" in 2017. The indicator was calculated for 130 countries by different age groups based on the four groups of indicators shown in figure 3.
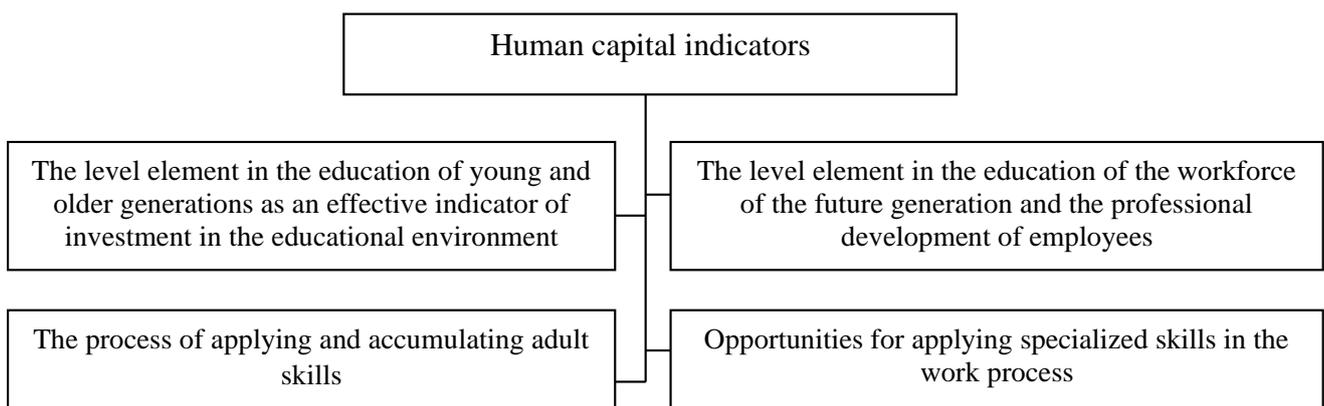
Figure 3: Indicators of human capital assessment (according to the methodology of the World Economic Forum)

Russia is in the ranking among other countries on the 16th place. At the same time, within the framework of this approach, Russia is ahead of the countries that were in higher positions in previous studies.
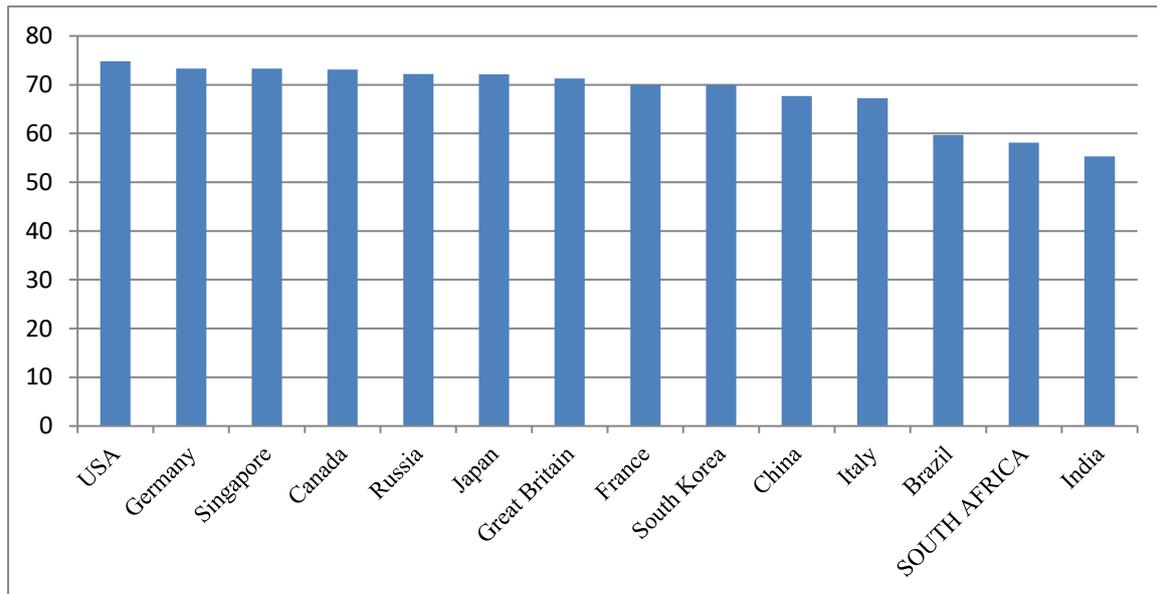
Figure 4: Values of the human capital index indicator according to the World Economic Forum methodology in 2017 (selected countries)

This study is based on the study of the potential of digital technologies that contribute to socio-economic development, taking into account factors in state regulation, human capital, a favorable business climate, an effective scientific and innovative system and a competitive digital sector of the economy. However, due to the differences in the availability of digital infrastructure, the low investment attractiveness of the regions, the disparity in population density, and the economic activity of the population, the problem of the digital divide can be traced. The new infrastructure requires a fundamentally different system of education and training of specialists. The education system is conservative in nature, and in this case it is very difficult to restructure. Therefore, only the discussion about the contours of the new system works today. The main problem is that most Russians almost stop their education after the age of 25. Businesses are trying to solve this problem. It should be noted that colleges and technical schools are trying to adapt their curricula to the requirements of the time and update the equipment. Consequently, the advanced achievements of science and technology in the field of digitalization and Industry 4.0 contribute to the formation of human capital of a fundamentally new quality. Due to the fact that there is progress in the advanced achievements of science and technology, Industry 4.0 allows you to create a new format of human capital. Until now, special human capital was considered the most valuable, and the general was assigned a secondary value. However, modern research in this area suggests that these roles are changing today. It is the general skills and competencies that come to the fore, such as system thinking, emotional intelligence, flexibility, creativity, adaptability, the ability to work in conditions of uncertainty, the ability to continuous learning, etc. The requirements for specific human capital are also changing.

4. METHODOLOGICAL RECOMMENDATIONS FOR MANAGING THE DEVELOPMENT OF HUMAN CAPITAL IN THE DIGITAL ECONOMY

In our opinion, the development of the concept of a new generation of human capital can be based on the digital technology "smart" card. The Smart card is the main methodological recommendation for human capital management. Its purpose is the process of identifying the conditions and mechanisms for the formation of the concept of human capital development of a new format, which will ensure the integration of educational resources of the digital economy

as a component of the concept of "smart" specialization of the region; it will act as a digital platform for interaction between the scientific and educational, administrative and business communities. Its main tasks:

- to determine the conditions for the creation and stages of the development of a "smart" map of the region in order to develop and effectively use human capital;
- make a forecast of the development of human capital;
- to form a system of integral indicators that characterize the assessment of the effectiveness of the use of human capital in the new format, taking into account the peculiarities of the development of the "smart" region and its scientific potential.

The development of digital competencies contributes to the implementation of tasks in the media and the digital environment, media literacy expands opportunities for communication, communication, cooperation, and joint search for solutions to problems. The ability to effectively, systematically accumulate knowledge, as well as critical, creative, autonomous and flexible thinking is important. Digital competencies extend to the creation of digital content, including programming, information security, including digital well-being, and competencies related to cybersecurity, intellectual property protection. An important role is assigned to digital competencies in order to form creative and critical thinking, increase adaptability to changing external conditions. In the context of modern trends, human capital is acquiring a new format. Digital competence of human capital is manifested in the accumulation of additional skills that ensure life activity and professional development in the digital environment. Therefore, such competence can be user-defined and professional. Within the framework of user competence, the skills necessary for the effective use of ICTs for personal purposes (study, self-development, communication, etc.) are developed. Professional digital competence is based on the skills required in the work, as well as in the field for the development, operation and maintenance of ICTs themselves. The change in the format of human capital is based on a system of objective factors that can be classified into personal and environmental factors (Figure 5).
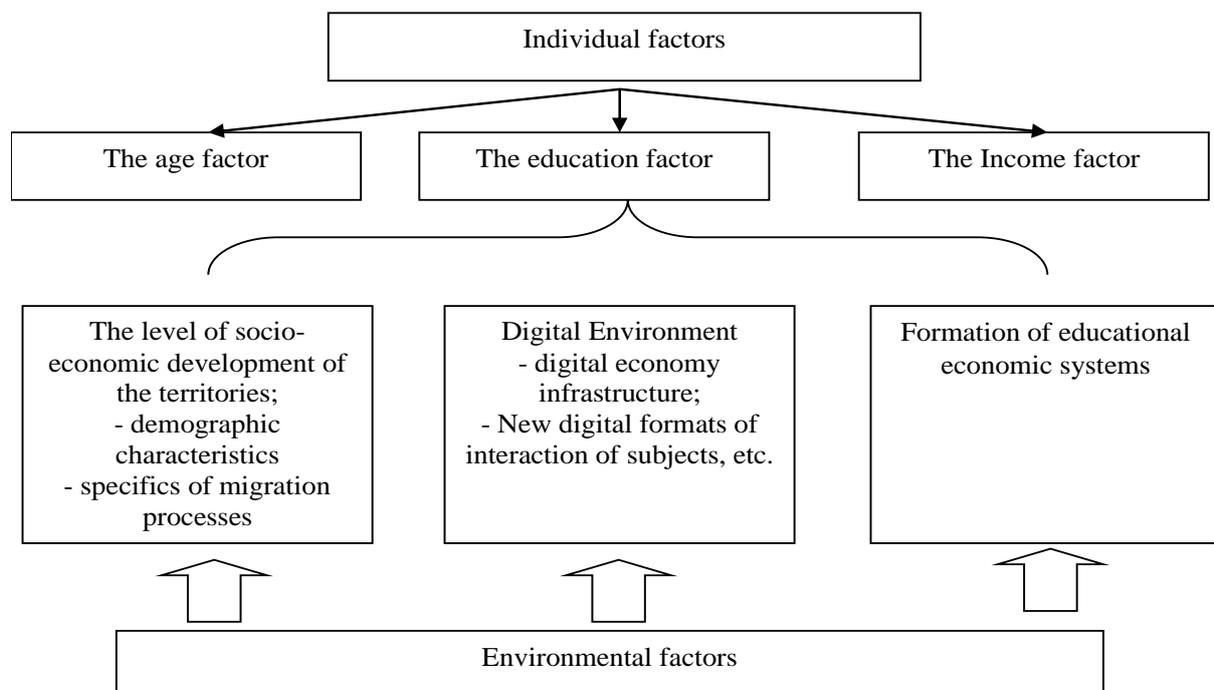
Figure 5: Factors of formation of digital competence of human capital

Personal factors include the age composition of the population, level of education, and income. As a rule, people with higher education have a similar level of development of digital competence skills. A similar trend continues with respect to the level of income that is associated with education. In general, the scheme of the influence of factors on the "smart" map as a digital technology for the development of human capital is presented in the following figure 6.
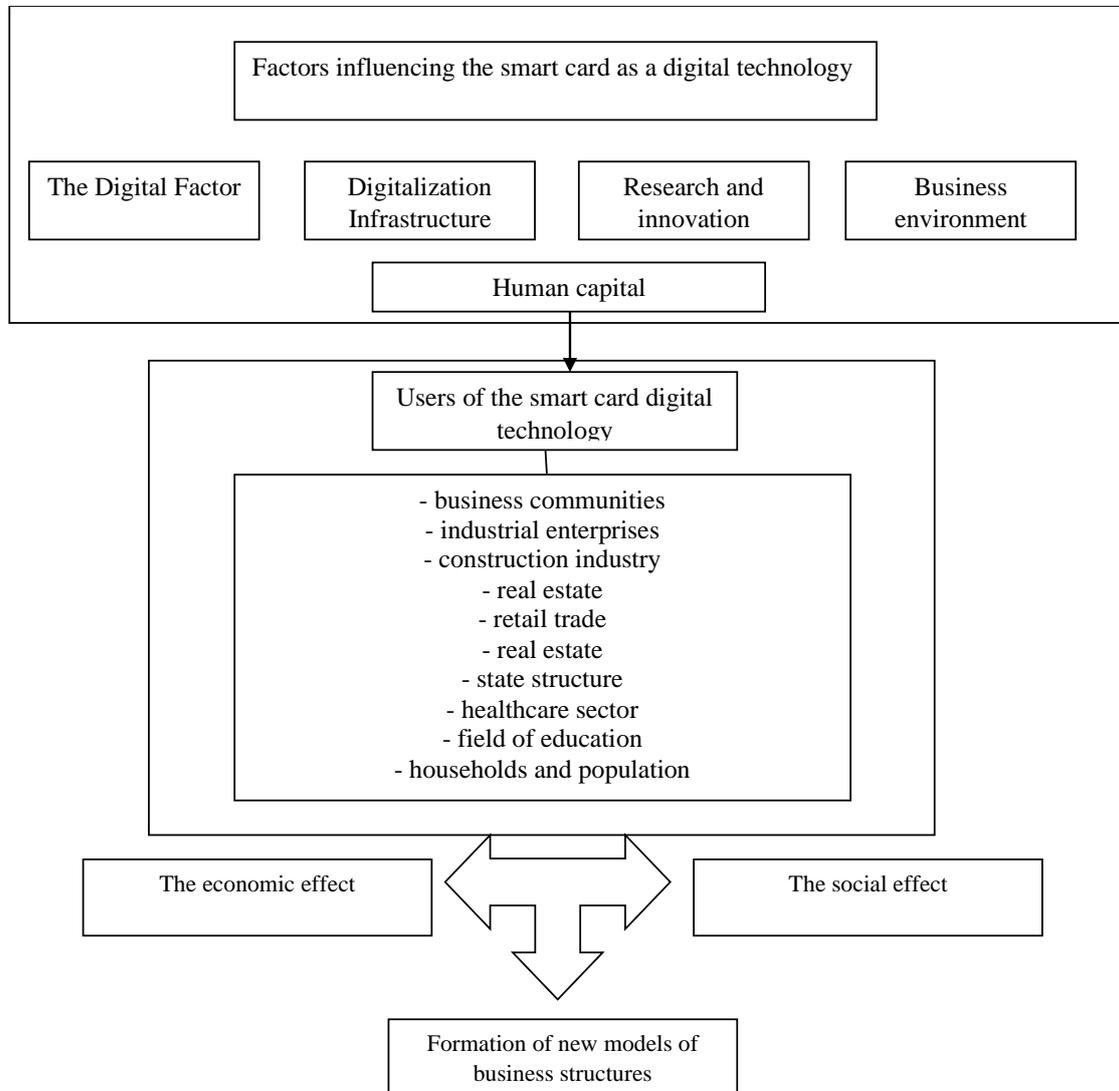
Figure 6: Factors influencing the "smart" map as a digital technology for the development of human capital

5. CONCLUSION

In conclusion, it should be noted that due to the influence of various factors on the development of a new generation of human capital, it is necessary to apply such a digital tool as the "smart" map, which will act as a digital personnel platform for the region in the aspect of human capital development through the interaction of scientific, educational, administrative and business communities. The results will be the stages of developing a "smart" map of the region for the development and effective use of human capital; the forecast of human capital development; a system of integral indicators that characterize the assessment of the effectiveness of the use of human capital in a new format, taking into account the peculiarities of the development of a "smart" region and its scientific potential.

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EVALUATION OF THE STATE AND PRIVATE SECTOR INVESTMENT PERSPECTIVES IN THE KARABAKH REGION

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ABSTRACT

Karabakh is one of the oldest historical regions and an integral part of Azerbaijan. Every nation keeps a record of the painful and happy years of its history. In 2020, a new phase of our history has begun. This is the victory stage. In the past years, the strengthening of the country's economy, the creation of foreign currency reserves, the provision of the army with modern equipment, the successes in the field of diplomacy have created conditions for the Azerbaijani Army to start its victory march. The counterattack, which started on September 27 in response to the Armenian provocation in 2020, resulted in victory in 44 days. The Azerbaijani Army, which is among the 50 strongest armies in the world, wrote a new page in the world military history with its courage in the Second Karabakh War. As a result of the victory won in the military conflict in autumn 2020, Azerbaijan has started to rebuild infrastructure and develop these regions in Karabakh. Currently, the process of clearing the released areas from mines and other explosive devices has begun. Shusha was once again declared the capital of our culture. President Ilham Aliyev has determined the framework for post-conflict reconstruction. The development of Azerbaijan's liberated territories, reconstruction, construction and humanitarian activities with the participation of international development partners and investors, cooperation between the state and the private sector, the return of internally displaced persons and the development of social capital can be implemented by applying a special state programs approach. The aim of this study is to examine the mining industry, metallurgy, food industry, processing industry, tourism and recreation, creative industry, medicine, grain growing, vegetable growing, viticulture, cotton growing, fruit growing and animal development potentials in the lands liberated from the occupation. In addition, investment in these areas makes it important to work in terms of both the growth of non-oil exports and import substitution and participation in value chains.
Keywords: *Karabakh, Azerbaijan, victory, reconstruction, investment, public, private*

1. INTRODUCTION

Karabakh is one of the oldest historical regions of Azerbaijan. The name of Karabakh, which is an integral part of Azerbaijan, derives from the Azerbaijani words "Qara" and "Bağ". The word "Qara" and "Bağ" has a history as old as the Azerbaijani people. It is an undeniable fact that this statement is applied to certain territories of Azerbaijan all over the world. The word "Garabagh" given by the Azerbaijani people to some of their lands was first developed 1300 years ago in the sources. Karabakh was defined first as a historical geographical concept and then as a large geographical area of Azerbaijan. The formation history of "Karabakh" as the name of a particular region of Azerbaijan allows a more scientific explanation of its etymology. Because in Azerbaijani language (as in other Turkic languages) "black" has the meanings of "dense", "thick", "big", "dark" and others in addition to color. From this point of view, the term "Karabakh" means "black garden", that is "big garden", "thick garden", etc. It means. Therefore, the word "Garabagh" belongs to the Azerbaijani people just like Karabakh. As a political-geographical place, in history it has always been not "Nagorno-Karabakh" but a general concept of "Garabagh" that covers the entire Karabakh lands - mountains and plains.

Hundreds of examples of the oldest and most precious folklore and music pearls of the Azerbaijani people were created in Karabakh and are connected with Karabakh. In addition to the historical and cultural value of Upper Karabakh, it is rich in its fascinating nature, underground and aboveground resources, rich economic potential and extensive tourism opportunities. If we pay attention to the main parameters of the economic potential of these regions, as a result of the plundering of Armenia, the infrastructure of the region has decreased to zero.

2. OVERVIEW OF KARABAK'S HISTORY
On the way to Karabakh victory, the history of Karabakh is illuminated in the following subsections.

2.1. Stage One
This stage can be called the stage of creating a "new homeland" for Armenians. The first period of exile of Azerbaijani Turks from West Azerbaijan began in 1801 with the annexation of Eastern Georgia by Russia and then the capture of Shamşedil and Loru-Pambak regions by the Russians. According to the Gulustan agreement signed between Russia and Iran on October 12, 13, all khanates of Northern Azerbaijan, except Nakhichevan and Yerevan khanates, joined Russia. Russian troops captured Nakhchivan city on 26 June 1827, Sardarabad fortress on 20 September and Yerevan fortress on 1 October. According to the Treaty of Turkmenchay signed on February 10, 1828, the last Northern Azerbaijani khanates, Yerevan and Nakhichevan, joined Russia. On March 20, Nikolai signed a decree on the establishment of an "Armenian province".

2.2. Second Stage
This can be called the "silent genocide" stage. As a result of the Armenian uprisings in Turkey in the 1990s, approximately 300,000 Armenians migrated to the Caucasus and the region turned into a bloodbath. Taking advantage of the pro-Armenian position of the ruling circles of Tsarist Russia, Armenians began to pursue a policy of ethnic cleansing by force of arms to establish a new Armenian state in the lands where Azerbaijanis lived in 1905-1906.

2.3. Third Stage
The crimes committed by Armenians against Azerbaijanis in the years 1918-1920, which were referred to as "national massacres" in the history at that time, are defined as genocide. Because these massacres were the result of the aggression and ethnic cleansing policy of the independent Armenian state. According to the Mudros agreement signed on 30 October 1918, after the withdrawal of Turkish troops from the South Caucasus, the second phase of the massacre of Armenians against Azerbaijanis began in the territory of Yerevan province. The President of the Azerbaijan Republic signed a decree "On the Genocide of Azerbaijanis" on March 26, 1998 to commemorate all the tragedies of the genocide in order to give a legal and political assessment of the genocide acts committed by the Armenians against the Azerbaijanis in the XIX-XX centuries and declared the Day of Genocide of the Azerbaijanis on March 31.

2.4. Fourth Stage
Although it is written as the deportation of Azerbaijanis in 1948-1953 in history, it is actually exile in the true sense of the word. In Soviet Armenia, more than 50,000 Azerbaijanis were persecuted in the 1930s, most of whom were deported to Kazakhstan and Central Asia. The Armenian leaders, who did not encounter any resistance during this action, managed to carry out another action in the late 1940s and early 1950s - the deportation of the Azerbaijanis.

The USSR government's resettlement decisions allowed the Armenian government to wipe out most of the existing Azerbaijani settlements around the city of Yerevan and on the Armenian border with Iran and Turkey.

2.5. Fifth Stage

This stage can be called the completion of the ethnic cleansing of Azerbaijanis from Armenia. In the mid-1960s, anti-Turkish and anti-Muslim propaganda was resumed in Armenia. The decision to commemorate the 50th anniversary of the so-called "Armenian genocide" further inflamed Armenian chauvinism. On February 20, 1988, the extraordinary session of the Council of People's Deputies of Nagorno-Karabakh with the participation of only Armenian deputies decided to remove the region from Azerbaijan and include it in the administrative-regional part of Armenia. Until 1988, the area where Azerbaijanis lived in Armenia was 25 percent of the country's territory, or about 7.5 square kilometers. In general, in the last 200 years, more than 2,000 Azerbaijani settlements in the territory of Armenia have been removed from the list in various ways, and a single-ethnic Armenian state has been established in the historical territory of Azerbaijan.

2.6. Sixth Stage

This stage covers the years 1991-1994 (Khojaly, genocide history, 1992). Understanding the impossibility of annexing Nagorno-Karabakh to Armenia, Armenia began to make territorial claims through armed groups formed in the territory of the autonomous region. The enemy used weapons of the USSR armed forces in Nagorno-Karabakh territory. As a result of the Armenian military attack, 20 percent of the territory of the Republic of Azerbaijan - Khankendi city, Khojaly, Shusha, Lachin, Khojavend, Kelbajar, Aghdam, Fuzuli, Jabrayil, Qubadli, Zangilan regions and 13 villages Tatar region, 7 villages of the Gazah region and Nakhchivan One village of Sadarak district was occupied by the army (Mammadov, 1992). After the national leader Heydar Aliyev came to power, the chaos in the country ended, a regular army was established and a ceasefire agreement was reached on May 12, 1994. Oil contracts were signed to strengthen the Azerbaijani economy. Azerbaijan's position in the international arena has strengthened. However, the OSCE Minsk Group, which was established to resolve the conflict, has not taken any concrete steps to date.

2.7. Seventh Stage

This stage is the triumphal stage of our history. The end of the 220 painful year has come. In the past 17 years, the strengthening of the country's economy, the establishment of foreign currency reserves, the provision of the army with modern equipment, the successes achieved in the field of diplomacy have created the conditions for the Azerbaijani Army to start its victory march. The counterattack, which started on September 27 as a reaction to another Armenian provocation, ended with victory in 44 days. The Azerbaijani Army, which is among the 50 most powerful armies in the world, wrote a new page in the world military history with its courage in the Second Karabakh War. It implemented UN Security Council resolutions that had not been implemented since 1993. Azerbaijan Army once again showed the world that we are a heroic, invincible and proud nation by restoring our territorial integrity. In 44 days, 5 cities, 4 settlements, about 300 settlements, many strategic heights were saved from the occupation. The liberation of Shusha on 8 November determined the fate of the war. On November 10, the Armenian Prime Minister signed a surrender decision. Armenia surrendered, raised the white flag and fell on her knees. Armenian Prime Minister Nikol Pashinyan, who put forward 7 conditions against Azerbaijan and said "Karabakh is Armenia", signed an unconditional surrender action. The territorial integrity of the state was restored. On December 10, Victory Parade was held with the participation of Turkish President Recep Tayyip Erdogan, who made

an exceptional contribution to our victory. The process of clearing our liberated areas from mines and other explosive devices has begun. Shusha was once again declared the capital of our culture. International organizations see the consequences of Armenian vandalism with their own eyes (Armenia - Azerbaycan münaqişəsi, 2005).

3. THE STATE OF KARABAKĞ AFTER VICTORY

As a result of the plundering of Armenia, the infrastructure of the region was reduced to zero. According to the statistics given by Deputy Minister of Economy Niyazi Safarov, 7 regional centers, 6 cities, 12 settlements, 830 villages, 700 hospitals and health institutions, 6 state theaters, 368 clubs, 85 music schools, 600 industrial and agricultural enterprises were destroyed in the occupied territories. has been. More than 1 million hectares of agricultural land were destroyed and withdrawn from circulation, including about 128,000 irrigated lands, about 35,000 hectares of vineyards and orchards. Before the occupation, these regions accounted for 24% of GDP, 41% of grape production, 46% of potato production, 18% of meat production and 34% of milk production. The occupation seriously damaged the country's water resources.

3.1. Reconstruction of the Karabakh Region

The statistics given above give an idea about the scale of the work to be done in the region. As a result of victories in military conflict in the autumn of 2020. Azerbaijan re-controlled a number of regions previously under Armenian control, as in the former Nagorno-Karabakh Autonomous Region. The question then arises, first of all, of the restoration of infrastructure and the development of these areas. Agriculture should be the main sector of the economy in the returned lands, this sector can make the main contribution to the economy of the whole of Azerbaijan. However, this is hampered by the fact that important areas in the region are mined. Several service areas in already rescued areas The recovery process continues. Within the framework of Azerishig project in Karabakh, OJSC built strategic facilities of special importance in the rescued areas. Azercell Telecom LLC is establishing the first mobile infrastructure and fourth generation LTE radio base stations in the liberated regions. Other mobile operators - Nar and Bakcell - also complete their interior design work and implement the action plan. The economic potential of the liberated lands is multifaceted and covers a variety of agricultural, industrial and tourism areas. The saved lands have great potential for the development of viticulture, tobacco cultivation, cotton growing, Cocoons, fruits and vegetables, melons and livestock. It is corn, pea and grape native to the region. During the pre-occupation period, Fizuli and Aghdam regions were among the leading regions of the country in cotton, grain and grape production. Cabrayil, Gubadlı, Zangilan neighborhoods also differed in viticulture. Animal husbandry is highly developed in Lachin, Kelbecer, Kubadlı and Zangilan. We can evaluate the industrial potential of the region in 4 areas: rich water supply, electricity, industrial recreation opportunities and processing of rich minerals. The region is also suitable for the development of the processing and food industries. Our lands are also rich in mineral and thermal water resources. These resources will be used for drinking water, land reclamation and electricity generation. Azerbaijan will put an end to the hydro war of the enemy waged against our country by effectively managing its water resources. Speaking of the industrial and recreational opportunities of the region, it should be noted that the main electricity generation and water storage gave grounds to say that the regional economy will grow rapidly.

3.2. Investing in Karabakh Region

Various financial resources can be used in the restructuring of the Karabakh region, including the state budget, SOFAZ, funds from foreign credit institutions, grants and donations, private investment and other sources not prohibited by law. Representatives of international organizations, foreign countries, large and medium-sized enterprises are interested in

participating in post-conflict building. Every international organization seems to be ready to invest in liberated lands, according to its jurisdiction and profile, to suit every business. As in Israel, the diaspora investment model can be widely used in Azerbaijan. In the post-conflict period, technology investments in the regions can be increased by venture capital, crowdfunding and crowdfunding. Investments in many areas can be attracted through public-private partnerships. The implementation of infrastructure projects through public-private partnerships leads to a revival of the private sector, an increase in productivity and a decrease in the burden on the state budget. The government is ready to invest in the development of the region. Minister Mikayil Cabbarov said that while the Azerbaijani side is open to foreign investments, it does not mean that it cannot do without them, and that attractive conditions will be created for investors. Baku plans to spend about $ 1.5 billion in the form of state investment for the restoration of the region (https://www.vedomosti.ru/politics/articles/2021/02/19/858725-azerbaidzhan-razrabativaet).

4. CONCLUSION

Finally, the Liberated areas have potential for mining, metallurgy, food industry, processing industry, tourism and recreation, creative industry, medicine, grain growing, vegetable growing, viticulture, cotton growing, fruit growing, animal husbandry, poultry farming, beekeeping and building development. Investments in these areas will be important both in terms of increasing non-oil exports and import substitution, and for merging value chains. Post-conflict construction will play an important role in the economic security of our country, including food security. Various mechanisms can be implemented to encourage investment in these areas, including industrial parks and neighborhoods, agro-industrial parks, and other investment incentive mechanisms. Karabakh has the resources, strategic assets, activities and markets that can attract investors' attention. The new economic value to be created in the liberated lands will exceed the financial cost of the Azerbaijani state. Restoration of these areas will create many new jobs. Thus, the realization of new infrastructure projects will have a positive impact on the employment of our citizens. Economic development will create new jobs. Moreover, it will accelerate the growth of the non-oil sector and further prosperity of the Azerbaijani economy. Another important issue is the reconstruction of the Nakhchivan transport corridor. The reconstruction of the Nakhchivan transport corridor and the restoration of the railway from Azerbaijan to Turkey through Armenia and Nakhchivan will positively affect the economy of the region. Reestablishing communication with Nakhichevan will be beneficial for all countries in the region. Access to Armenia via Nakhichevan opens a second railway exit to Turkey. For this, Baku-Tbilisi-Kars highway was used before, but Nakhchivan road is much shorter. This is especially important for Russia due to strained relations with Georgia. In general, the Karabakh region will be a new geographical driver of economic development in Azerbaijan, the center of growth. Investment and construction activities in the region will accelerate GDP growth in Azerbaijan (http://www.iqtisadiislahat.org/news/vusal_qasimli_qarabag_azerbaycanda_iqtisadi_artimin_yeni_drayveri_olacaq-1079).

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THE EVALUATION OF SCIENTIFIC PRODUCTS IN THE INTELLECTUAL PROPERTY MARKET IN THE CONTEXT OF GLOBALIZATION

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ABSTRACT

In modern times the transition of human society from industry to post-industry is evaluated as one of the characteristic features of development trends. This is mainly related with the large-scale nature of the growing impact of science and technology on each aspect of society, as well as scientific and technological development aimed at more comprehensive socio-economic and historical changes.Due to this, the main trends of economic growth and the set of sources are also changing.Among them, natural resources and capital, which have the ability to affect the level of development of the economy, as well as scientific knowledge, which can be turned into an integrated resource, are considered as more important advantages. Experience shows that a new product of knowledge also necessitates an innovation process that ensures the transformation into technological innovations. The innovation process in itself changes the type of reproduction, the quality of socio-economic relations, and begins to play a key role in the functioning of the entire economic system, creating a progressive innovation-oriented economy with its own form of savings, special evaluation criteria for savings efficiency. From a theoretical point of view, the intellectualization of production as economic growth is considered to be the basis, ie GDP growth is achieved mainly through the production and sale of science-based products and services. One of the important rules for Azerbaijan's accession to the global economy is its activity in the field of science, technology and innovation, the restructuring of the economy based on the development of high-tech science-based production, and the transition to a more high-tech stage. As society progressed, science had moved to an independent field of individual activity with its own laws and at the same time growth trends, working methods, technologies and techniques, basic laws and systems of labor organization, and specially trained personnel.This is constantly developing area.At the same time, the labor, financial and material resources allocated to science are limited in a sense. Limited resources lead to the development of strategies and tactics aimed at the targeted involvement of limited resources in certain priorities, scientific and technical activities.
Keywords: intellectual property,innovation process,innovation market, information economy, scientific products

1. INTRODUCTION

The level of attention paid to research, education, culture, and technical growth in these countries from the past to the present is one of the features of developed countries under the current conditions of modern civilization.The degree of efficiency with which a state uses its intellectual capacity, as well as technological and cultural growth, are considered crucial aspects that have a considerable impact on the state's economic difficulties.Also, in the current environment, STP, culture, education, and research can only grow as a result of strong legal protection and a fair appraisal of intellectual property.In modern society, property is regarded as a socio-economic relationship. Property relations cannot exist and function if people do not treat a given person's property as "someone else's" and the owner of that property as "his own."Property is defined as the appropriation of means of production as well as material items by individuals, as well as the development of economic connections between members of society regarding the use and disposal of property, from an economic standpoint.When these relationships are legally protected in their broadest sense, the right of property emerges, and the right of property, with its specific form and regulations, safeguards the property, or more accurately, the existing economic relationships between people. The transition of human civilization from industry to post-industry is one of the defining characteristics of current development patterns. This is attributed to the large-scale nature of science and technology's rising impact on every area of society, as well as scientific and technological advancements targeted toward more extensive socioeconomic and historical transformations.As a result, the main patterns in economic growth and the sources of growth are shifting. Natural resources and money, which have the power to influence the economy's level of development, as well as scientific knowledge, which may be transformed into an integrated resource, are considered to be the most crucial advantages. Experience has shown that a new knowledge product requires an innovation process to ensure that it is transformed into technological innovations [1]. The process of innovation alters the type of reproduction, the quality of socio-economic connections, and begins to play a vital role in the operation of the entire economic system, resulting in a progressive innovation-oriented economy with its own form of savings and unique savings efficiency evaluation criteria.The intellectualization of production as economic growth is believed to be the foundation from a theoretical standpoint, for example GDP growth is primarily achieved through the creation and sale of science-based products and services. The transition to the new millennium at the conclusion of the previous century coincided with the process of replacing a specific phase in society's cyclical growth, or more accurately, with a new, more sophisticated stage of civilization.There is a global industrial society crisis at the turn of the century, which affects every level of civilization, including the level of demand dictated by the individual, his aptitude, ability, and degree of knowledge; socio-economic relations; ownership, exchange, national, moral, political, and legal issues as well as ideology, including science, education, culture, and religion. In society, new elements are coming together and building strength in a flexible way. It is thought that the following are the primary indicators:

- the development of a individual with greater knowledge, as well as the adaptation of that knowledge to new beliefs about natural laws and societal progress;
- production development, fundamental reconstruction of the reproductive structure, prioritization of human needs, transfer to a more advanced technological structure;
- the social-market economy's diversity, which relates other types of ownership and the level of concentration of production in a significant way;
- sharply competitive market economy with favorable regulatory features and developed social protection;
- state structure with democratic rights;

- the start of a time of national awakening associated with the formation of voluntary associations of equal peoples;
- a resurgence of high cultural legacy; increased scientific creation, demand for intellectual items, and a rapid rise in the proportion of people who spend time thinking.

As a result, it is critical to include the aforementioned worldwide trends when developing forecasts for the state's future development, its regions, and sectors of activity as a whole, particularly in the sphere of science, technology, and innovation. [2, p.428]

2. DEVELOPMENT WAYS FOR INNOVATION INFRASTRUCTURE

One of the most essential criteria for Azerbaijan's entry into the global economy is its scientific, technological, and innovative activity, as well as the reorganization of the economy based on the development of high-tech science-based production and the transition to a more high-tech stage. Science evolved as an independent field of individual activity with its own laws, growth trends, working methods, technologies and techniques, basic laws and labor organization systems, and specifically qualified employees as society progressed.This is a field that is always changing. At the same time, science's labor, financial, and material resources are constrained in some ways. Limited resources necessitate the creation of strategies and tactics aimed at directing limited resources toward specific priorities, scientific and technical activity. Scientific activity is defined as any activity that aims to gain and utilize scientific information. Basic scientific research is defined as an experimental or theoretical effort aiming at gaining new understanding about the development and basic qualities of individuals, societies, and the natural environment in which they live. Scientific and technical activity (STA) is an activity that aims to acquire and apply new knowledge in order to solve technological, economic, social, humanitarian, and other problems, as well as to ensure that science, technology, and production work together as a unified system. STAs are divided into many types. The boundaries between these species are conventional and it is difficult to distinguish them from each other. Individuals that participate in STA on a regular basis are also not restricted to a single type of STA. That is, every form of "science-production-consumption" cycle can involve a scientist or an inventor. Expansion of scientific capacity in the production of products is considered as a theoretical basis for the creation and development of science-based economic zones. The above-mentioned theoretical basis must be considered in the development of scientific and technical, as well as innovation policy at certain levels of government. Concepts, theories, and models that, in and of themselves, manifest new information in the form of a scientific output and enable professionals to understand and master it.In addition, science's product becomes a commodity and manifests as an innovation. The intellectual or scientific product can be employed in two ways: through market realization and non-market realization. In other words, once an intellectual product is commercialized, it moves from the stage of invention to the stage of new application - innovation. In the last 15-20 years, the term "newly applied" - "innovation" has become commonly employed in scientific literature and practical operations.The format can be used to codify innovation in the form of one of the forms of intellectual products, such as an invention, scientific approach, standard, recommendation, methodology, documentation for an enhanced product, patent, effective proposal, invention, "know-how," marketing outcomes, and so on.When innovation is applied to a production and management system, it is changed into a marketable product, and its application leads to economically, socially, and other beneficial forms, or, to put it another way, it transforms into a new stage - innovation [3, p.30]. The following are the key characteristics that influence the competitiveness of items supplied and traded in today's intellectual property market:

- The level of legal protection of goods sold in trade enterprises or markets;
- The criteria meets modern technical standards;

- Ability to meet the requirements of buyers;
- Price level when comparing the goods sold with similar ones;
- Sharp changes in the number of consumers;
- The degree of access of intellectual goods to the market, etc.

Initially, the intellectual property market was thought to be a market for technological raw materials, but in its current form, existing market agreements are codified as the acknowledgment of exclusive intellectual property or trade secrets rights, as well as legal protection of IP in the form of a service, more specifically, the findings of market research, software provision, technical solution availability, technological documentation, and so on.It functions as a product, and as a result of intellectual work, these products acquire specific attributes and are appreciated. It's worth noting that an intellectual product's introduction into the economic cycle can be facilitated by the acquisition of property rights for the owner.The adoption of a substantial level of monopoly is one of the fundamental elements of the intellectual property market. This market is considered a seller's market and differs from other consumer goods markets in that it has a high level of income as one of its key characteristics.The appropriated profit is defined by the existing difference between the cost of the intellectual product and the licensing price, with the license price based on the part of the income that the buyer can earn in the right to use the intellectual product. The intellectual property market is classified into the following types based on the characteristics of the products on the market:

- According to the type of market structure: monopoly, oligopoly, and monopoly competition;
- According to the type of products purchased and sold: inventions, utility models, know-how, and so on;
- According to the subjects of the intellectual property market: consumers, inventors, buyers, sellers, authors, (in some cases, the state can be included);
- Patent market, copyright market, related rights market, etc. according to the range of intellectual goods;
- According to the development section: research, sales, production, etc. IP market in sectors;
- According to the degree of coverage: regional, global, local and national.

Thus, there are six major elements that have a positive or negative impact on the development of the intellectual property market and should be examined by a particular country in the context of global integration:

1) By field of formation: socio-economic, institutional and cultural factors;
2) According to the scope of impact: macroeconomic and microeconomic factors;
3) In the direction of impact: direct and indirect factors;
4) Due to changes in market competition, supply and demand: price and non-price factors;
5) On the characteristics of the impact of supply and demand in the market: special and general factors;
6) According to the general characteristics of influence: external and internal factors. [4, p.3]

3. THE ROLE AND PLACE OF INTELLECTUAL PROPERTY EVALUATION IN THE ECONOMIC DEVELOPMENT

The application of intellectual property in economic operations, in the form of knowledge-based legal structures, is intimately linked to the development of the contemporary modern economy.In many nations with a higher intellectual level, the intellectual property market is gradually becoming one of the most important sectors of the national economy. Intellectual property is an essential resource that influences people's material well-being.

As a result, the proportion of intangible assets based on intellectual property in the property complexes of major national corporations is increasing. Intellectual property has grown in importance as a valuable resource in the realm of material production.

1) If intellectual property is valued as a legal system, it is intangible and, under certain conditions, can be used by multiple legal entities at the same time. They are stored in the research of existing knowledge during the transfer of knowledge. The nature of information protection legislation, as well as the protection of commercial secrets, patents, and copyrights, are all tied to intellectual property.The intellectual property market entails the utilization of knowledge as intellectual property objects, as well as the protection of human rights, as part of innovation and scientific and technical activities. The intellectual property market's operation as part of innovation and scientific and technological activities can be separated into two parts:
2) Inclusion of intellectual property in the economic turnover;
3) Second, the economic turnover in these facilities.

In today's world, the intellectual property market is regarded as a place where supply and demand for intellectual property are formed. Property, in this case, functions as a commodity in the context of free choice and exchange.Simultaneously, the state must behave as one of the market's subjects, mediators, right holders, or partners.The intellectual property market is largely valued as a market for technological raw resources, and such transactions are formalized in the current market as the transfer of intellectual property rights and the provision of legal protection in the form of service or trade secrets.The intellectual property market is often seen as the culmination of product research and development, original technical judgments, design and technology documentation kits, and software. Intellectual property is considered the consequence of intellectual property when it develops appropriate features as a product. The sale of property rights, licenses, the search for new investors, licenses, the placement of orders in the company, or, to be more accurate, the maximum income from intellectual property in various forms comprise the outcome of intellectual work in modern society, including formation of motivation and stimulus in the employees of the enterprise in the field of creation, legal protection and use of intellectual property. The success of a company's development does not depend on the company's financial resources, but on the people and their collective activity. Therefore, it is expedient to develop stimulus and motivation tactics of employees working in the field of intellectual activity and direct them to the creation of a new product of the company. The pace of change of economic processes around the world, the further dissemination of inventive ideas, and their application in the sphere of production is accelerating in the period of globalization, with the development of innovation activities to a qualitatively new level.This is a "positively charged" result of globalization since it allows more countries to benefit from their innovations, increased technical standards, and innovative management approaches. This component, according to projections, will drive global economic growth in the near and distant future [5]. Intellectual property is now regarded as a fundamental reform in the competition, rather than a by-product of the development of new items.The research has always been chosen on the basis of its intellectual quality. As a result, Azerbaijani producers should not miss out on current chances by legally monopolizing key product markets.The establishment of a positive intellectual property management system in businesses creates the circumstances for a significant improvement in the profitability of intellectual activity. To develop circumstances for the generation of intellectual property, new economic, legal, and organizational management methods are required.The aim of management science and practice is also to find mechanisms that will allow innovation to become a true productive force and a market subject. The significance and relevance of intellectual property management organization may be explained by the fact that the corporate entity's source of income is believed to be effective

decisions - management, technical, and economic judgments.It is impossible to examine the current economic strategy without taking into account intellectual property.That is, its usage in manufacturing generates a significant amount of additional revenue. The application of intellectual activity's results to civil, legal, and economic circulation is critical for raising the technical level and competitiveness of manufactured items.Production facility and equipment management is unquestionably legal for a third-millennium business, but it must be linked with excellent intangible asset management to obtain a competitive advantage. According to research, the intellectual property management system does not match modern standards. The state has not yet formed a favorable system of regulation of intellectual property relations. Many companies do not fully use their scientific capabilities and companies do not fully use their scientific potential and patent-protected research.In addition, practice demonstrates that intellectual property is the most important factor in improving the innovation economy's competitiveness, and that its usage necessitates managerial influence over processes. Taking all of this into account, it is deemed necessary to adopt the following actions in Azerbaijan to improve intellectual property management:

- first of all, to direct the intellectual property potential of individuals to obtain modern purposeful directions for innovative development;
- to incorporate retail infrastructure into the unified system for innovative activities by establishing infrastructure improvement ministries at the state and regional levels;
- Improving the quality of domestic regulation of the intellectual property and innovation market

As a result, the list of measures to be implemented includes the following:

- the selection of state-supported strategic priorities in science and education, as well as assuring the training of a new generation of employees;
- development of national and regional development programs of the intellectual property market;
- participation of the country in the creation of the infrastructure of innovation activity as a result of the cooperation between private and state sectors;
- the execution of economic and social benefits that can have a significant impact on the development of economic entities' innovative activities;
- to effectively use state assistance mechanisms for the purchase and sale of intellectual property in a way that safeguards both the state's and businesses' interests.

These include:

- Subsidies for intellectual property researchers;
- Quotas for the export of effective intellectual commodities;
- State protection of the rights of intellectual property authors;
- Increase export customs tariffs to prevent inefficient export of technology and licenses;
- Investment of intellectual capital in the charter funds of local and foreign businesses;
- Intellectual property copyright sales.

Services based on science. According to the findings of the study, scientific services are classified as follows in European Statistics by forms of economic activity:
a) high-tech services with a high level of science:
  - computer related activities;
  - communication;
  - research and development.

b) medium-level science and high-tech services:
- health and social services;
- other commercial activities;
- financial intermediation;
- types of activities related to the organization of culture, recreation and sports.

The systematization of high-tech services is further developed according to the technological level in the practice of existing statistics observations. It is necessary to assess the expenses of producing more advanced knowledge in order to analyze employment in fields of intellectual activity. As a result, they rely on a variety of sources of data, including one-time observations. Investments in science-intensive products are provided in the form of tax breaks and, above all, "investment tax credit". Companies that devote the majority of their resources to the creation and development of inventions are frequently granted such privileges. This is deducted from the amount of tax as part of the increased income, as well as the tax benefits provided in the traditional form.In general, the preferable form becomes significant only after the installation and operation of new machinery. In the presence of a regulatory system that complies with the law, a company's right to a tax credit is automatically included.Tax benefits are determined as a percentage of the cost of modern equipment, such as 5.3 percent in Japan (for equipment and electronics), 50 percent in the UK (for the first year of development of modern equipment, materials, technology, and so on), 10-15 percent in Japan (firm depending on the appropriation of the territory, geographical position), and 100 percent in Ireland.Tax advantages are only available in the United States for innovation investments in energy-related sectors.[12] As a result, tax advantages for the production and development of inventions are offered as deductions from a company's expenditure for proper purposes in industrialized countries.

3.1. Development innovation activity in Azerbaijan

The continuance of care in the field of research and education, the conservation of scientific and technical advantages, the training of highly skilled employees in science and education, personnel care, and the approval of numerous key laws in the field of science are all priority of Azerbaijan's innovation strategy.The majority of the country's scientific institutions are funded by the government. The amount of dollars provided for scientific finance in 2008 increased dramatically due to an improvement in the quality of research and technology.In this regard, expenditures on science in the state budget in 2017 grew from 30.8 million manat to 65.0 million manat, up from 30.8 million manat in 2014. In recent years, appropriate steps have been taken to advance science and strengthen the management system. In recent years, the invention and enhancement of innovations in the framework of the growth of a knowledge-based economy has evolved into a process of replication facilitated by a better national innovation system, and intelligence is now regarded as a priority as a result of the state's demand for innovative knowledgeHuman capital is a carrier of mental resources that is always evolving. As a result, premier universities, which not only make a large contribution as a result of modern training, but also serve as a foundation for regional innovation clusters, hold a prominent place in national innovation systems as a display of successful foreign experience (cluster - a set of objects).They create the conditions for the formulation of ideas, the enhancement of science-based product manufacturing, and the demonstration of high-tech services. Let's have a look at how changes in the labor market will benefit the science-based economy:

1) In general, hiring specialists with the necessary information and knowledge, such as programmers, analysts, scientists, and engineers, is required to promote science-based manufacturing. As a result, as the "intellectual share" of the product obtained grows, so does the demand for research employees.
2) Professors and teachers are required for professional and scientific education.

3) The industrialized countries' strategy was to find geniuses who could create new knowledge, and as a result, the worldwide competition will heat up. Those who excel in schooling in the United States, for example, now confront significant hurdles. There are certain bad tendencies in science and education staffing:
- aging of engineering and scientific personnel;
- a drop in the number of scientists and graduate students in nations that are already undergoing rapid scientific and technological development (South Korea, China, India, and so on);
- decreased interest in studying technical and natural sciences among young people;
- higher cost of higher education compared to other countries;
- limited number of teachers of scientific and technical subjects in many universities;
- secondary education still lags behind world standards.

The assignment of exclusive rights to the results of intellectual creation is crucial in the development of any legal interactions between civil law subjects for the use of intellectual property results.The phrase "intellectual property" is often used in laws in various nations to express these rights.[6] In the cases and in the manner prescribed by law, intellectual property is recognized as the exclusive right to a legal or natural person's results of intellectual creation, or to similar products, types of work, and services (firm name, trademark, service mark, etc.). The transfer of intellectual property rights and the forms of their integration into the economy are gradually evolving as computer technology and the Internet advance. The following is an analysis of forecasts for the development of science in the country:
- Improving the quality of basic research carried out at ANAS, other scientific research institutions and universities;
- Protection and development of Azerbaijan's scientific and technical potential, more effective application of this potential in environmental and public health protection, expansion of the country's information resources, and acceleration of innovative processes;
- Strengthening the functioning of scientific institutes and universities in terms of guiding and organizing scientific research;
- Effective use of more open, expedient methods of competition and competition, which eliminates the prospect of monopolies in research, and the establishment of conditions for the discovery of the country's scientists' creative potential;
- Competition-based development of general programs in scientific institutions and implementation of their funding;
- Training of highly qualified personnel with education and internship abroad.

The following can be considered as measures to be implemented in the fields of science:
- Realization of changes in management of scientific institutions according to important scientific directions of ANAS;
- Prioritization of scientific interests in the management mechanism of ANAS;
- Creation and sale of knowledge-based products, as well as their adaptation to the market economy through information, marketing and service;
- Determine the process for evaluating the quality and degree of scientific works, with a focus on research characteristics, civilized traditions of creative research, the establishment of governmental priorities in this direction, and the scientific community's viewpoint;
- The development of a new system for realizing scientific research outcomes by merging ANAS, technopark (technopolis), and scientific exchange (scientific and information technology interchange);

- Providing high salaries to researchers, as in developed countries, as well as increasing the attention to scientific work in society;
- Establishment of various funds to support the research of young scientists;
- Establishment of a system for training scientific professionals in conformity with the scientific and technical field's demands and preferences;
- Development of some creative foreign company initiatives by scientists and specialists from the National Academy of Sciences, as well as the formation of joint ventures in the Republic of Azerbaijan to speed up access to the global market;
- With the assistance of foreign corporations, transforming the scientific products of the National Academy of Sciences' enterprises into competitive samples and introducing these items to the global market.

The Law on Patents of the Republic of Azerbaijan (established in 1997) governs inventions, utility models, and industrial designs, among other things, that are the outcome of human mental activity and are regarded objects of industrial property. It is a security document issued by the relevant governmental authority.Industrial property rights are patented and safeguarded by the government. A patent is a legal document that verifies the authorship and originality of a work and grants the owner the exclusive right to use it. Patents cannot be used to protect inventions, utility models, or industrial designs that violate humanism and morality values, as well as social norms.The relevant executive authority in the field of industrial property in Azerbaijan carries out attestation and registration of patent attorneys, accepts claims on legal property from legal entities and individuals, performs research and inspection, registers industrial property in the State Register, grants patents, and implements the state policy on industrial property protection.Improving transnational education and transnational science based on innovative technology is the answer to universal problems. The formation of a unified scientific and educational space in Europe based on the Bologna system, in particular, is linked to scientific development ideals.Many countries' development strategies are based on concepts for innovative societal improvement (the idea of innovative development is the basis of the development strategy of the EU, China and other countries of the Russian Federation).If a country adopts an innovative development plan as its foundation, the transition from an industrial to a knowledge-based economy must be assured. Currently, it is not the countries who produce the most scientific information that are developing, but the ones that utilise such information in a higher quality and put it into practice.Of course, the relevance of information and new knowledge for industry varies by region or location; the important thing is that these ideas can be implemented swiftly and successfully.In and of itself, innovation entails gaining money from new information, scientific breakthroughs, and discoveries, as well as the ability to sell these products profitably on the market.Innovation is an important sort of intellectual entrepreneurship that is predicted to become a large-scale sphere of activity (as a result of the usage of the Internet for intellectual product e-commerce).Economic progress in developing nations is dependent on the development of a high-quality national innovation system. The Czech Republic, for example, has a fascinating history with innovation:On the basis of licensing, 98 percent of technology utilized as new ideas are purchased from other nations, and local enterprises are given 10-year loans at a rate of 5% per year to implement such unique ideas. Since 2016, the Czech Republic, together with a prominent country like the United States, has been a world leader in high-tech exports. Another example is Japan, whose rapid development began in the middle of the last century with the licensing of leading technologies to build innovative industries in the country. In Russia, the subject of creative development has been one of the government's strategic goals in recent years, although problems with administrative management, corruption, bureaucracy, and monopoly in the country present temporary barriers to creative development [9].

In recent years, significant emphasis has been paid to the development of human capital, education, and information technology, which has opened up favorable potential for innovative development prospects in Azerbaijan.Recently, Azerbaijan's higher education system has improved, and it has been integrated into the European education system through the creation of Regional Innovation Zones (RIZ), "Electronic Azerbaijan," and other initiatives. The establishment of state programs in these areas should be regarded as a positive move.The country's innovative development outlook necessitates the training of modern-thinking employees, which in turn necessitates the country's educational system's inventive development.. Innovative educational ideas should be employed more broadly in education to achieve this goal. Additional new knowledge is learned as a result of the implementation of innovative educational programs based on the application of students' acquired capabilities.The low degree of scientific and industrial interactions, as well as the relatively weak competitive environment in educational institutions, necessitate the creation of new higher education institutions.The teaching of the educational process itself, including the integration of science and industry, in the process of gaining new knowledge, is provided by the innovative education system, and innovative education can, of course, be applied in innovative institutions. Innovative institutions should create an educational system that is accessible to new scientific research. These universities' curricula equip students and masters with practical skills for developing and managing various projects, as well as training on current concerns and internship possibilities in production and research institutes. In order to ensure innovative development in the educational process, it is important to consistently implement the following processes:

a) prepare real projects for students' future professional activities (in various sectors of the economy);
b) conducting and applying fundamental research;
c) creating opportunities and conditions for students to choose courses as a result of the application of educational technologies.

Because the information economy's creation of information, information goods, and services is highly scientific, their quality and market competitiveness are heavily influenced by a country's level of technological development, as well as the level of development and adoption of new information technologies.The widespread use of cutting-edge technologies opens up prospects for operational change in the manufacturing organization to ensure high mobility and the introduction of new product models.[10 The information economy allows for the development of a variety of tools for maximizing the efficiency of production and knowledge.Its growth develops and distributes new sorts of products and services, as well as creating and stimulating the creation of new forms of labor. This alters people's living environments, providing new opportunities for personal growth, the construction of a new information culture, and the construction of moral ideals.As a result, the country's social production system must undergo successful structural reforms, achieve rapid development of the ICT sector, and construct modern production and service sectors with extensive application of innovative technologies in order to become an active participant in the modern global economy and a subject of the information society.

4. CONCLUSION
In summary, these processes highlight the significance of Azerbaijan developing a comprehensive innovation system. Simultaneously, new approaches to improve science and research-based production are being investigated. The formation and development of technoparks is one response to such processes. Simultaneously, taking these elements into account, it is necessary to build a concept of technopark networks, which serve as the

development infrastructure for innovation processes.The building of an innovative economy is one of the Republic of Azerbaijan's top priorities for development. Our country, which is richly endowed with natural resources, aspires to diversify its economy beyond oil.This necessitates the development of Azerbaijan's scientific-educational complex and industry. The country's chances of developing a new knowledge-based innovative enterprise should be enhanced.The purpose of diversifying the country's economy is to boost GDP by producing different kinds of goods and services.Furthermore, enhancing production efficiency, developing new technologies, and implementing advanced technologies to improve the competitiveness of high-tech goods in local and global markets, as well as expanding science-intensive businesses, should be considered a top priority for the country's economy.

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PROMOTING EXPORTS OF SERVICES IN AZERBAIJAN

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ABSTRACT

It is clear that the export has important effects on country economic development. There are lot of various strategies have used in some countries to increase the export of services. According to the international statistics, we can see that the share of services exports in global trade is increasing, and every country is trying to improve its capacity in the export of services by making some progress in this direction. After the successfully implementing oil strategy in the Republic of Azerbaijan, the volume of country exports has increased. At the moment, developing non-oil sector and achieving in diversifications of production and exports are main priorities of the country. Many strategies and policies have been pursued in this direction. However, the share of crude oil and oil products in total exports is still high and expanding export diversification is very important. We consider that one of the ways of expanding total exports is to increase exports of services. In this regard, some progress has been made in tourism and transport services in recent years, and according to statistics, the number of tourists visiting to the country is growing every year. Considering to the geographical and climate environment of our country, it is possible to achieve more progress in the export of tourism and the other types of services exports. Considering experiences of the countries that have succeeded in exporting services, it is clear that the main important factors of services exports development are improving the quality of services, creating the necessary infrastructure, having professional staff or increasing their professionalism, developing sectors that interact with exported services. For this regard, with the direct and indirect support of the government, it is possible to achieve the expanding services exports in our country by eliminating those problems.
Keywords: *export of services, export diversification, government support*

1. INTRODUCTION

It is an undeniable fact that the export of services plays an important role in the economic development of the country. Most countries in the world pay special attention to the promoting exports of services in order to achieve economic development, export diversification, increase revenues, employment and other important goals. For this reason, the share of services exports in the world economy is constantly growing. The development of technology has given a great impetus to the expansion of services. Thus, as a result of the technological development, the opportunities for trade in services have increased, and the export of services has created new opportunities for the diversification of the economies in many developing countries. For this reason, it is important to make some recommendations for the development of this sector by studying the experience of countries that have succeeded in exporting services and studying existing theories.

2. THE ROLE OF SERVICES IN THE ECONOMIC DEVELOPMENT

According to many researchers, services affect the country's economic development in four ways (Adlung 2007, Mattoo and Payton 2007):

- By influencing national income and employment. It is clear that the development of services leads to an increase in national income and employment in the country;
- By affecting the quality of some services. Thus, the expansion of services exports in the country results in an increase in the quality of some services;
- By influencing the investment climate. Promoting commercial services in the country is leading to an improvement in the investment climate in order to strengthen the infrastructure in a number of related services, including transport systems, communications and energy services.
- By diversifying the economy. The role of services in achieving inclusive growth in the country is great. Although the agricultural sector has a more effective impact on poverty reduction in the country than any other sectors, the service sector is considered to be more effective. The service sector allows more low-income people to find higher-paying jobs, strengthens economic infrastructure, and helps the country become more competitive globally.

3. THE MODES OF INTERNATIONAL TRADE IN SERVICES

It is very useful to study the aspects of trade in services. Service trades differ from commodity trades in that they are face-to-face between the consumer and the service provider. The international trade of services is implemented through the following models:

- Mode 1. Cross-border supply; this model is similar to commodities. For example, sending software from one country to another.
- Mode 2. Consumption abroad. Consumers (for example, tourists or students) travel across the border and benefit from certain services.
- Mode 3. Commercial presence. Establishment of a manufacturer's department in the consumer's country.
- Mode 4. Presence of natural persons. Manufacturer (engineer, doctor and teacher) operating in another country across the border.

Before studying the factors of development of international trade in services, it would be more expedient to identify the existing barriers in this area. Barriers to international trade in services are more complicated than barriers to international trade in goods.

4. BARRIERS IN INTERNATIONAL TRADE OF SERVICES

According to the experiences of some countries around the world, the main obstacles to the export of services are:

- Lack of human resources: As the service sector is labor-intensive, the development of this sector depends directly on skilled and professional staff. The level of education in the country plays a special role in this direction. In addition, a number of low-income countries face challenges, such as having highly professional staff working outside the country, which in some countries leads to restrictions, such as reduced access to the necessary staff in the service sector.
- Poor infrastructure: In countries with relatively low incomes, infrastructure is underdeveloped. Lack of necessary infrastructure for the development of services reduces the tendency to invest in this area. Lack of necessary infrastructure and reduced investment in services is a major obstacle to the development of this sector.

- Small size of the domestic market: One of the obstacles to the development of services is the small size of the domestic market in some countries. Thus, small countries face certain difficulties if they do not take advantage of the scale effect in the field of services.
- Lack of necessary information: In some developing countries, service exporters have difficulty obtaining the necessary information about the markets due to their small size. At the same time, these companies are unable to inform customers about the services they offer. Since the sale of products in foreign trade is formed mainly on the basis of international reliability and trust, the services offered by such enterprises are not attractive to customers.
- Low use of modern technologies: For the most part, most companies operating in developing countries are not able to use modern technologies. As we know, the lack of high-level technologies leads to a low level of competitiveness of these enterprises.
- Lack of financial resources: Many small and new enterprises face certain difficulties in obtaining the necessary financial resources. This is one of the factors preventing their development.

5. INTERNATIONAL TRADE OF SERVICES AND SERVICES EXPORTS OF AZERBAIJAN
5.1. International trade in services worldwide
According the statistics, it is clear that the total exports of goods and services in the world in 2019 amounted to 25033 billion US dollars, of which 19468 billion US dollars accounted for exports of goods and 6144 billion US dollars for exports of services. Share of services in total exports was 24.5% (UNWTO - World Tourism Barometer, 2020). Looking at the last decade, we see a steady increase in the share of services exports. According to other statistics, the share of services in the export of all goods and services in developed countries is 20.9%, while in developing countries this figure is 29.3% higher (UNWTO - World Tourism Barometer, 2020). It is clear that the share of developing countries in total exports of services is growing steadily.

5.2. International trade in services in Azerbaijan
First of all, it should be noted that after gaining independence, our republic has attached great importance to foreign trade and considered the development of this sector as the basis of economic development of the country. For this reason, foreign trade relations with many countries of the world have been started from the very beginning and certain successes have been achieved in this direction. As a result of the successful oil strategy implemented in our country, the volume of foreign trade exchanges and our country's foreign exchange earnings have been steadily increasing in a short period of time. Recently, special attention has been paid to the diversification of the economy in our country, and many strategies, policies and measures have been implemented to increase the number of the country's exports. As a result, many products in addition to oil and oil products are already exported to the world. In addition, special attention was paid to the international trade in services, which has become one of the most important sectors in the world, as a result of which great achievements have been made in the export of some services. However, looking at the potential of our country, it seems that we are still not in the right position in the export of services. According to statistics, until 2019, there was an increase in the export of services in our country.

Table following on the next page

	2017	2018	2019
Total exports of services	4 688 439	4 690 704	3 761 480
Commercial services	4 660 773	4 661 131	3 726 578
Travel	3 011 781	2 634 163	1 791 514
Transport	971 396	1 223 822	1 107 970
Other business services	404 966	528 309	666 527
Telecommunications, computer and information services	66 296	78 995	58 438
Government services	27 666	29 573	34 902
Construction	65 181	54 307	31 589
Insurance and pension services	23 464	12 462	26 639
Personal, cultural, and recreational services	12 529	17 222	22 523
Financial services	6 125	12 521	7 298

Table 1: Services exports of Azerbaijan, 2017-2019, by tousand USD
(Source: https://www.trademap.org/tradestat/index.aspx)

It is clear that in 2019, Azerbaijan's exports of services amounted to 3761 million US dollars, which is less than last year. However, in 2018 there was an increase in exports of services. The decline in the last year is due to events in the world. Among the commercial services of our country, tourism and transport services have the largest share. However, it should be noted that in the last two years, there has been a decline in exports of tourism services, but in 2018 there is an increase in transport services.

	2017	2018	2019
Total imports of services	8 067 752	6 752 758	6 377 143
Commercial services	8 004 015	6 678 845	6 302 990
Travel	1 453 655	1 164 989	1 723 533
Transport	2 658 369	2 284 361	1 702 493
Other business services	1 048 362	1 520 870	1 458 446
Telecommunications, computer and information services	2 482 167	1 331 496	1 034 176
Government services	112 864	161 412	159 345
Construction	90 387	99 484	97 940
Insurance and pension services	63 737	73 913	74 153
Personal, cultural, and recreational services	49 880	42 198	46 734
Financial services	14 425	16 781	16 026

Table 2: Services imports of Azerbaijan, 2017-2019, by tousand USD
(Source: https://www.trademap.org/tradestat/index.aspx)

There has been a decrease in the import of services in our country over the past two years. Thus, in 2017, the country's import of services amounted to 8067 million US dollars, while in 2019 it was 6377 million US dollars.

	2017	2018	2019
Total exports of services	4 688 439	4 690 704	3 761 480
Travel	3 011 781	2 634 163	1 791 514
Personal travel	2 286 894	2 036 827	1 435 377
Business travel	724 887	597 336	356 137

Table 3: Travel services exports of Azerbaijan, 2017-2019, by tousand USD
(Source: https://www.trademap.org/tradestat/index.aspx)

As we have noted, tourism and transport services have the highest share in the export of services of our country. Individual travel weighs more in the export of tourism services. However, if we look at many countries around the world, we can see that business travel accounts for 40-45%. For this reason, first of all, it is expedient to take the necessary measures for the development of business travel in our country.

	2017	2018	2019
Total exports of services	4 688 439	4 690 704	3 761 480
Transport services	971 396	1 223 822	1 107 970
Air transport	439 559	782 668	680 039
Sea transport	175 227	146 379	129 684
Other transport	350 689	288 095	294 484
Postal and courier services	5 921	6 680	3 763

Table 4: Transport services exports of Azerbaijan, 2017-2019, by tousand USD
(Source: https://www.trademap.org/tradestat/index.aspx)

In the field of export of transport services, air transport had a higher weight. However, for some reason, there was a decline in 2019. Exports of maritime transport services declined every two years. As we have noted, despite the great opportunities in the field of export of services in our country, the existing potential is used at a low level.

6. DEVELOPMENT FACTORS OF INTERNATIONAL TRADE IN SERVICES

Examining the strategies implemented in the field of export of services on a global scale, we can see that the following important factors have a greater impact on the development of this sector:

- The existence of "fundamentals" in the country. Fundamentals refers to the country's factor endowments, particularly entrepreneurial skills, natural resources and human capital, relevant infrastructure and telecommunications networks, the institutional environment related to services, and so on.
- Trade in services, investment climate and policies affecting the mobility of staff working in this field. These include transport and financial services, health and education services, foreign investment in this area, telecommunications and business process outsourcing, construction and information technology, and more.
- Policies for the development of services. This section includes policies to increase exports of services and investment in services, as well as special incentives for technology and raw material imports, subsidies or tax incentives for those operating in the sector, trade fairs abroad and the dissemination of relevant information to assist exporters.

7. CONCLUSION

The role of the services exports in the non-oil sector development in our country, the diversification of exports, the growth of foreign exchange earnings, the creation of new jobs and the stimulation of economic development in general is great. For this reason, the development of this sector is important. Given the existence of strong global competitors, the need for large investments, as well as the direct or indirect involvement of the state, as it covers not only one sector, but many sectors of the economy, we consider it appropriate to use tax incentives and subsidies. Thus, the quality of the environment, the strengthening of infrastructure, the protection of the environment, the expansion of relations between the services sector and related sectors, the high quality services that are created are not only important for the local community. The state, companies and public organizations have common interests in this work. For this reason, clustering of stakeholders has the advantage of being more effective in achieving these goals, benefiting from the scale effect (allocation of costs for road construction and maintenance) and benefiting public organizations. This has the ability to strengthen the competitive environment within the cluster. Of course, the creation of such clusters can be more effective due to government incentives. At the same time, strengthening the economic infrastructure of the state, increasing domestic capacity, improving the professionalism of staff in this area, as well as investments in the export of services, special discounts on technology and raw material imports, the introduction of necessary subsidies and other incentive policies can be useful in services exports.

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STATISTICAL RESEARCH ON GENDER CHARACTERISTICS OF EMPLOYMENT IN THE REPUBLIC OF AZERBAIJAN

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ABSTRACT

As in all other countries gender issue in Azerbaijan still remains actual. Gender equality plays a major role not only in the development of any country's economy and in improving its social welfare. Although the legal equality of population in the country is regulated by relevant laws and other legal acts, the distribution of women and men by occupation and sector, the improper distribution of unpaid domestic work, gender discrimination in the workplace and other obstacles equality still exist. In the labour market, the employment rate of men is higher than that of women, which leads to social inequality. The article analyzes the level of employment of men and women in Azerbaijan, as well as the gender characteristics of the age and level of citizens' education, the unemployment rate and the short-term employment rate and the existing gender pay gap were also statistically assessed. The aim of the research is to estimate statistics of gender characteristics of employment in Azerbaijan, as well as to identify reasons of gender inequality based on the data provided by State Statistical Committee of the Republic of Azerbaijan, World Bank and World Economic Forum. The methodological basis of the research consists of analyzing statistical data of gender characteristics of employment in the Republic of Azerbaijan with the help of special graphs, tables, time series analysis, forecast and others. The results of the research take into consideration the levels of employment in Azerbaijan. The results can be used as an analytical and statistical data while making decisions to overcome the existing gender issue in the job market.
Keywords: employment, gender inequality, labor market, statistics, unemployment

1. INTRODUCTION

Gender equality allows all women and men, regardless of their gender, to participate equally in social, economic, political and other areas of life, as well as to ensure their equal access to economic resources. Ensuring social justice, human security, and men's and women's rights and freedoms in modern conditions is only possible with the real establishment of gender equality in all spheres of society, and the solution of this problem is one of the main goals of the Republic of Azerbaijan since the first years of its independence. Equality and freedom of men and women before the law in Azerbaijan are guaranteed in accordance with the Constitution of the Republic of Azerbaijan (Article 25) adopted by nationwide referendum in 1995. In addition, a number of important steps have been taken for gender equality by means of state support. "The Law on Guarantees of Gender (men and women) Equality" signed by Azerbaijani President in 2006, "Republican Comprehensive Program on Fight against Daily Violence in a Democratic Society" adopted by the Cabinet of Ministers in 2007, and "The Law on Prevention of Domestic Violence" adopted by National Assembly in 2010 is among those important steps taken to eliminate gender discrimination (http://www.e-qanun.az).

Since Azerbaijan ratified conventions such as "The Convention on the Political Rights of Women" (1992) and "The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)" (1995), as well as agreed with the international agreements such as "The Beijing Declaration and Platform for Action (1995), the Millennium Development Goals (MDGs) set forth in the Millennium Declaration (2000), and the Sustainable Development Goals (2015), it has made great achievements in issues related to the protection of human rights and freedoms, the protection of women's rights, and the elimination of gender discrimination (http://www.undp.org). Although gender inequality has been partially eliminated as a result of these measures, the country's indicators in international gender equality indices have not yet reached the desired level. Pursuant to the Global Gender Gap Index calculated by the World Economic Forum experts for 156 countries, Azerbaijan ranked 100th in 2021 (94th in 2020, 97th in 2019). In the index, which is rated between 0-1, Azerbaijan's score was 0.688 for countries, 0.996 for educational attainment, 0.748 for economic participation and opportunity, 0.939 for health and survival, and 0.069 for political empowerment. Thus, although the country's performance in reducing gender inequality in education and health is acceptable, we can still observe gender inequality in political empowerment. The level of gender inequality in economic participation and opportunity is relatively moderate. The labor force participation rate was 69.5% for women and 74.6% for men. In Azerbaijan, 35.8% of legislators, senior officials, and managers were female, 64.2% were male, and 58.0% of professional and technical workers were female, 42.0% were male (World Economic Forum, 2021). As reported by the World Bank's "Women, Business and the Law 2020" survey published in 2020, Azerbaijan ranked 92nd (78.8 score) among 190 countries in the gender equality ranking (World Bank, 2020). Taking into account the gender factor, the Human Development Index was 0.934, the Women's Empowerment Index was 0.427, and the Gender Inequality Index was 0.264 in Azerbaijan in 2019 (http://www.stat.gov.az). All this proves once again that there is gender inequality in Azerbaijan, which leads to unfavorable socio-economic consequences, and the statistical analysis of gender differences in unemployment and employment remains as a particularly significant and relevant subject. Gender issues has been studied by foreign and local scholars such as Eliseeva I.I., Dekina M.P., Tagarov B.Zh., Persteneva N.P., Panov A.M., Barchenkova E.Y., Muradov S.M., Abasov A.S., Mirzazade R.S., Mehtiyev A.S..

2. STATISTICAL ANALYSIS OF THE GENDER DISTRIBUTION OF THE ECONOMICALLY ACTIVE POPULATION

One of the most essential statistical indicators used to characterize gender equality in the labor market is the distribution of men and women in the economically active population. Conforming to this indicator, experts from the World Economic Forum assess women's access to the labor market (Panov, 2014). Let's analyze the general situation of economic activity of men and women in the labor market in Azerbaijan, using the data of the official statistical service of the Republic of Azerbaijan (Table1):

	2005	**2010**	**2015**	**2016**	**2017**	**2018**	**2019**
Economically active population (in thousands)	4380.1	4587.4	4915.3	5012.7	5073.8	5133.1	5190.1
Women	2111.3	2257.7	2404.5	2439.5	2464.8	2495.7	2526.0
Men	2268.8	2329.7	2510.8	2573.2	2609.0	2637.4	2664.1

Table 1: Dynamics of economic activity of men and women in Azerbaijan in 2005-2019
(Source: http://www.stat.gov.az)

As can be seen from Table 1, the number of economically active population in 2019 increased by 810 thousand people (18.5%) compared to 2005 and amounted to 5190.1 thousand people, of whom 251.6 thousand people were unemployed and 4938.5 thousand were employed. According to official state statistics, the share of women in the economically active population in Azerbaijan increased to 48.2% in 2005, 49.2% in 2010, 48.9% in 2015, 48.7% in 2016, 48.6% in 2017, 48.6% in 2018, and 48.7% in 2019. The gender distribution of the economically active population has not changed significantly during the years studied. In 2005-2019, more than 50% of the economically active population was men, and this indicator was almost the same with slight differences in all years. The highest share of men in the economically active population was registered in 2005 (51.8%) and the lowest in 2010 (50.8%). Compared to 2005, the number of economically active women increased by 6.9% in 2010, 13.9% in 2015, 15.5% in 2016, 16.7% in 2017, 18.2% in 2018, and 19.6% in 2019. On the other hand, the number of economically active men increased by 2.7% in 2010, 10.7% in 2015, 13.4% in 2016, 15.0% in 2017, 16.2% in 2018, and 17.4% in 2019 compared to 2005. The increase in the economically active population in 2005-2019 was due to the strong impact of the development of the oil and gas sector in the country on other economic fields (mainly service and construction), as well as the self-employment of small landowners and their families. The results of the selective statistical survey "On economic activity of the population" conducted by the State Statistics Committee of the Republic of Azerbaijan in 2019 in all regions of the country showed that the share of economic activity of working-age women was lower than men. This proves that women in he country are mainly involved in family care, cleaning and other unpaid work. The share of economic activity in the country was 72.4% for women (68.7% in urban areas, 76.6% in rural areas), 75.1% (72.3% in urban areas, 78.3% in rural areas) for men. In 2019, the level of economic activity of women was 11.3% for those aged 15-24, 78.6% for those aged 25-54, and 10.1% for those aged 55 and over. The level of economic activity of men was 12.3% for those aged 15-24, 75.5% for those aged 25-54, and 12.2% for those aged 55 and over. Thus, in 2019, the level of economic activity of women and men aged 25-54 was higher than in other age groups. Given that the majority of young boys and young girls aged 15-24 in Azerbaijan are involved in education, the figures showing a low level of economic activity in this age group are quite natural. The share of economically active women aged 15 and over is 6.4% lower than that of men of the same age throughout the country, 6.7% lower in urban areas, and 5.8% lower in rural areas. The economic activity of working-age women living in rural areas was 8.0% higher than that of urban women, and the economic activity of working-age men living in rural areas was 6.0% higher than that of urban men. In 2010-2019, the share of the unemployed in the economically active population in Azerbaijan decreased 5.6%-4.8%, while the share of the employed population increased 94.4%-95.2%.

3. STATISTICAL ANALYSIS OF GENDER DIFFERENCES OF EMPLOYMENT AND UNEMPLOYMENT IN AZERBAIJAN

Ensuring gender equality in the labor market results with an increase in employment, a decrease in unemployment and, consequently, an increase in income, which all these in turn reduce social tension and poverty, and improve living standards. The dynamics of gender distribution of the employed and unemployed population in Azerbaijan in 1999-2019 was as follows (Table2):

Table following on the next page

Year	Employed (in thousands)		Unemployed (in thousands)	
	Men	Women	Men	Women
1999	1978,5	1978,5	263,6	289,0
2000	2016,5	2016,5	246,5	268,2
2001	2032,6	2032,6	234,5	242,2
2002	2049,2	2049,2	220,6	220,6
2003	2066,7	2066,7	206,2	194,7
2004	2085,3	2085,3	179,8	168,9
2005	2104,7	2104,7	164,1	153,7
2006	2126,4	2126,4	157,0	134,2
2007	2149,2	2149,2	163,9	117,2
2008	2173,4	2173,4	142,4	119,8
2009	2199,8	2199,8	114,2	146,0
2010	2227,4	2227,4	102,3	156,0
2011	2250,0	2250,0	104,7	146,2
2012	2291,8	2291,8	103,5	139,6
2013	2337,5	2337,5	98,5	138,1
2014	2376,1	2376,1	99,6	138,2
2015	2408,2	2408,2	102,6	141,1
2016	2465,7	2465,7	107,5	145,3
2017	2502,8	2502,8	106,2	145,5
2018	2529,4	2529,4	108,0	145,8
2019	2556,8	2556,8	107,3	144,3

Table 2: Dynamics of gender distribution of the employed and unemployed population in Azerbaijan in 1999-2019
(Source: http://www.stat.gov.az)

As can be seen from Table 2, as a result of measures and reforms implemented in Azerbaijan since the first years of its independence, the number of unemployed of both females and males in the labor market in the country decreased in 1999-2019, while the number of employed population increased. Gender equality in employment allows establishing equal opportunities for both women and men to work with different levels of professionalism in various economic activities and jobs, receiving adequate and comparative rewards for work, equal provision of appropriate working conditions, social protection, as well as equal access to the labor market. Although the dynamics of the employed population for both women and men increased steadily between 1999 and 2019, the number of employed men exceeded the number of employed women in all years. In 1999, the share of women in the employed population was 47.7%; in 2019 it was 48.2%. In comparison with 1999, the number of employed men in 2019 increased by 29.2% and amounted to 2556.8 thousand people, and the number of employed women increased by 32% and amounted to 2381.7 thousand people. Compared to 2018, the number of employed men in 2019 increased by 27.4 thousand (1.1%), and the number of employed women increased by 31.8 thousand (1.4%). According to the results of the selective statistical survey "On economic activity of the population" conducted by the State Statistics Committee of the Republic of Azerbaijan in 2019 in all regions of the country, the employment rate for the population aged 15 and over was 59.7% for women (55.5% in urban areas, 64.7% in rural areas) and 66.9% for men (63.0% in urban areas, 71.4% in rural areas).

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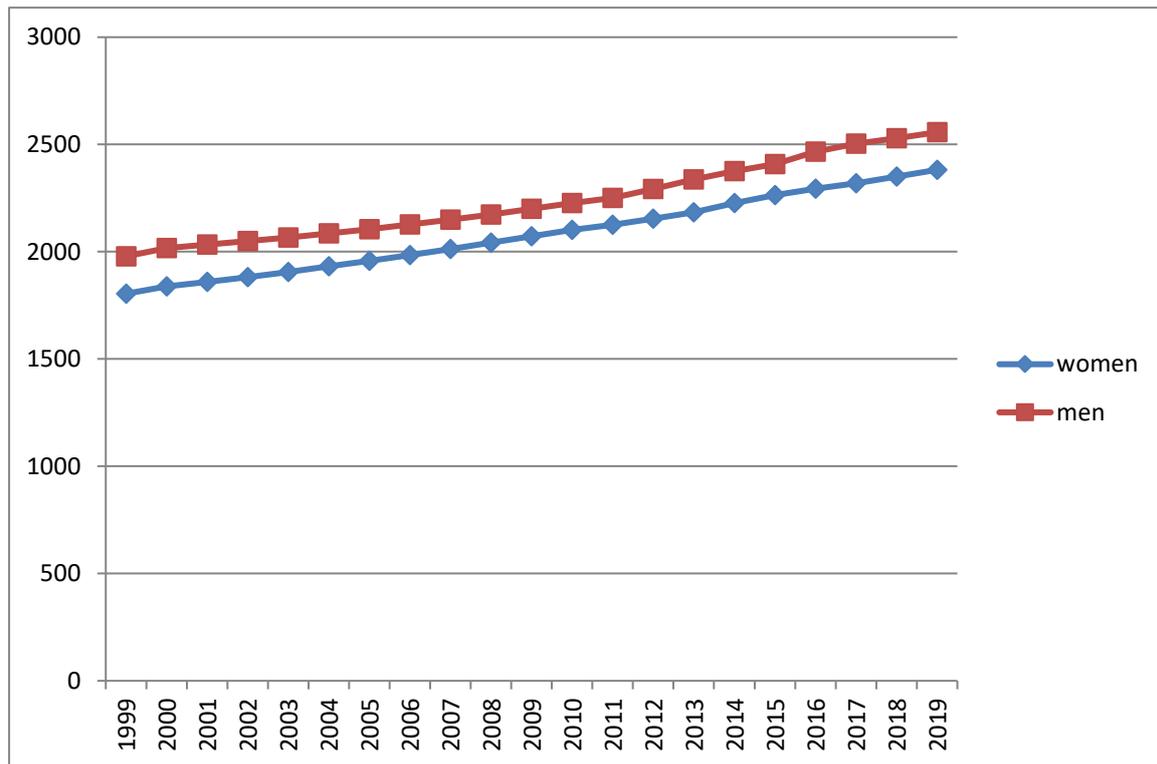
Figure 1: Gender distribution of the employed population in Azerbaijan in 1999-2019, in thousands
(Source: http://www.stat.gov.az)

In 2019, 10.3% of the total number of employed 2381.7 thousand women aged 15-24, 79.3% aged 25-54, and 10.4% aged 55 and over. 11.4% of the employed men (2556.8 thousand people) aged 15-24, 76.1% aged 25-54, and 12.5% aged 55 and over. This means that men start working at an earlier age than women and continue working until later in life. Women start working later than men and retire earlier. As can be seen from Figure 2, in 2019, the share of men in all age groups (except for 45-49 and 50-54 age groups) was higher in the employed population in Azerbaijan. Only 43.7% of the employed population in the 15-19 age groups was women. The high number of men in this age group is due to the fact that, unlike girls, young boys enter the labor market earlier without finishing school. Due to the fact that many young girls have graduated from higher and secondary schools and entered the labor market, the number of employed women in the 20-24 age groups increased slightly to 45.9%. Although the number of employed women in the 25-29 age groups was close to the number of men, the number of employed women and men in the labor market was equal in the 30-34 age groups. The fact that more than half of the employed population in the 45-49 and 50-54 age groups is women is due to the fact that women in these age groups, regardless of salary level, do not leave their permanent jobs and the number of men looking for work decreases. The increase in the proportion of men was due to the fact that women retired earlier.

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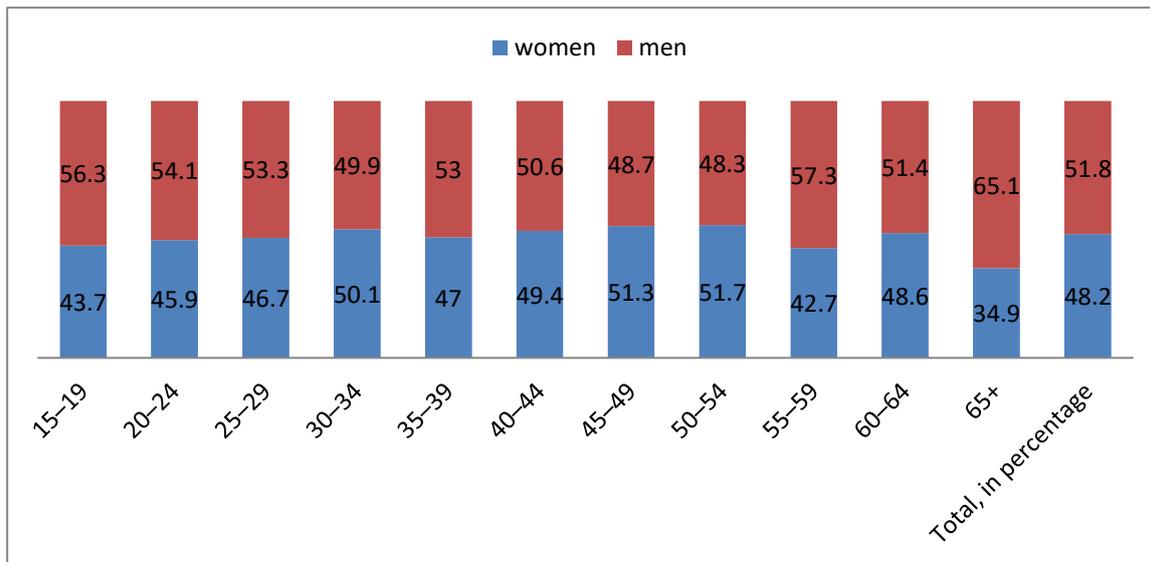
Figure 2: Gender and age distribution of the employed population in Azerbaijan in 2019, in percentage
(Source: http://www.stat.gov.az)

As in other countries, women and men are unequally represented in economic activities in Azerbaijan. In 2019, 41.8% of all employed women were involved in agriculture, forestry and fishing, 18.8% in trade, vehicle repair, 12% in education, and 6.1% in health and social care, and 21.3% in other areas. 30.6% of men worked in agriculture, forestry and fishing, 13.0% in construction, 10.1% in industry, 9.1% in public administration, defense and social security, 7.3% in transport and warehousing, 3.8% in education, 2.4% in real estate operations and 23.7% in other areas. According to the State Statistics Committee of Azerbaijan, while in 2018 only the number of women working in 3 types of economic activities (education, health and social services and recreation, entertainment, art) was higher than the number of men, in 2019, the number of women working in agriculture, trade, vehicle repairing, information and communication, healthcare, social services, education, recreation, entertainment and art, and other services exceeded the number of men (http://www.stat.gov.az). Studies show that in the labor market in Azerbaijan, as in developed countries, there is a problem of gender differentiation of income and wages. Although the principle of equal payment for equal work is provided by law in the Republic of Azerbaijan, the salaries of men and women working in the same field in the labor market differ. While the average monthly nominal salary in 2018 was 360.8 manats for women and 670.2 manats for men, as a result of the increase in the minimum wage, the level of this indicator in 2019 was 443.4 manats for women and 764.8 manats for men. That is, the average monthly salary of women was 58% in 2019, compared to 53.8% of the average monthly salary of men in 2018. The average monthly salary of women in the areas dominated by women in the labor market in Azerbaijan is considerably less than the average monthly salary of women. For example, although at the beginning of the 2019/2020 academic year, 81% of secondary school teachers, 79% of secondary special education teachers, and 55% of higher education teachers were women, the average monthly nominal salary of women in the education sector (409.7 manats) was 78.6% of the average monthly nominal salary of men (521.0 manats). This was due to the fact that the number of men working in management positions in the education sector and receiving high salaries was higher than the number of women. 48.8% of full-time general education principals and their deputies were women and 51.2% were men. In 2019, the share of women in the total number of civil servants in Azerbaijan was 29.0%.

The number of women holding civil service positions increased by 232 people (2.8%) in 2019 compared to 2018 and amounted to 8520 people, of which 465 people held administrative positions according to the 3rd higher classifications, 5076 people were in administrative positions according to the 4th-7th classifications, and 2979 people worked in auxiliary positions. In 2019, the average monthly nominal salary of women (325.1 manats) in the field of healthcare and social care services, which are dominated by women, was 72.4% of the average monthly nominal salary of men (449.2 manats). As of the end of 2019, the number of doctors was 31,829, of which 65.9% were women. In other areas, the high average monthly salary of men is explained by the large number of men in these areas. In the Azerbaijan labor market, women work more informally and in low-paid jobs than men, which lead to a significant difference in the salaries of men and women. In general, the difference between men's and women's wages is formed as a result of the influence of employment conditions such as the level of education of employees, individual characteristics like work experience, the sector of the economy, the type of employment contract, the size of the enterprise, and so on. The highest level of employment was observed in both women and men with full secondary education, and the lowest level was observed in those with primary education. In 2019, 40.5% of the employed population with higher education was women, 59.5% was men, 60.4% of the employed population with secondary special education was women, 39.6% was men, 29.7% of the employed population with vocational education was women, 70.3% was men, 48.8% of the employed population with full secondary education was women, 51.2% was men, 56.0% of the employed population with general secondary education was women, 44.0% was men, and 73.5% of the employed population with primary education was women, 26.5% was men. According to the data obtained by the State Statistics Committee of Azerbaijan applying International Labor Organization's (ILO) methodology (including the unemployed), the number of unemployed men in 2002-2008 exceeded the number of unemployed women, while in 2009-2019 the number of unemployed women exceeded the number of unemployed men. 49.7% of all unemployed in 2002, 48.6% in 2003, 48.4% in 2004, 48.4% in 2005, 2006 46.1%, 41.7% in 2007, 45.7% in 2008, 60.4% in 2010, 58.3% in 2011, 57.4% in 2012, 58.4% in 2013, 58.1% in 2014, 57.9% in 2015, 57 in 2016, 8%, 57.8% in 2017, 57.4% in 2018, and 57.4% in 2019 were women. These data indicate that the unemployment in the Republic of Azerbaijan is more specific to women. The unemployment rate for women was equal to 6.9% in 2010, 5.9% in 2015, 6.0% in 2016, 6.0% in 2017, 5.9% in 2018 and 5.8% in 2018. In 2019, the unemployment rate in the whole country was 5.7% for women (6.7% in urban areas, 4.7% in rural areas), 4.0% for men (4.9% in urban areas, 3.1% in rural areas). In 2019, the number of unemployed reached 81.3 thousand people (30.7 thousand for women, 50.6 thousand for men), and the number of those receiving unemployment benefits was 540 (283 for women, 257 for men). Despite the high share of men among those who received unemployment status in 2010-2019, the share of men in the number of those receiving unemployment benefits in 2012 and 2019 was small. In 2019, 0.51% of men and 0.92% of women with unemployment status were given the unemployment benefits.

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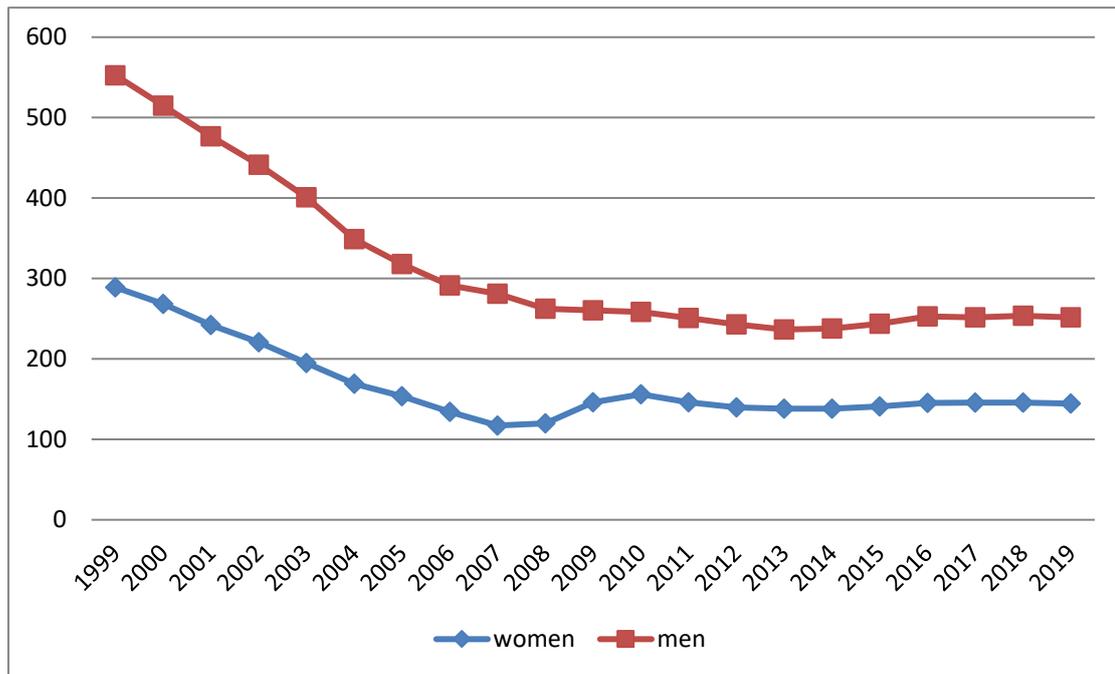
Figure 3: Gender distribution of the unemployed population in Azerbaijan in 1999-2019, in thousands
(Source: http://www.stat.gov.az)

The highest unemployment rates are noticed in the 15-19 and 20-24 age groups. The high unemployment rate for young boys and girls in the composition of unemployment remains a serious problem in Azerbaijan, as in most other countries. Unemployment rates for these age groups are higher in urban areas than rural areas for both females and males. There is a difference between the unemployment rates for boys and girls in the 15-29 age groups (27.9% for young boys and 36% for young girls). The high unemployment rate in this age group is explained by the reluctance of employers to hire inexperienced workers.
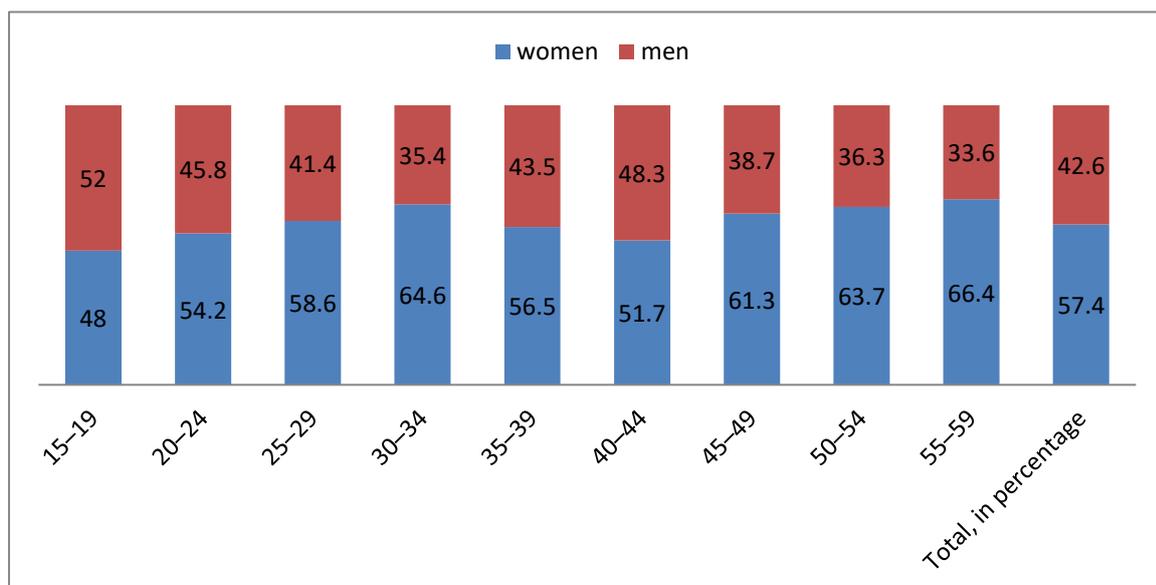
Figure 4: Gender and age distribution of the unemployed in Azerbaijan in 2019, in percentage
(Source: http://www.stat.gov.az)

Gender differences of unemployment are also reflected in education. The highest unemployment level is observed in the population with full secondary education, as in employment. More than half of the unemployed women – 55.9%, and 47.3% of the men have full secondary education. 46.4% of the unemployed population with higher education is women and 53.6% is men. 54.1% of the unemployed population with secondary special education is women and 45.9% is men. 62.1% of the unemployed population with vocational education is women and 37.9% are men. 61.4% of the unemployed population with full secondary education is women and 38.6% is men. 53.0% of the unemployed population with general secondary education is women and 47.0% is men. Finally, 66.7% of the unemployed population with primary education is women and 33.3% is men. One of the fundamental issues in the statistical analysis of gender differences in unemployment and employment is to determine its general development trend and forecast the level of unemployment and employment for men and women by analyzing the dynamics of the gender distribution of the unemployed and employed population. As a result of analytical smoothing of the dynamics series (Table 2) characterizing the distribution of the unemployed and employed population in Azerbaijan, the trend model $\hat{y}_t = 149,2 + (-8,1)t$ for unemployed men, the trend model $\hat{y}_t = 2234,7 + 28,9t$ for employed men was determined. The trend model was $\hat{y}_t = 166,4 + (-5,6)t$ for unemployed women and $\hat{y}_t = 2080,5 + 28,9t$ for employed women. According to the forecast on the basis of these models, a decrease in the level of unemployment and an increase in the level of employment for both men and women were expected to occur in a short term in Azerbaijan. However, since March 2020, the spread of coronavirus COVID-19 in Azerbaijan has had a direct impact on the country's labor market as a negative factor. In order to prevent a pandemic in Azerbaijan, the closure of enterprises, including small and medium enterprises, has increased the unemployment rates and decreased the number of employed population. In conformity with the preliminary data provided by the State Statistics Committee of Azerbaijan, despite the creation of more than 129,000 new workplaces in Azerbaijan, in 2020, the number of unemployed was 375.9 thousand people, which were 124.3 thousand people or 49.4% more than in 2019. The number of employed population decreased by 1.25% and amounted to 4876.6 thousand people (APA-Economics, 2021). Finally, due to the lack of official data on the gender distribution of unemployment and employment in 2020, it was not possible to conduct a statistical analysis of gender differences of unemployment and employment in Azerbaijan caused by the spread of coronavirus infection COVID-19.

4. CONCLUSION

Ensuring gender equality in unemployment and employment in the labor market is of crucial importance in the socio-economic development of any country and is a key mechanism in the struggle with poverty. A statistical analysis of the gender differences of employment and unemployment in Azerbaijan using data from the official statistics service found that despite the high proportion of women in the total population, more than half of the economically active population was men. Although women have the same legal status as men in the labor market in Azerbaijan, women's mainly engagement in family care, cleaning, and other unpaid work because of national customs and traditions, social problems (violence, economic and political oppression), difficulties in reconciling personal life with work, gender discrimination in employment, etc. all these prove that women do not have the same opportunities as men do. These reasons prevent many women from using their potential in the labor market and result with an increase in the number of employed men and in the number of unemployed women. At the same time, men start working at an earlier age than women and continue their work until a later age. Women start working later than men and retire earlier. Compared to the number of employed men, the number of employed women was higher in agriculture, trade, vehicle repair, information and communication, healthcare, social services, education, recreation,

entertainment, art, and other fields. Men worked mostly in industry, construction, transport and warehousing, tourist accommodation and catering, financial and insurance activities, real estate operations, professional, scientific and technical activities, administrative and support services, public administration and defense, and social security. However, there is a variation between the salaries of men and women working in the same job in the labor market. This variation was primarily due to the vertical (greater number of men in leadership positions than women) and horizontal gender segregation (male dominance in the labor force) in the country's labor market.

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IMPACT OF COVID-19 ON THE TOURISM SECTOR IN AZERBAIJAN: PROBLEMS AND DEVELOPMENT PROSPECTS IN THE POST-COVID PERIOD

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ABSTRACT

The pandemic of the new coronavirus and the strict anti-epidemic measures imposed by various countries have accelerated the transformation of world tourism. The industry is losing hundreds of billions of dollars and millions of jobs. However, at the same time, the digital travel tech startups are entering the market, the new opportunities for individual tours and the international cooperation formats are emerging. The article investigates the impact of the pandemic on the economy and the tourism sector of Azerbaijan, discusses the problems that have arisen in the field of tourism. It is noted that the current crisis has revealed the existing structural weaknesses in the tourism economy (this is a fragmented sector, represented mainly by small and medium-sized businesses, overly dependent on seasonality), as well as gaps in the readiness of governments and businesses to respond quickly to the new challenges and changes. The socio-economic consequences of the pandemic and the possibilities transformation of tourism are analyzed. By conducting a comparative analysis of statistical data, the main changes in inbound and outbound tourism are identified, an analysis of various scenarios for the development of tourism in the post-covid period is carried out. The results of the study make it possible to put forward a number of proposals for the restructuring of the industry and the further development of tourism in Azerbaijan.
Keywords: COVID-19, pandemic, tourism restructuring, tourism sector

1. INTRODUCTION

In the 21st century, humankind faced a number of global crises that had a negative impact `on the growth of the entire world economy. Having survived the economic crises of 2001 and 2008, the world faced an even more unpredictable and destructive situation in 2020. Given the cyclical nature of economic growth, we can state the beginning of a new global financial crisis in the short run. To the global economic problems, such as trade and customs wars, the global GDP slowdown, energy resources sales and prices slowdown, was added a new threat of global scale-the coronavirus infection, which within a year has brought down futures quotes for oil to negative values and questioned the viability of globalization in the current conditions. The upcoming global financial crisis, complicated by a global pandemic, might be the most crucial test for the global economy of the 21st century (Kostin K.B.& Khomchenko E.A., 2020). In recent years, the global economy has grown more slowly than at the beginning of the 21st century: developed countries - at an annual average of 2% against 2.4%, developing countries - at an annual average of 5% instead of 7%. The world was struggling to overcome the effects of the crisis of 2009, and the coronavirus not only cancelled out the achieved, but also accelerated a number of processes that pose even more complex challenges to humankind. As per the International Labour Organization, the "coronacrisis" jeopardized more than 500 million work places in the world, and 100 million of them will be lost permanently. As a result, about 120 million people in developing countries will end up in extreme poverty. Tourism has become one of the areas of the global economy that has felt the full negative impact of the pandemic. The closure of the airspace of many countries, the imposition of many restrictions, the strengthening of sanitary and hygienic requirements, the need to observe social distance, the increasing concern of the population for their safety and psychological fear of a new virus led

to a complete crisis of tourism and a number of related industries (hotel business, air transportation of passengers, entertainment, etc.). The article examines the impact of the pandemic on the tourism sector of Azerbaijan, analyses the existing problems in the industry and offers a number of recommendations for the development of tourism in the post-crisis period.

2. IMPACT OF THE PANDEMIC ON WORLD TOURISM

Tourism is an important area of socio-economic activity and makes a significant contribution to the state budget revenues of many countries. According to the World Travel & Tourism Council (WTTC) data, which represents the international tourism industry, the contribution of tourism to the global economy in 2019 amounted to $ 9.1 trillion, or 10.4% of world GDP (https://wttc.org/Research/Economic-Impact). Council estimates the travel and tourism industry accounts for 330 million work places worldwide (1 in every 10 work places worldwide). In early 2020, all countries were covered by a pandemic of a new type of coronavirus, COVID-19, announced by the World Health Organization. Tourism is one of the global industries most affected by the economic impact of the pandemic (Aburumman, 2020). Traditionally, the tourism and recreation industry is affected by external shocks – for example, events occurring in specific host countries can lead to a large-scale redistribution of trips to other resort regions. However, such powerful shocks as COVID-19 pandemic can paralyze the world tourism market for an indefinite period. Along with the epidemics of viral and infectious diseases, exogenous factors that depress the global hospitality industry can also include military conflicts and terrorist threats, climate change and natural disasters, abrupt price changes of the oil and oil products, currency fluctuations, financial and economic crises, etc. (Bayeva M. A.& Knobel A. Y., 2020). Today, tourism and related industries are experiencing an unprecedented decline due to the coronavirus pandemic. Many experts in tourism state that the current crisis associated with the new virus is the worst for the industry since 1950. Thus, according to the UNWTO, the annual figures for tourism in 2020 had declined by 73% on the average compared to 2019. The slowdown was observed in almost all regions of the world (Fig. 1).
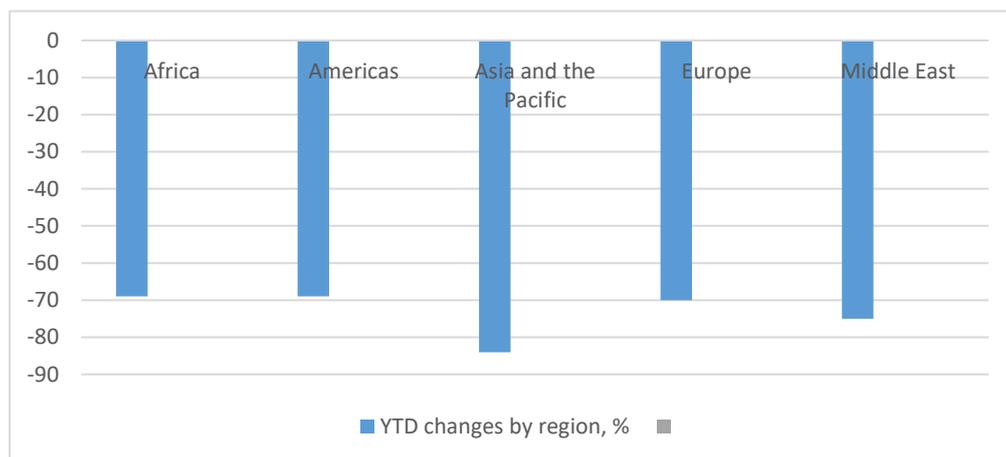
Figure 1: YTD changes by region, 2020 (%)
(Source: https://www.unwto.org/international-tourism-and-covid-19)

As it follows from the above graph, Asia and the Pacific suffered the most, with an annualized slowdown in tourism of -84%, followed by the Middle East (-75%), Europe (-70%), Africa (-69%) and Americas (-69%). The Asian region was the first to feel the impact of the new virus, accompanied by travel restrictions, and sometimes a complete lockdown, in addition, this region was the most active in terms of tourist flows. We consider the change in tourism indicators in 2020 by months (Fig. 2).
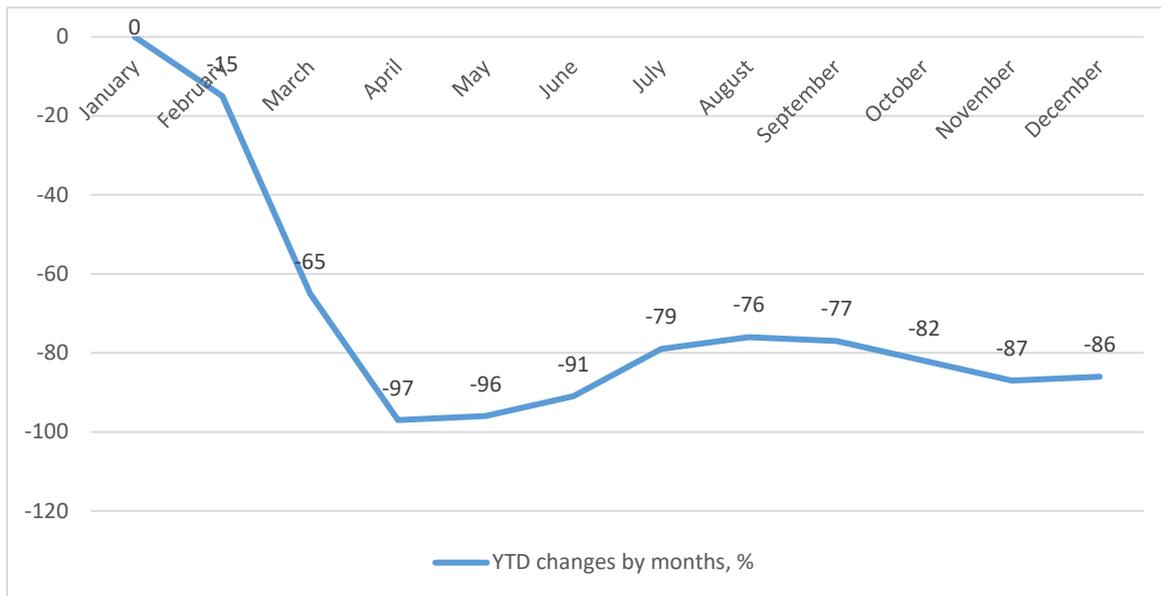
Figure 2: YTD changes by month, 2020 (%)
(Source: https://www.unwto.org/international-tourism-and-covid-19)

As it follows from the graph, the maximum slowdown in tourist figures was observed in April-June 2020, which is due to the imposition of strict restrictions by a number of countries and the air spaces shut-down. We will notice that along with tourism, passenger air transportation also faced global revenue losses. So, according to the site (https://www.statista.com/statistics/1106679/coronavirus-airlines-passenger-revenue-region/), total revenue losses of passenger air transportation in 2020 amounted to $370 billion, including revenue losses for individual regions were as follows: Asia-Pacific region - $120 billion, Europe - $ 100 billion, North America - $88 billion, Latin America - $26 billion, the Middle East - $ 22 billion, Africa - $ 14 billion. In assessing the loss of tourism due to COVID-19, the WTTC notes that the sector has lost 4.5 trillion US dollars, while the contribution of tourism to Total GDP was 5.5% (4,671 billion US dollars), that is 4.9% less than in 2019.

3. IMPACT OF COVID-19 ON THE TOURISM SECTOR OF AZERBAIJAN

As elsewhere in the world, the pandemic has caused great damage to the tourism sector of Azerbaijan. The first case of infection in the country was registered in February 2020. The first infected with the virus were citizens of the country who arrived from Iran, and after confirming cases of infection, it was agreed the country's border with Iran should be closed for two weeks. Naturally, at the time, it was not yet clear how dangerous and contagious the virus was, and no one could predict how long this situation would last. In early March has been a ban on imports of Iranian products into the country, and in all educational institutions located in the country, a week vacation was announced to ensure the safety of the population and prevent the spread of the virus, and later the period was extended until March 27. On March 12, in our country the first case of death from a new coronavirus was confirmed. On March 14, social isolation measures began to take effect in our country, mass events were banned, appeals to people with the slogan "Stay at home" were made, the land and air borders of the country were temporarily closed (Hajiyeva L., 2021). The number of people infected with the COVID-19 virus in our country is reflected in Table 1. Also note that the first information about the number of infected people in Azerbaijan was published on the website of the World Health Organization (WHO) (https://www.worldometers.info/coronavirus/country/azerbaijan/) on March 24 of 2020 (15 people).

Date	30/ 03 2020	30/ 04 2020	31/ 05 2020	30/ 06 2020	31/ 07 2020	31/ 08 2020	30/ 09 2020	31/ 10 2020	30/ 11 2020	31/ 12 2020	31/ 01 2021	28/ 02 2021	31/ 03 2021	30/ 04 2021
Number	64	38	248	556	318	126	110	1022	2981	1052	153	270	2237	1196

Table 1: Daily New Cases in Azerbaijan (by selected dates)
(Source: https://www.worldometers.info/coronavirus/country/azerbaijan/)

As it shown in the Table, the number of infected people began to grow from October and reached its peak in December (on December 13, the highest daily number of infections so far was recorded – 4451 people). At present, with the number of 328.159 people infected (12 may 2021), Azerbaijan ranks 53 among 221 countries (the number of deaths was 4726, the number of survivors was 309771, the number of active cases was 13662). In general, if we look at the graph of the daily number of infections in our country, we can observe that the process is of wavy (cyclic) nature (https://www.worldometers.info/coronavirus/country/). The graph shows three waves, the smallest of which is observed in May-August 2020, the largest wave-in October 2020-January 2021, and a relatively average wave - in March-May 2021. Tourism plays a key role in the economy of Azerbaijan and has significant potential for development (Hajiyeva&Teymurova, 2019). The COVID-19 pandemic has significantly affected the tourism sector and, since March 2020, has led to a serious decline in this area. According to statistics, 686.3 thousand people from 155 countries visited Azerbaijan in January-September 2020 (3.5 times less than in the same period last year). In order to prevent the spread of coronavirus infection, the imposition of a restrictive regime at the state border between the Republic of Azerbaijan and neighbouring states, as well as temporary restrictions on the travel of citizens in most countries of the world, led to a sharp decline in the number of arrivals to our country from April to September 2020, and trips were carried out mainly for non-tourist purposes. Unfortunately, currently, full statistical indicators for 2020 have not been published, so the analysis covers January to September. For the analysis, we will consider the data provided by the State Agency for Tourism of the Republic of Azerbaijan for 2020 (Figure 3). January 2020 was successful for tourism, compared to the corresponding indicator of 2019, the number of tourists arriving in Azerbaijan increased by 18.1% and amounted to 226,200 people, and the most tourists came to our country from Russia (+20.5%), Georgia (+14.6%), the Middle East (+20.8%), Turkey (+12.1%) and Iran (+26.5%). The increase in the flow of tourists, also, continued in February, which is not very suitable for travel. The number of tourists coming to the country in this month, increased by 15.8%, the majority of them came from Georgia -59,000 people (+11.4%) and Russia -55,000 people (+23.3%). The number of tourists coming from Turkey was 23,600 (+5.9%), from the Middle East – 16,900 people (+11.2%), from Iran - 13400 people (+22.9%). The highest growth is observed in the number of tourists from Russia and Iran.

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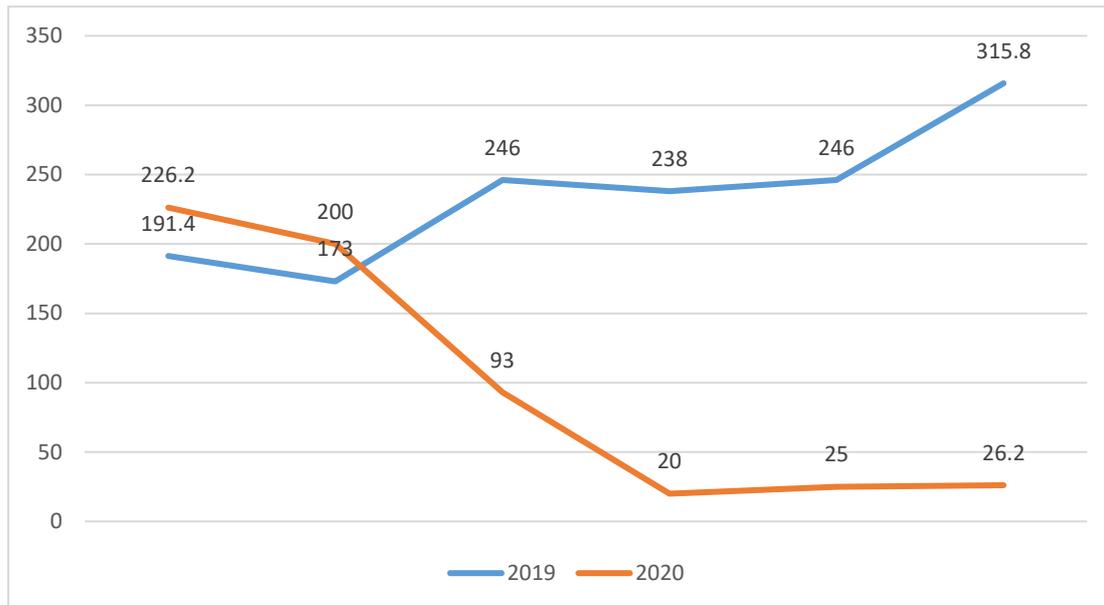
Figure 3: Number of tourists visiting Azerbaijan in the first half (January-June) of 2019 and 2020, in thousands
(Source: https://tourism.gov.az/uploads/documents/statistic/_report)

According to the State Tourism Agency of the Republic of Azerbaijan, a sharp decline of tourism indicators starts in March. It should be noted that March is the most favourable time for tourism in Azerbaijan, and many tourists come to our country to observe the celebration of Novruz Bayram. In March, 93,000 people visited Azerbaijan, which is 153,000 people (62.2%) less than the corresponding figure for 2019. 35,000 people (-47%) from Russia, 24,600 people (-60%) from Georgia, 13,200 people (-47%) from Turkey and 4,100 people (-88.5%) from Iran visited our country. In April, the crisis in tourism continued and deepened, as only 20,000 tourists visited our country this month, which is 218,000, or 91.7% less than in 2019. The number of tourists from Russia declined by 90.3%, from Turkey - by 79%, from Georgia - by 94.6%, from Iran - by 78.5%. Negative trends in tourism continued in May, when 25,000 foreign tourists visited our country, which is 89.9% less than last year. The tourists were from Turkey (-69%), Russia (-91.9%), Iran (-70.7%) and Georgia (-93.7%). In June, 26,000 tourists visited our country, which is 91.7% less than in 2019, while the number of tourists from Turkey declined by 59.9%, Russia - by 94.8%, Iran – by 82.7% and Georgia – by 93.7%. According to the information on the website of the State Statistics Committee of the Republic of Azerbaijan (stat.gov.az) in January-September of 2020, the majority of those tourists arrived in our country were from Russia (28.1%), Georgia (24.9%), Turkey (18.1%) and Iran (8.3%). The majority (78.7%) of people traveling to our country were men, and 21.3% were women. According to statistical information there have been changes in the use of vehicles by tourists arriving in Azerbaijan, if in 2019 52.9% of tourists chose the road and railway transport, then in 2020 this indicator increased by 16.1% and reached 69%, and the number of people using air transport declined by 11.8% (from 40.5% to 28.7%). Since sea transport in our country is not developed, this indicator is very low, in 2019, it increased by 0.8%, and in 2020 the number of people traveling by sea increased by 1.5% and amounted to 2.3%. Compared to the corresponding period of 2019, the number of citizens of the Republic of Azerbaijan traveling abroad declined by 3.9 times and amounted to 1073.4 thousand. 69.9% of those who left were men and 30.1% are women. The number of Azerbaijani citizens traveling to Iran during this period declined by 4.6 times, to Turkey by 3.5 times, to Georgia by 4.1 times, and to the Russian Federation by 3.5 times. Let's analyse the use of vehicles by tourists traveling abroad from Azerbaijan: in 2019, 75.9% of our passengers chose road and railway transport, in 2020 this figure increased by the

factor of 0.7% and reached 76.7%, while the number of air transport users increased by 4.1%. Since sea transport in our country is not developed, this figure is very low, in 2019 it increased by 0.8%, and in 2020 the number of people traveling by sea increased by 1.8% and amounted to 2.5%. If you look at the statistics of domestic tourism, the number of people who made tourist trips in 2020 declined by 3.4 times compared to 2019 (4352.9 thousand people, including 56.5% men, 43.5% women) by 1268.7 thousand people (57.6% men, 42.4% women). If we overview the statistics of domestic tourism, the number of tourists who made tourist trips in 2020 declined by 3.4 times (57.6% men, 42.4% women) compared to 2019 (4352.9 thousand people, 56.5% of which were men, 43.5% were women) and amounted to 1268.7 thousand people. The purpose of most of the trips was related to visiting relatives, friends, and vacation-related trips. As for the vehicles used, intercity buses and cars were used more. In terms of the vehicles used, intercity buses and cars were preferred. Thus, our analysis shows that the COVID-19 pandemic has negatively affected the development of tourism in Azerbaijan, the indicators of inbound and outbound tourism have declined by 3.5-4 times, and domestic tourism indicators have declined by 3.4 times compared to 2019.

4. MAIN SCENARIOS AND PROSPECTS FOR THE DEVELOPMENT OF TOURISM IN THE POST-COVID PERIOD

UNWTO considered three scenarios for the decline and recovery of international tourism after the coronavirus pandemic, according to which by 2020 the number of international tourist arrivals could decline from 58 to 80%. The first scenario assumed a decline in international tourist flows by 58% if the gradual opening of borders and the easing of restrictions on travel begin in early July; the second scenario envisaged a decline in world tourism indicators to 70% provided that the recovery process begins in September; the third, worst possible scenario envisaged a decline in indicators to 78% if international tourism does not begin to recover before December. Unfortunately, the results of 2020 (-73%) showed that the development will follow the third scenario. Researches of a number of authors are dedicated to impact of the coronavirus pandemic on the hospitality and tourism sector. Several experts note that the recovery of the industry and the achievement of the results of 2019 can be expected no earlier than 2023 (Takudzwa, 2020). Others (Gössling et al, 2020) draw parallels between the impacts of previous crises on the tourism sector and state that the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 or the global financial crisis of 2008-2009 had a short-term impact on tourism. Bakar and Rosbi (2020) studies analyses the impact of Covid-19 on the hospitality sector based on a supply and demand analysis. The authors note that the pandemic has a high psychological impact on tourists and caused panic, which led to a sharp decline in demand for the services of the hospitality and tourism sector. D'Orazio et al, (2020) investigates the dynamics of infected people in tourist centres using an agent –based model and analyses social restrictions aimed at reducing the number of infected people with the virus. Takudzwa. C. Maradze et al, (2020) note the socio-economic impact of the pandemic on tourism, expressed in a decline in demand for tourist services; fall in income; job losses and rising unemployment; the need for social support for sector workers and, as a result, increase in social expenditure; increased requirements for public safety and health. Hao et al (2020) studies the impact of Covid-19 on the hotel sector and identifies six stages of anti-crisis management of pandemic: the pre-crisis stage; the warning factor monitoring stage; the interim stage; the recovery stage; and the stage of making specific decisions. Anton Pak et al, (2020) studies the economic consequences of the pandemic associated with a decline in economic activity, the breakdown of communications, the reduction of productivity of many enterprises, the closure or partial operation of a number of companies, which led to an increase in unemployment and a decrease in household incomes. The authors note that the pandemic has caused fear and panic among the population, which has led to a change in the structure of its spending.

Passenger air travel, tourism, restaurant and hotel business, and entertainment have been the most impacted sectors. Consolidation of all countries is proposed to solve the problems; the need for mutual economic assistance to less developed countries that are not able to meet the pandemic independently; increased investment in the development of a better vaccine; and the adoption of protective measures in the field of sanitary and hygienic conditions. T. Ibn-Mohammed, et al. (2021) studies the impact of the coronavirus pandemic at the macro level (the impact of global production and trade, as well as export and import) and at the micro level (changes in consumer behaviour patterns) on the example of a number of countries. The authors point out that the unprecedented impact of Covid-19 on the aviation sector and tourism, emphasizing that according to the modelling of various development scenarios, depending on the period of restrictions and the closure of air borders, the arrival of international tourists will fall from 58% to 78%, while the prospects for further development of the industry remain extremely uncertain. Abhimanyu Awasthi et al, (2020) points out that in the context of a global pandemic that has affected all areas of economic development, it is necessary to develop socially responsible tourism-the tourism aimed at sustainable development, that is, economic growth, environmental integrity and social justice. Nana Kvirkvelia and Mariam Tsitsagi (2021) analysing the impact of Covid-19 on the tourism sector in Georgia, note the need to adapt to the real situation and develop new strategies for hotels. Adapted strategies should focus on the development of domestic tourism, the use of a more stimulating price mechanism, as well as focus on improving the quality of tourist services provided and strengthening protective measures. Hajiyeva L.A. (2021), analysing the impact of the pandemic on the tourism sector of Azerbaijan, talks about the necessary changes in national tourism companies, including the development of domestic tourism at the initial stages and, in particular, ecological tourism; the introduction of digital technologies (the preparation of virtual excursions to cities and museums, the launching of new online platforms); introduction of new rules of movement (vaccinations, mandatory wearing of a mask, observance of physical distance, changes in visa rules), etc. The World Travel and Tourism Council (WTTC) provided its recommendations for the recovery of the tourism industry:

1) Overturn of travel recommendations and bans on non-essential international trips that prevent traveller insurance.
2) Adoption of global health and safety protocols, provision of travel safety guarantees to travellers.
3) Adoption of a rapid test and tracking strategy, which helps to contain the spread of the virus.
4) Closer collaboration between the public and the private sector to ensure a standardized and global approach to the crisis.
5) Continued government support for the sector in terms of tax incentives and liquidity incentives, as well as measures to protect employees

5. CONCLUSION

The assessment of the current situation shows that all future trips need a new scenario and the introduction of new requirements. Many European countries already require travellers to have a certificate of vaccination (as well as vaccines accepted in Europe such as BioNTech produced by a German company or the American vaccine Pfizer). Compliance with the new rules will be the focus of countries around the world to minimize risks to the health and prevent any future infections. Developing new "ethics rules" and compliance with them (for tourists, residents, and companies) can be a prerequisite for ensuring "responsible behaviour" and accountability for businesses, communities, and tourists. Travel companies today must regulate their activities in accordance with changes in the environment and pursue a flexible policy of adaptation to new conditions. It should be taken into account that as a result of today's restrictions on the market there is a deferred demand, and the volume of this demand is quite large.

In such circumstances, travel companies that apply a more flexible policy may benefit. It is necessary to use the situation to develop more profitable proposals, to create a better infrastructure. In order to compete, companies in this sector need to quickly adapt to changing requirements, as well as develop technological projects and digitalization in the tourism sector. The demand for online platforms is growing day by day; the digitalization has a strong impact on the tourism sector. Summarizing our research, we propose the following to help the tourism sector overcome the crisis caused by the pandemic:

- Implementation of a number of measures to reduce socio-economic consequences (preservation of work places, strengthening confidence and security, introducing new sanitary rules);
- First of all, the development of the strategy for the development of the domestic tourism market;
- Strengthening the competitiveness and sustainability (development of tourism infrastructure, improving the quality of services, diversification of offers and markets, focus on the development of domestic tourism);
- Application of digitization (use of QR codes, mobile applications, new technologies, organization of online excursions in social networks, etc.);
- Development of socially responsible tourism (creation of necessary products and infrastructure for the development of green tourism);
- Transition from mass tourism to the organization of individual and small tours;
- Coordination and cooperation of all parties to achieve the goals of sustainable development and transformation of the tourism sector.

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THE PROBLEMS OF INTERNATIONAL TOURISM DEVELOPMENT DURING COVID 19 PANDEMIC

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ABSTRACT

In recent decades, international tourism has become one of the fastest growing industries. This is due to the fact, that international tourism is an important source of foreign exchange earnings in the economy, affects GDP increase, provides an increase of employment in service sector and development of industries related to serving foreign tourists. Azerbaijan, regained its independence in 1991 and since then tourism has become one of the promising industries with wide range of opportunities and untapped potential. International tourism development will contribute to overall economic growth, increase employment opportunities and growth rate of foreign exchange earnings. Considering this, Azerbaijan government declared tourism one of the priority areas of the non-oil sector. As a result, the development of tourism in Azerbaijan has become one of the fastest growing sector of the economy. This article examines trends of tourism development in the Republic of Azerbaijan for 2013-2019.In 2020 COVID-19 pandemic caused significant damage to almost all sectors and especially tourism. Being still emerging industry in Azerbaijan, tourism faces a number of challenges due to the pandemic. The article considers the ways of mitigating impacts of lockdowns on tourism, alternative ways of tourism development, the opportunities of digitalization in tourism sector as well as the issues of the development of this industry in the period after the pandemic.
Keywords: tourism, international tourism

1. INTRODUCTION

Tourism is one of the youngest industries and economic studies devoted to its development began to appear since 50s of the twentieth century. The economic aspects of tourism are described in the works of K.Cooper, R.Sharply, D.Telfer. Then there were studies devoted to the problem of supply and demand in tourism, tourism statistics which were presented in the works of Witt.S, Rithie.B, Burns.P, Palmer.K and others. By the 90s of twentieth century new directions in the study of tourism appeared, revealing the impact of tourism on economic development. The relationship between tourism and economic growth is reflected in the work of Sinclar M.The impact of tourism on the welfare is reflected in the work of Copeland B. In Azerbaijan, the problems of tourism were studied by R. Kasumov, A. Alirzayev, L. Allahverdiyev, I. Akhmedova and others. Within the framework of the development of the non-oil sector in Azerbaijan tourism is one of the important. This choice is explained by the fact that tourism is a highly profitable and dynamically developing sector of the economy. The development of tourism and especially international tourism is a source of foreign exchange earnings in national economy, increases GDP. provides an increases in employment in the service sector and the development of industries associated with tourism. Thus the development of international tourism contributes to the overall growth of economy, employment and foreign exchange earnings in the country. The development of international tourism has a direct and indirect impact on the development of various economic entities. The international tourism directly affects tourism enterprises (tour operators and travel agencies), hotels, health resorts, restaurants, cafes, museums, excursions and entertainment centers. The development of international tourism affects also shopping centers and production of souvenirs.

In addition, the development of international tourism affects the work of embassies and consulates, the transport sectors (airways, railways stations, bus stations), insurance companies, communication services, etc.

2. ANALYSIS OF THE MAIN INDICATORS OF THE TOURISM INDUSTRY IN AZERBAIJAN

The law "On Tourism" adopted on 04.06.1999 No. 674 IQ regulates the tourism sector in Azerbaijan. The adoption of this law determined the principles of state policy in the area of tourism development. The Law of the Republic of Azerbaijan "On Tourism" is aimed at establishing the legal basis for the development of tourism in the country. It contributes to the creation of a single tourism market in the Republic of Azerbaijan, regulates relations arising in the area when realizing the rights of citizens and stateless persons to rest, travel and freedom of movement. The law also defines the procedure of using the tourism resources of the Azerbaijan Republic. In 2002 the country adopted a state program for the development of tourism in Azerbaijan. Then the Ministry of Tourism prepared a program "Development of tourism in AR for 2008-2016".Taking into attention the prospects of the industry, 2011 year was declared as year of tourism in Azerbaijan. Then the government adopted a Strategic Roadmap for the development of the specialized tourism industry in Azerbaijan. The main goals in the tourism sector of the Republic of Azerbaijan until 2025 were selected in this strategy. These goals are the next:

1) Full implementation of the tourism potential of Baku providing the attraction of a large number of foreign tourists to the city;

2) Formation of favorable environment in Azerbaijan for the development of the tourism sector in the country;

3) Development of regional types of tourism for both local and regional tourists;

4) Establishing a national tourism quality system to improve tourist satisfaction; (Strategic roadmap for the development of specialized tourism industry in the Republic of Azerbaijan pp.2-3)

Table following on the next page

Table 1: The main indicators of tourism for 2013-2019 years

	2013	2014	2015	2016	2017	2018	2019	Dynamics for 2013-2019 (%)
Number of tour operators and travel agencies	197	218	243	272	339	374	432	219.3
Annual growth rate(%)		110.7	111.5	111.9	124.6	110.3	115.5	
The number of people employed	1729	1794	1586	1838	1891	2074	2205	127.5
Annual growth rate (%)		103.8	88.4	115.9	102.9	109.7	106.3	
Profit of tour operators and travel agencies (mln.azn)	29.6	27.0	30.8	29.1	36.7	**46.1**	**50.4**	170.3
Annual growth rate (%)		105.1	117.3	100.8	111.6	137.5	112.3	
Number of tours sold	65448	66233	44615	36978	44066	49992	63885	97.6
Annual growth rate (%)		101	67	83	119	113	128	
Including citizens of Azerbaijan	7078	6990	4695	5842	5850	7390	7501	106.0
Annual growth rate(%)		99	67	124	100	126	102	
For Azerbaijani citizens abroad	53771	54900	38002	24368	31612	36463	44915	83.5
Annual growth rate (%)		102	69	64	130	115	123	
Foreigners and stateless persons	4599	4343	1918	6768	6604	6139	11469	249.4
Annual growth rate (%)		94	44	353	98	93	187	

Source: Tourism in Azerbaijan 2020, p. 12

As can be seen from Table 1, in 2013-2019 in Azerbaijan the number of tour operators and travel agencies increased by 2.2 times, the income of tour operators and travel agencies increased by 70.2%. During this period the number of tours sold to tourists decreased by 2,4%. If consider the annual growth rates, a significant decrease by 33.0 % took place in 2015 and by 17.0 % in 2016 .In subsequent years, there has been an increase of annual growth rate. The same trade can be traced in the number of tours sold to Azerbaijani citizens within the country. The number of them increased by 6.0% over the entire period, and the largest decrease was observed in 2015. The tours sold to Azerbaijani citizens traveling abroad in 2013-2019 decreased by 17.5 %.The largest decline took place in 2015 and 2016.The decrease was associated with a fall in in oil price, a depreciation of manat and a decrease in real incomes of the population. During the study period, the number of tours sold to foreigners and stateless persons has significantly increased by 2.5 times. It should be noted that in 2013 only 7.0% of tours were sold to foreigners and stateless persons. By 2019, their share increased to 18.0%. In 2013, the tours sold to the citizens of Azerbaijan accounted for 93%. 10.8 % from them were tours within the country and 82.2 % were foreign trips.

In 2019, the share of tours sold to Azerbaijani citizens decreased compared to 2013 to 82.2 %, 11.7% of which were tours within the country, and 70.3 % were foreign trips. Thus, the analysis showed that in Azerbaijan in 2013-2019 there was a trend in favor of international tourism growth.

Table 2: Dynamics of foreign tourists arriving in Azerbaijan in 2015-2019.

	2015	2016	**2017**	**2018**	**2019**
Total	2009	8949	13455	12777	30950
USA	12	28	161	40	61
Germany	45	83	49	115	247
UAE	55	1262	5009	3964	1899
Great Britain	35	61	131	7	16
China	9	352	91	25	133
France	94	133	36	37	141
India	-	-	21	524	5230
Israel	-	-	584	1721	1919
Iran	-	1338	1780	128	105
Russia	1052	4321	1985	2225	3637
Turkey	129	50	444	229	1211
Other countries	578	2659	5549	6135	9079

Source: Tourism in Azerbaijan 2020, p.17-18

As it can be seen from table 2 in 2015-2019 the number of tourists visiting the country increased by 10.7 times. This significant growth is because the number of foreign tourists in the country in 2015 was very small – only 2009 people. Table 2 shows that the greatest growth by 34.0 times was observed among tourists from the UAE. In descending order the next are tourists from China with growth by 14.8 times; Turkey with growth by 9.4 times; Germany with growth by 5.5 times; Russia with growth by 3.5 times. The number of tourists from India and Israel has significantly increased, but because of absence of information, it is impossible to demonstrate their growth correctly. In 2015 more than half of foreign tourists (52.4%) were Russian tourists. The proportion of tourists arriving in Azerbaijan from various countries did not exceed 10 % level and amounted to 6.4 % for tourists fro Turkey,4.7% for tourists from France,2.7 % for tourists from the UAE and 2.2% for tourist from Germany. The share of tourists from other countries was very small and totaled 28.8%.By 2019 the geography of tourists arriving to the country changed. Thus the tourists arriving from Israel accounted for 29.7 %.Then in descending order follows India for 16.9%,Russia for 11.8%,UAE for 6.1% and Turkey for 3.9%.Other countries accounted for 29.3 % and the share of each country is in this group does not exceed one percent level. The small proportion of tourists per country indicates that there is not enough information about the opportunities for recreation and leisure in Azerbaijan there. In 2015, 93% of tours was sold to the citizens of Azerbaijan Republic and 7 % was sold to foreigners and stateless persons. 13.2% of tours to the citizens of Azerbaijan were domestic the rest ones were foreign. By 2019 the share of tours sold to the citizens of Azerbaijan Republic decreased to 82.0 % while the share of tours sold to foreign citizens increased to 18.0% respectively.6.9 % of tours sold to the citizens of the AR are travel within the country and 93.1% are foreign travels. Such distribution of tours indicates that the citizens of Azerbaijan prefer to rest outside the country. One of the reason is the high cost recreation within the country. During the study period the cost of tours increased by 55.3 %. This indicator increased 2.5 times for the citizens of AR and it increased 3.9 times for foreigners and stateless persons. (Tourism in Azerbaijan pp.15-19).

However, COVID 19 has adjusted the development of tourism around the world including Azerbaijan. The tourism industry losses multimillion of dollars and people employed in this industry lose their jobs and income. All of this negatively affects the tourism industry. At the same time, the existing problems stimulate the search for new opportunities for tourism and the growth of digitalization of tourism.

3. PROSPECTS FOR THE DEVELOPMENT OF TOURISM IN AZERBAIJAN

Azerbaijan is located at the junction of Europe and Asia there all conditions for development of international tourism here including historical monuments, excellent climatic conditions and picturesque landscapes. However, Baku is the main attractive center for tourists. Natural and climatic conditions of Azerbaijan, its geographical location on the trajectory of the Great Silk Road creates conditions for diversifying the directions of tourism. First, it is cultural tourism. It includes acquaintance with history, art, architecture and way of life of the population of the country. Secondary it is health tourism. This potential is represented by a large number of mineral springs in various regions of the country. Then, Naftalan can be considered as a unique health resource. Third, there are summer and winter types of mountain tourism here. The country has such favorable conditions for this as picturesque ridges Greater and Lesser Caucasus. At present time, the Tufandag and Shahdag operates as summer-winter recreation center. In the future, it will be possible to organize summer-winter recreation complexes on the liberated territories of Karabakh and Kalbyadzar-Lachin regions. Fourth, the organization of beach tourism has good perspective for the country. The long sea line of the Caspian Sea from north to south is a favorable condition for beach tourism, the potential of which is not sufficiently used. The lack of infrastructure meeting standards does not allow beach tourism to compete with Turkey, Egypt, the United Arab Emirates, etc. In addition to infrastructure, the organization of leisure is also important for the development of tourism. It includes the creation of entertainment centers, various attractions, the organization of concerts, etc. Fifth direction is business tourism. For development this direction in Azerbaijan there are hotels, conference rooms, as well as experience in organizing such events here. In addition, the country has conditions for the development of sport tourism, ecological and hunting tourism. For this purpose, the necessary infrastructure has been created,including Olympic complexes etc. In Azerbaijan, the opportunities for extensive growth of the tourism sector has not been still exhausted - many territories that could be used for the development of tourism are still waiting for its investors. It should be noted that tourism was chosen as a priority area for the development of the non-oil sector of the economy and it is supported by the state. As a result of government support in the country infrastructure for the development of tourism was created, including conference rooms, hotels, concert halls, etc. Geographical position of Azerbaijan, natural and climatic condition of the country, monuments of history and culture, rich cuisine – all of them are favorable conditions for the development of tourism. The main problem of tourism development in Azerbaijan is the facts that travel agencies are concentrated in the capital. This fact does not allow to use the existing tourism potential of the country's region. Another problem is the lack of appropriate personnel, including the lack of persons speaking foreign languages in rural areas. In addition, the lack of sufficient information about the country and the high cost of tourism services in comparison with Turkey and Georgia are factors that hinder the development of tourism in the country. To solve the existing problems, it is necessary to strengthen the work on advertising the regions of Azerbaijan, regulary monitor the tourism markets of neighboring countries, use their positive experience and increase the competitiveness of tourism services in Azerbaijan.

4. CONCLUSION

Pandemic COVID-19 requires taking care of the health of tourists which contributes to the growth requirements for sanitary and hygienic standards in tourism. The requirements of sustainable development are promoted by an orientation towards rational consumption and respect for nature, organization of production with minimization of damage to the environment. During pandemic it is possible to use immersive technologies that allow to combine real and virtual effects for a more immersive space. The pandemic has significantly reduced travel opportunities. Thus, the huge deferred demand was formed.The direction of this demand depends on the country, tour operators and tour agencies which are prepared for this. Travel companies need to prepare well for the post-pandemic period and be competitive in new conditions. Digitalization of the tourism industry may be one of the important areas. To a certain extent this process was underway and such services as Skyscanner, Booking.com, Airbnb made it possible for tourists to choose and plan their trips. The share of tourists requests to these services grew annually. The pandemic will contribute to an increase in tourists s use of various digital services. Thus, tour operators must create digital services and digital products to meet modern requirements and be competitive. It considers also creation of online platforms for booking tickets, hotel rooms, as well as organizing leisure activities for example, purchasing tickets to museums, concerts, etc. The creation of such services to organize individual routes from buying plane tickets to various excursions. Another important direction of tourism is the organization of virtual excursions to cities and museums around the world. The opportunity to visit famous sights without leaving apartment allows people to see the world, visit new places in different countries. If a person liked the virtual tour, then he or she will want to visit this place after the pandemic. Thus, virtual excursions influence deferred demand shaping it for the future. In addition, it is important to develop international cooperation in the field of tourism. Conducting teleconferences with foreign partners provides an opportunity to discuss problems and opportunities, exchange experience and solutions to emerging problems. Summarizing all of the above, it should be noted that it is important for the tourism industry of Azerbaijan to use the existing potential and diversify tourism services. is important to prepare for the post-pandemic period in order to attract deffered demand, expand the geography of tourists, use non-standard technologies in tourism and opportunities of digitalization. All of the above will help to increase the competitiveness of the tourism industry in Azerbaijan.

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NATIVE AMERICAN INDIAN LANGUAGES AND THEIR ROLE IN ENRICHING THE VOCABULARY OF ENGLISH

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ABSTRACT

It is known that the first immigrants came from the western part of the present-day United States. Probably many of them settled in the area before moving. More than half of the North American language families spoke English on the Pacific coast, especially in California. People later settled in the northern and eastern regions of the United States, where very few families lived. Thus, the spread of the true Native American population throughout the region was a reflection of the spread of the Europeans a few hundred years later. Most of the native languages were spoken in the southern United States: Quechua - 7 million, Maya - over 1 million, Aztec - over 1 million. Today, one in 250 Americans speaks Indian. In 1962, the last reliable number of American speakers was announced. The influence of Native American Indian words on the English language has a deeper meaning than the derivations that are included in the vocabulary of the language individually. With this technique, the English language enriched its vocabulary. European languages are rich in nouns, but weak in verbs. Therefore, they received many names from the Native American Indian languages. However, Native American nouns are also used as verbs and do not differ in sentence. Therefore, English speakers began to use compound nouns to form verbs from nouns or to combine them to capture the essence of Native American Indian terms. Phrases and regular expressions used by many Native American Indians are included in the English dictionary, for example: going on the warpath, scalp hunting, paleface man, burying the hatchet, smoking the peace pipe.
Keywords: *immigrants, Linguistic and archaeological information, Vikings*

1. INTRODUCTION

Except the recipients as the Indian American and Native Alaskan themselves (people being more than 5 years old), the people more than 70 % report that they speak only English at home. Approximately, the Native Northern American Indian language is spoken at 15 % of homes. Approximately, according to two/thirds of the homes where native language is spoken there are located in New Mexico, Arizona and Alaska, being the language of Navajo of the most spoken native language doesn't surprise. Coming from west part of the current USA of the first immigrants is known. Probably, most of them have settled in that territory before migration. More than half of the Northern American language families are spoken in English on the cost of the Pacific Ocean, especially in California. The peoples have migrated to the North and East regions of USA later and less families have lived there. Thus, the spreading of the real Native American nation along the region as if it was the mirror of the spreading of Europeans after many years: *The languages of California (Hokan, Penutian-Mayan); Siouan tribes (Lakota, Dakota); Southern America (Mascots and Isolation); Iroquois and Cherokee (Chalagi); Algonquian in California (Lenni-Lenape, Delaware, Walam Olum); Beothuk, Yuchi; Na-Dene (Navajo, Apache, Athabaskan); Eskimos-Aleut (Inuit).* The Southern American languages – the greatest difference – the field of shelter for the grandchildren of the first immigrants: *Quechua, Aymara, Guarani, Chibchan; Language isolate – in Amazon; Carib, Arawak, Taino.* What is the reason of the existing of language diversity of the Native Americans in such great degree? There were tens of language families belonging to each of the Indo-European family.

On the contrary, the map simplifies this language diversity. In California, the languages are different as the speaking of the English and Chinese with each other. Most of the linguists doubt that, the root of some of these spread families is associated with the immigrants being from the various tribes of Asia, speaking in the languages not relating to each other. The linguistic and archeologic information indicate the existing of more immigration from Asia to America by Alaska. Those immigrations have started 14 thousand years ago at least. The settlement of the people engaged with the hunting-gathering in all dwellings of America from Arctic to the extreme points of the Southern America until 9000 BC is known. According to the legends of Walam Olum, there is no evidence related to the existing of communication of these languages with the Siberian languages. Until 1492, the arguments related to the main communication haven't been met in the other sources, either. Vikings have travelled to the coast of the Northern Atlantic from the X century to the XIV century, but they haven't influenced any durable effects linguistically or demographically.

2. THE NATIVE AMERICAN LANGUAGES AFTER THE OPPOSITE RELATIONS

Before the Europeans, the Aztecs and Incas had the strong Empires consisting of thousands of people. The capital of Aztecs called Tenochtitlan was greater than London in 1492 and only the Chinese Empire was greater and stronger than the Inca Empire. The main part of the world languages was the Native American Indian languages in 1492. It was estimated that, one of each five people around the Earth had spoken in the Native American Indian language in that time. It is clear that, this situation doesn't apply for today. Most of the Native American Indian languages have been spread; and less people speak in these languages preserving the existence till today. None of the Native American Indian languages is used for addressing to the United Nations Organization. Native American Indians have been moved by the Europeans completely and at the beginning of this century many of the people thought that, the root of Hindus has been eradicated and their languages have been doomed to exhaustion completely. Most of the Native languages have been spoken in the south of the United States of America: Quechua– 7 million, Mayan language – over 1 million, Aztec – over 1 million. Today, one of each 250 American citizens speaks in the Native American language. The last true number of the carriers of the Native American languages has been announced in 1962.

3. THE INFLUENCE OF THE NATIVE AMERICAN LANGUAGES TO THE ENGLISH LANGUAGE

Now let's look through the influence of the Native American Indian languages to the English language. Despite the native languages have been forgotten as being the method of communication or have mixed with the other languages at the best situation, these languages have influenced more to the language of the invaders. The main influence is belonged to the names of place taken from the Native American Indian languages. The names of the states more than half of the United States of America are related to the Native American Indian names; only fewer names of the states come from the European languages. The Native American languages: *Michigan (Alg) large water or large lake (Great Lake), Minnesota (Siouan) clear blue water or cloudy water, Missouri (Siouan) water flowing forward, Ohio (Ir) good river (great river), Texas (Caddoan) Friends or Allies, the State of Nebraska (Omaha) flat water, the State of Kentucky (Ir) Dark and bloody (cursed) ground.* Most of the states have been called with the names of the tribes once lived there: Mass, Conn, Illinois, Dakota. The cities and the Counties too: Punxsutawney (Town of the sandflies), Skagit, Snowhomish, Okanogan and etc. The Native American Indian names are found more for rivers, sea and mountains: Potomac, Allegheny, Monongahela, Okeechobee Lake, Okefenokee Swamp, Skagit, Samish, Wabash, Wasatch and etc. Though it is strange, the Native Americans usually didn't give the separate single name to the river or mountain completely.

Instead, they were inclined to give special names to the individual features as any of the turning (flowing) of the river or the source of the river. Instead of giving the name to the whole mountain, they called each of the peaks or height of them with separate different names. The Europeans often misunderstood this method and they applied one native name to the whole geographical unites: the State of Tennessee (in the tribe of Cherokee) – has chosen from the name of Village, Appalachian Mountains – (in the Northern Florida, Appalachian) – has chosen from the name of the village. Canada (Ir) – Is in honor of the name of small village by Jacques Cartier to whole land (ground). Coinciding to the practice of naming of the places in honor of the individual people, the Europeans often called the places in honor of them after the famous Indians: Tammany, Pochatello (the chief of Bannock), Sacagawea (Shoshone woman bird), Ueatcom (Seattle). It is strange that, after the name of people, the Indians occasionally called any of the names of things or places in honour of that person. Almost, the practices of Europeans giving the name have also changed later: they accepted the tradition of the Native American Indians by giving preference to call the places with the names of animals more than giving the names of individual people: Buffalo, New-York; Turkey Island (near Jamestown); Turtle Lake, Michigan, Reindeer River. The Ancient Europe didn't use this practice after the accepting of Christianity; as a rule, only the European toponyms before Christianity are the names of animals: for example; Berlin, Bern. In last years, the ancient Native American Indian names as Denali, Kalaallit Nunaat, Kulshan, and Tahoma have been pushed for using again by discovered. Thousands of Native American Indian words included to the general dictionary of the English language. It wasn't surprised, because since the belonging of the greatest series of the names given to many new plants, animals, things and environments to the Native American Indians and keeping themselves, the Europeans had to find the way for expressing them: bayou (in the language of Choctaw associwith the southeastern part of the United States, meaning is a slow-moving creek or a swampy section of a river or a lake); savanna (field being forest and grassland, Taino, in the language of Arawakan tribe); pampas (the name of grass and country in the South America); jerky (derives from the Quechua word ch'arki which means "dried, salted meat"); potato (it is the hybridized form of the word of Taino tribe "batata" with the word of Quechua tribe "papa"); hurricane (comes from the Taino Native American word, meaning is evil spirit of the wind); tomato and chocolate (Aztec); blizzard, shark – perhaps, it is in the language of Native American Indian and some sources say it came from the Mayans. Many Native American Indian words have passed to the English language. The colonies of Massachusetts Bay and Jamestown are the places being the first witness of Indian-English large communications, the word "squash" derives from the word "asquatasquash" meaning is "eaten raw", the word "succotash" meaning is "broken corn kernels". The other Algonquin words: skank – a woman of low or sleazy character (yüngül qadın), chipmunk – small, striped rodents of the family Sciuridae (dələ), racoon – medium-sized mammal (yenot), moose – elk is a member of the New World deer in North America (Amerika sığını), opossum – marsupial (siçan növü), persimmon – edible fruit (xurma), sassafras – genus of three extant and one extinct species of deciduous trees by its aromatic properties, the Native Americans have used from this as tea (ətirli yarpaqları olan agac, yerli amerikalılar çay kimi bundan istifadə ediblər), hickory – it is a shortening of pockerchicory, pocohicora, or a similar word, which may be a milky drink made from such nuts (qoz ağacı və bu qoz, fındıqlardan hazırlanan südlü bir içki olan pockerchicory pocochicora sözünün qısaldılmasıdır), wampum – white strings of shell beads by the Native American nations (yerli amerika xalqları tərəfindən pul və zərgərlik kimi istifadə edilən cilalanmış balıqqulağından xüsusən ağ qabiqlarından hazırlanmış, sapa düzülmüş munçuqlar), toboggan – a simple sled (xizək), wigwam – semi-permanent domed dwelling (yaşayış yeri, kiçik ev), tomahawk – is a type of single-handed axe (yerli amerika tayfalarının istifadə etdikləri bu söz bizimdə işlətdiyimiz toxmaq kəlməsinin eynisidir), papoose – meaning "child", is used in the context of the child's mother (uşaq və ya valideynə deyilən söz), squaw

– the woman, but in some tribes this word is used as the meaning of humiliation (qadın, ancaq bəzi qəbilələrdə təhqir mənasında da işlənir), Squaw and Papoose – woman with a baby in a sling on her back seated on a large rock outside a wooden fence (ana uşağını arxasına bağlayaraq görüntüsü anlamında ana və uşaq deməkdir), powwow – a celebration of American Indian culture in which people from diverse indigenous nations gather for the purpose of dancing, singing, and honouring the traditions of their ancestors (qısa içlas, görüş, parad mənasından savayı həm də, sağaltmaq ücün keçirilən sehirli ritual və onu aparan müqəddəs insan anlamınıda verir), caucus – a meeting at which local members of a political party (qapalı bir siyasi toplantı anlamına gəlir). The word Yankee passed to the English language derives from the word "eankee" in the tribe of Cherokee and its meaning is "coward". Podunk – swampy place and a small, unimportant and isolated town (bataqlıq və ərazinin təcrid olunmuş lazımsız hissəsi), "muckamuck" – it is jargon in Chinook language and its meaning is "plenty to eat, plenty of food (Chinook dilində jarqon yemək yemək və yeməyi bol olan adam mənasındadır), Honk – a noise made by a goose or a car horn (vəhşi qazların səsi, sonra avtomobilin signal səsi), honky-tonk – it is the name of the place as being the musical bar (musiqili bar olaraq yer adıdır). The influence of the Native American Indian words to the English language expresses deeper meaning than the borrowings including to the lexicology of language individually. The English language has enriched its own lexicology by this technology. The European languages are rich with the nouns, but are poor with the verbs. According to this, they got more nouns from the Native American Indian languages. But the Native American nouns can be used as the verb and don't differ in the sentence. For this, the English speakers have started to make the verbs from the nouns or to use the compound nouns combining them to each other for keeping the essence of terms in the Native American Indian language. It causes to the appearing of hundreds of new noun combinations: rattlesnake – venomous snake (zıngrovlu ilan), june bug – green June beetle (iyun böcəyi), red cedar- red cedar (qırmızı sidr), bloodroot – is a perennial, herbaceous, antiseptical flowering plant called by Native American Indians in Eastern (America Şərqi Amerikada yerli amerika hinduların adlandırdıqları bu bitki, antiseptic, sidikqovucu, qusma, iltihab, qızdırma, ösürək əleyhinə və rak xəstəliyi nə qarşı bi dərman bitkisidir), chokecherry – species of bird cherry (quş albalı), sugar maple – sweet maple (şəkər ağcaqayın), peanut – groundnut (fıstıq), firewater – whisky, strong alcoholic drink (viski), icki növü, bullfrog – species of frog (gurbağa), catfish – a person giving fake information (yalan məlumat verən adam). Such kind of combinations surrounding the elements of strange or opposite meaning was rare to the period of colony in the English language. The polysynthetic structure of the Native American Indian languages influenced to the modern English language and after the first influence of the Native American languages, such kind of unusual semantic combinations were continued to emerge: wore off – to gradually disappear (tədricən yoxa çıxmaq, köhnəlmək), bootleg – in the meaning of alcoholic drink sold illegally, the whites smuggled illicit items, specially the alcoholic drinks in the legs of tall boots during selling the illicit alcohol to the Native American Indians (gizli satilan içki mənasındadır, ağ dərililər yerli amerika hindularına qeyri qanuni alkoqol ickilər satan zaman ickiləri kolbalarda uzunboğaz cəkmələrinin yuxarı hissəsində gizlədirmişlər). Most of expressions and stable word combinations used by the Native American Indians include to the lexicology of the English language. For example: going on the warpath -angry and ready to fight with (acıqlı ,əsəbi, qisas hissi ilə döyüşə getmək), scalp hunting – is the act of cutting or tearing a part of the human scalp, with hair attached (baş dərisini soyub cıxartmaq), paleface – a white person (ağ irq və ya ağ dərili adam), burying the hatchet – end a quarrel or conflict and become friendly (küsüşməni,konflikti bitirmək və dostlaşmaq), smoking the peace pipe – to resolve a dispute or stop fighting with someone (mübahisəni və vuruşmanı dayandirmaq), Great Spirit – is the concept of a life force, a Supreme Being or God (Böyük Ruh), Happy Hunting Ground – the paradise of some American Indian tribes to which the souls of warriors and hunters pass after

death to spend a happy hereafter in hunting and feasting (yerli amerika hindularının inancında, onların döyüşçüləri və ovcuları öləndən sonra ruhlarının cənnətdə xoşbəxt ovçuluq etdikləri məkan).

4. CONCLUSION

As Native American Indians lived with each other, it is obvious that their language can influence each other's language. The words, expressions, sayings of the Native American Indian languages have passed to the English language and both have enriched the lexicology of the language, and have left deep traces by influencing basically to the European, English life and culture. In this regard the main influence is belonged to the names of place taken from the Native American Indian languages.

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REGIONAL DEVELOPMENT MANAGEMENT IN THE DIGITAL ECONOMY

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ABSTRACT

To ensure socio-economic development in the world, it is necessary to achieve positive changes in certain territories. Regional development is a complex process and should be considered using a multidimensional approach and assessing the impact of factors on the level and quality of life of the population, the dynamics of economic growth. The digitalization of the economic sphere currently has a significant impact on the development of territories. Digital transformations form new conditions for the functioning of regional socio-economic systems, the unique features of which in different territories require study. The digital economy is based on the deep penetration of digital technologies, that is, the use of hardware and software for collecting, processing and transmitting digital information, in all spheres of economic activity and social relations. The digitalization of society creates new opportunities for business entities, which can be realized through the creation and implementation of innovations in the business sector and public administration. Innovations in management, production or in the goods and services themselves are the main conductors of digital achievements in the activities of business entities and the mechanism for their transition to the digital economy. Innovation, like other types of economic activity, undergoes significant transformations in the context of digitalization, consisting in the expansion of the types of innovative resources and subjects. The digital economy expands the development potential of the region, makes it possible to overcome resource constraints. It is advisable to explore aspects of regional development through the functioning of digital platforms that integrate economic, social and technological processes that form digital service ecosystems. The phenomenon of the digital economy requires scientific understanding and assessment to be used as a factor in the development of the economy of the territories.
Keywords: *Regional development, Digital economy, Regional development management, Digital transformation, Digital platform*

1. INTRODUCTION

Digital technologies are now so widespread that it is already difficult to separate them from the spheres of management and life. The digital transformation trajectory has penetrated economic and production processes. The digital economy and management can no longer be considered a phenomenon, it is rather a consequence of the objective processes of the evolution of modern

society (Chehabeddine, Tvaronavičienė, 2020, P. 434; Shenoy, 2018, P. 175). In this regard, the modern policy of influencing the parameters of territorial socio-economic systems should provide for integration with promising technologies. Activities on the regulation of regional development are aimed at strengthening the level of economic security and socio-economic transformations through the implementation of programs and measures that activate the resources of the territory. Regional development implies a systematic positive change in the living conditions of citizens and is reflected in an increase in regional product indicators, per capita regional income, expansion of production opportunities and industries, product competitiveness, export of manufactured goods (Barca, McCann, Rodríguez-Pose, 2012, P. 140; Stryabkova, Lyshchikova, Chistnikova, Glotova, Kochergin 2019). Digitalization conditions contribute to regional development, create additional opportunities for the business community and consumer services. At the same time, the penetration of digital technologies and devices into all spheres of life poses a certain threat of excessive dissemination of personal information, loss of confidential data, unauthorized access to closed public and private sources. Therefore, modern measures of regulation of development on the part of government structures should provide directions for ensuring information security.

2. OPPORTUNITIES AND CHALLENGES OF USING DIGITAL TECHNOLOGIES FOR REGIONAL DEVELOPMENT

Despite the fact that the legislation of different countries is responsible for the organization of information protection activities to a large extent on its owner, who must conduct checks of the level of protection of sources and bases, the facts of intrusion into information systems, in our opinion, it is the authorities that should carry out comprehensive work on implementation of the observance of the rights of the owners of information resources. The creation of the correct legal framework for the functioning of digital means of storing, using and applying information will lead to the empowerment of entrepreneurs and an increase in citizens' satisfaction. Since information becomes a factor of production and a certain condition for the formation of competitive advantages, it is advisable at the government level to regulate the issues of establishing property rights, as well as regulating the aspects of determining the value and value of digital content. While establishing the proper level of security and regulation in the digital economy, government bodies are faced with the task of creating conditions for the unhindered development of new technologies and free access to them (Dyatlov, Lobanov, Zhou, 2018, P. 1194; Mazelis, Lavrenyuk, and Krasko, 2020, P. 1140). It is these conditions that trigger economic growth. One of the advantages that arises in the digital economy is the release of time (Litvinenko, 2020, P. 1525; Novikova, Strogonova, 2020). Accordingly, the economic policy for the development of territories can use the resources of free time that have appeared for representatives of business structures and the population. Both of them can feel the effect of the release of time and interpret it as an indicator of social development, as well as direct the resulting time resource into the production sphere, which will entail the emergence of economic growth. Another effect that requires analysis and assessment in regional socio-economic systems is the network effect. Its action causes an increase in the value of services, goods, products for all consumers with an increase in their market. Within the framework of regional development regulation, it is necessary to study the reserves for expanding the action of network effects. Along with this, an obstacle to regional industrial and social development in the digital environment may become too much information available in the public domain, an opportunity for everyone to disseminate and post any information (Novikova, Strogonova, 2020). That is, the "digital noise" arising in the current situation makes it difficult to access high-quality, objective, correct sources. Scientists note that there is a threat of the emergence of a "digital crisis", as a result of which "a significant part of the data corresponding to the information need will not be used, instead of valuable information, the attention of specialists will be diverted to

the processing of" information noise "(Sturgeon, 2021, 42). To increase the level of development of regional territories and enhance their influence on the country's economy, it is advisable to expand the use of blockchain technologies in various spheres and industries of the territory. For a socio-economic system, distributed ledger technologies can give impetus to the development of existing companies, the expansion of interregional cooperation and the emergence of startups in different industries, innovative products and business models. Blockchain can be applied not only in financial markets, it is the potential of the industry application of such technologies that should be revealed in regional socio-economic systems. And blockchain technologies can enter business practice alongside traditional business models. Blockchain technology attracts not only individual companies, but entire business sectors as well. For example, the benefit of blockchain for regional insurance organizations is the automation of workflows. Regardless of the context of using smart contracts, in conjunction with the blockchain, they offer a number of advantages: they allow you to automate the satisfaction of claims for insurance payments, offer a reliable and transparent mechanism for organizing payments for all parties, and can be used to individually and fine-tune the terms of each individual agreement. For example, in the case of a car accident, a smart contract can guarantee that a payment is made only if the car is repaired at a service station pre-selected by the insurer or more convenient for it. Despite the possibility of implementing such programs without the use of blockchain, a smart contract platform based on the new technology can provide unique advantages. Not only does it guarantee increased transparency and customer trust through decentralization and automation of data reconciliation and validation, but it also provides a tangible network effect not available with centralized platforms. Technological innovation is not intended to change the essence of products, although it can sometimes do so. A very breakthrough consequence of the development of digital technologies can be considered the emergence of a means of completely leveling corruption in any area. Such an opportunity is provided by the use of the blockchain network due to the transparency of the entered records, the impossibility of deleting them by one or several persons, protection against falsification and deliberate distortion of data, since the entered information is recorded simultaneously on multiple devices, controlled by a significant number of users. Blockchain in public administration has already found application in different countries of the world, their comprehensive application and distribution is being investigated by specialists from various organizations. Blockchain has shown the greatest efficiency in construction and in organizing and holding elections. The use of blockchain technologies in the construction sector reduces the degree of uncertainty or incompleteness of data on the progress of work, the level of conflict disputes during the execution of the contract. The experience of holding elections in Sierra Leone will make it possible to state the high efficiency of blockchain elections with insignificant monetary costs for the organization (Avazov, Abduraxmonov, 2020). In Russia, distributed ledger technologies were tested during the voting on amendments to the Constitution of the Russian Federation; residents of the Moscow and Nizhny Novgorod regions were able to apply them. Convenience, relative simplicity and citizens' confidence in the results of such elections are the undoubted advantages of digitalization of voting. Blockchain as a digital transformation technology is of strategic interest to players in the regional insurance market. The biggest barriers to widespread adoption of technology in the insurance industry are the need to foster collaboration between market participants and technology leaders, the need for successful operational transformations, and the creation of a supportive regulatory environment. Laying the foundations to address these challenges today will enable insurance companies to implement full-scale scenarios for their own practical application of the technology and capitalize on its benefits over the next five years. The new technology has the potential to help many industry players cope with competitive challenges, including weak customer interest in insurance products, limited growth in developed markets, and the trend

towards digitalization. Representatives of the banking industry are currently attempting to practically implement several scenarios for using the blockchain at once: from the development of technology for direct interaction of customers with the payment system to the launch of trading systems on the stock exchange and currency exchange. Startups like Tradle are working on blockchain solutions to implement a customer data verification process for authenticity and reliability. This procedure requires the client to agree to all the necessary checks of his data to close the contract. Once a customer's profile has been verified, they are able to send verified identities to other companies to sign new contracts using the same tool, avoiding the need to go through the entire verification process again. This speeds up and increases the efficiency of the new customer acquisition process.

3. REGIONAL NETWORK STRUCTURES

One of the most important trajectories for the development of the regional economy is the development of network spatial structures. The network economy is defined in the European Commission report as an environment in which any company or individual, located anywhere in the economic system, can contact easily and at minimal cost with any other company or individual for collaboration, for trade, for the exchange of ideas and know-how or just for fun. Proceeding from this, the network economy is a qualitatively new form of economic order, which is beginning to oust hierarchical and market forms from servicing economic relations in society. Networked cooperation is an extended group of people with similar interests interacting with each other and maintaining informal contact for the purpose of mutual support and assistance (Chepurko, 2011, P. 56; Delgado, Porter, Stern, 2016, P. 37). Networking is one of the forms that allow you to save on the scale of production, an intermediate form between the market and the hierarchy (Leonov, Barabash, 2015, P. 82). Interfirm cooperation helps to reduce transaction costs associated with obtaining information and exercising control. The network structure is a stable and structured collection of semi-independent firms or non-profit organizations) involved in mutual relations and united by a common goal. Relationships in the network are designed to streamline the exchange relationships between participants and facilitate their adaptation to the conditions of a changing environment. Both formal and informal contracts serve as the basis for networking (Delgado, Porter, Stern, 2014, P. 1788). The network structure can take the form of temporary cooperation of enterprises (organizations, individual teams and people) with key competencies for the best fulfillment of a market order, based on a unified information system (Panke, 2020, P. 481; Börze, Risse, 2019, p. 1235; Adner, Kapoor, 2010, p. 310). In our opinion, the economic development of the regional economy can be carried out by increasing entrepreneurial networks in the form of a system of long-term cooperative interactions of independent enterprises based on the joint use of resources, a special system of values, and having a specific set of organizational and managerial interactions. In the regions, it is advisable to promote the emergence of network structures when a group of persons united by some organizational framework carries out their interactions on the basis of Internet technologies. Such a technical basis allows a group of persons engaged in joint activities to create a more flexible and effective organizational structure, compared to traditional forms of organizations (Schiff, Winters, 2002; Kostrov, 2010, P. 117). In addition, it will be effective to introduce a network form of management (coordination) of the regional economy, which can be used both in network organizations and in the network economy to coordinate joint activities. The main difference between this form and the market and command form is the direct and equal participation of all members in the process of coordinating their activities." Network presence is beneficial if it helps the local firm to do its job better. if the customer benefits from their service provider's membership in the network. The entry of a local firm into the network presupposes an increase in its "local" value, due to an increase in its status and the expected growth of professionalism and quality of services provided (Granstrand,

Holgersson, 2020, P. 91). Behind this claim is serious work at the network level to provide local benefits from network participation that are valuable to customers. The best opportunity to grow the network is to provide a system of support and interaction that will help all local members become more useful to their own customers. Network participation can be valuable for serving geographically dispersed customers.

4. CONCLUSION

In the regions, it is advisable to promote the emergence of network structures when a group of persons united by some organizational framework carries out their interactions on the basis of Internet technologies. Such a technical basis allows a group of persons engaged in joint activities to create a more flexible and effective organizational structure, compared to traditional forms of organizations. In addition, it will be effective to introduce a network form of management (coordination) of the regional economy, which can be used both in network organizations and in the network economy to coordinate joint activities. The main difference between this form and the market and command form is the direct and equal participation of all members in the process of coordinating their activities." Network presence is beneficial if it helps the local firm to do its job better. if the customer benefits from their service provider's membership in the network. The entry of a local firm into the network presupposes an increase in its "local" value, due to an increase in its status and the expected growth of professionalism and quality of services provided (Granstrand, Holgersson, 2020, P. 91). Behind this claim is serious work at the network level to provide local benefits from network participation that are valuable to customers. The best opportunity to grow the network is to provide a system of support and interaction that will help all local members become more useful to their own customers. Network participation can be valuable for serving geographically dispersed customers. In the regions, it is advisable to promote the emergence of network structures when a group of persons united by some organizational framework carries out their interactions on the basis of Internet technologies. Such a technical basis allows a group of persons engaged in joint activities to create a more flexible and effective organizational structure, compared to traditional forms of organizations (Schiff, Winters, 2002; Kostrov, 2010, P. 117). In addition, it will be effective to introduce a network form of management (coordination) of the regional economy, which can be used both in network organizations and in the network economy to coordinate joint activities. The main difference between this form and the market and command form is the direct and equal participation of all members in the process of coordinating their activities." Network presence is beneficial if it helps the local firm to do its job better. if the customer benefits from their service provider's membership in the network. The entry of a local firm into the network presupposes an increase in its "local" value, due to an increase in its status and the expected growth of professionalism and quality of services provided (Granstrand O., Holgersson M., 2020, P. 91). Behind this claim is serious work at the network level to provide local benefits from network participation that are valuable to customers. The best opportunity to grow the network is to provide a system of support and interaction that will help all local members become more useful to their own customers. Network participation can be valuable for serving geographically dispersed customers.

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PRIORITY DIRECTIONS OF PUBLIC SECTOR DEVELOPMENT AT THE POSTNEFT STAGE

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ABSTRACT

All the successes achieved in the field of socio-economic development in our country during the years of independence, the created economic, social, scientific-technical, financial potential, human capital, infrastructure, improvement of social welfare of the population are connected with the personality of National Leader Heydar Aliyev. From this point of view, the general and characteristic features of the economic development strategy of Azerbaijan, the stages of its formation, the main factors, conditions and means ensuring its success, systematically analyzed and evaluated by President Ilham Aliyev, defined by the Great Leader, are being systematically analyzed and evaluated. It is of exceptional importance in the study of the economic heritage of the great leader and in the selection and realization of the priorities, main goals and objectives of the future development of our country. The main features of the economic policy pursued in the Republic in recent years are its high level of implementation of state programs, decrees and orders for these periods, successfully ensuring the acceleration of economic development in the country, leading to non-oil sustainable development of all processes. After the economic independence of the Republic of Azerbaijan, significant changes took place in the political and economic life of the country. Thus, the choice of the path to a market economy, in turn, has created the basis for the privatization of property, the development of new organizational and legal forms of entrepreneurship based on individual and joint private property, including commercial. Since then, enterprises have been studying market demand, establishing economic ties, concluding contracts with foreign partners, seeking sources of financing, and producing products in order to achieve full economic independence. Thus, effective independent economic entities also operate in competition with public sector enterprises. Looking at the experience of countries that have undergone significant development in the world practice, the Public-Private Sector Partnership has always been of special importance as a broad parametric topic. Public-private relations are a priority topic and reflect economic, social, legal, cultural, political and other nuances. President Ilham Aliyev is successfully continuing the work on the adoption and implementation of various programs in the field of state structure in our country. Targeted measures will significantly increase the economic power of the state by ensuring the development of all sectors of the economy.
Keywords: *fiscal policy, government, finance, entrepreneurship*

1. INTRODUCTION

At the end of the last century, despite a difficult historical period, Azerbaijan was recognized in the world as a country that confidently went through a great evolution in its socio-economic and cultural life and ensured a stable, secure and modern standard of living. The country's international prestige has increased significantly, the traditions of statehood have been strengthened in society, and the construction of modern socio-economic infrastructure has been successfully implemented. One of the main problems in modern times is to determine the role of the state in the economic system. This problem also determines the importance of studying the functionality of the public sector of the economy, the impact of the public sector in Azerbaijan on market processes. Therefore, the efficiency of public sector development can be considered as one of the main factors in increasing the synergistic impact of government

intervention on the spheres of economic activity, especially in the economic sphere. In a sense, this is even more relevant in the context of the global financial crisis and the inability of private capital to meet the needs of the population. Along with ensuring the efficient operation of the public sector and improving its structure, work is underway to expand the scope of the private sector through the privatization of state property. In modern times, the most important priorities for the development of the national economy are the implementation of economic policies that comprehensively develop the country's economy, the formation of export-oriented national economy, production of competitive products on the world market, minimizing dependence on oil and diversification of the non-oil sector [3]. Improving the structure of public capital investment, strengthening control over the efficient use of these funds, ensuring the strengthening of relations between public investment policy and relevant development programs, achieving common principles and priorities in the areas of state-guaranteed funds and public investment expenditures in the state budget is [5].

2. RELATIONSHIP BETWEEN THE PUBLIC DEPARTMENT AND THE PRIVATE SECTOR

Recent processes in the world economy, the complex external economic environment of the country, the deterioration of the macroeconomic and financial situation, the decline in oil revenues due to falling oil prices have had a serious impact on the economy of the Republic of Azerbaijan. Such serious circumstances have made it necessary to adapt to the global economic crisis and form a new model of economic development. Azerbaijan's modern economic policy is aimed at diversifying the economy, developing the non-oil sector, and creating a sustainable and competitive national economy [4]. The methods of the article include observation, collection and selection of facts, analysis of E-views 10 program, autocorrelation test, Breusch-Pagan tests, methods of normal distribution. In general, the reason why the public sector is active in all types of entrepreneurship in the industry is the intention to increase its brand. It should not be overlooked that the minimum number of medium-sized enterprises is concentrated in the agricultural sector, as their number is many times lower than 50. This is due to the lack of attention to agriculture. There are other unnamed areas in state ownership where the largest share of micro-entrepreneurship has fallen. Looking at the tourism sector, at least micro-enterprises are in this sector. I would like to clarify that the smallest number of state-owned small businesses is concentrated in education, and the largest number in industry. The reason for this is as mentioned above.
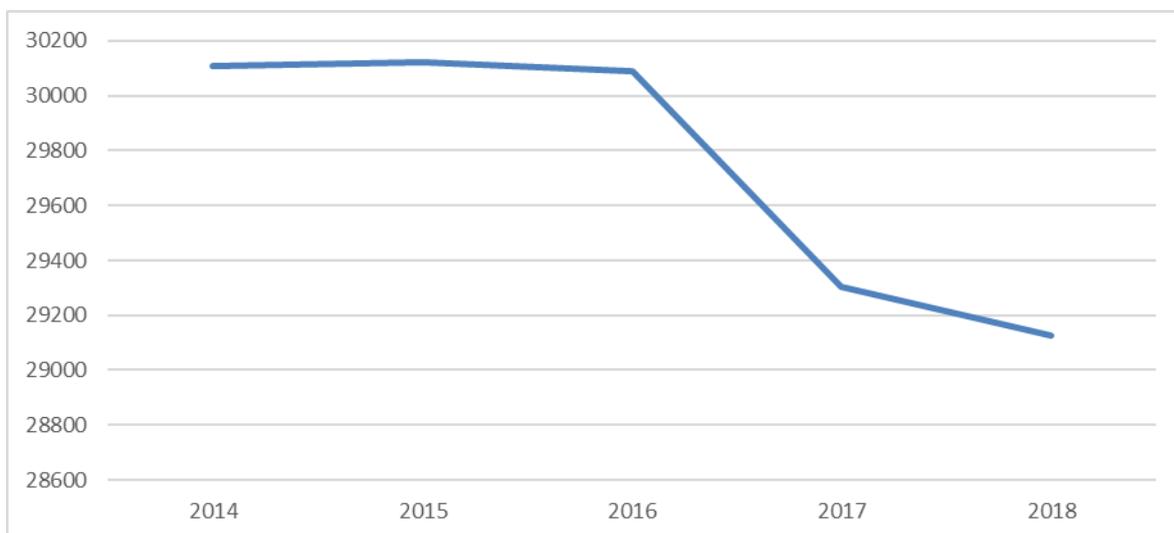
Figure 1: Total civil servant in the Republic (2014-2018) [9]

The number of civil servants working in state-owned enterprises, ie in the public sector, varies from year to year. These indicators can both decrease and increase relative to each other. For example, if we analyze the indicators for 2014 and 2018, we can easily see that the total number of civil servants in the country in 2015 increased slightly compared to 2014. But when we compare this figure with 2018, we see that on the contrary, in 2014, this figure is 3% higher. So, in 2018, the number of civil servants in the country did not increase, but decreased. In general, the year with the highest total in the country was 2015, and the year with the weakest was 2018. From this it can be concluded that this figure is declining in the country every year [9].
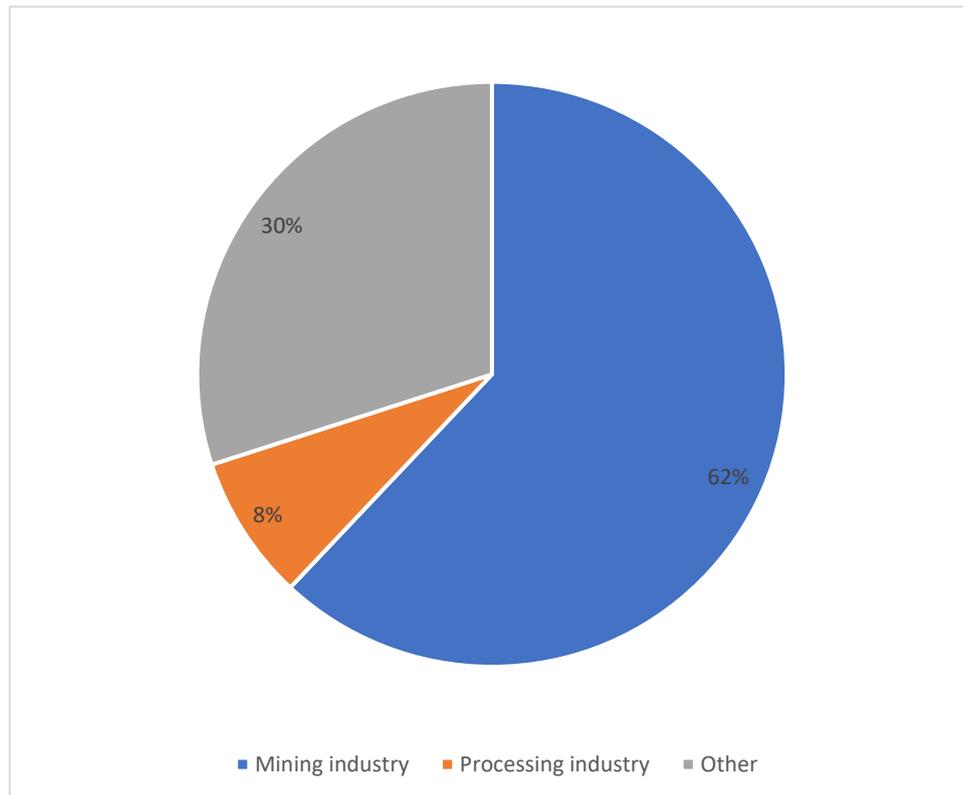
Figure 2: Specific weight of the private sector in the economy (2019) [9]

The development of the private sector corresponds to the industrial sector, as we are an oil country. If we look at Azerbaijan, we will see a large number of enterprises and organizations engaged in oil production. Of course, due to the rich gold deposits in our country, some private companies are trying to increase the number of enterprises in this category by investing in our homeland. This shows the role of the private sector in our economy. The share of the private sector in the economy is 62% of the mining industry. In general, as a result of consistent measures taken within the framework of industrialization, growth rates have been observed in various industries. As can be seen from the graph, the processing industry has the smallest share in the private sector. Apart from mining and processing industry, the remaining 30% falls on other industries. However, such factors are somewhat different in the public sector than in the private sector. In general, the state should try to make the public sector more dominant in the economy than the private sector. The reason for this is that the state, unlike the private sector, serves only citizens. The diagram below is an indication of these factors. is purely to serve the citizens. The diagram below is an indication of these factors. is purely to serve the citizens. The diagram below is an indication of these factors.
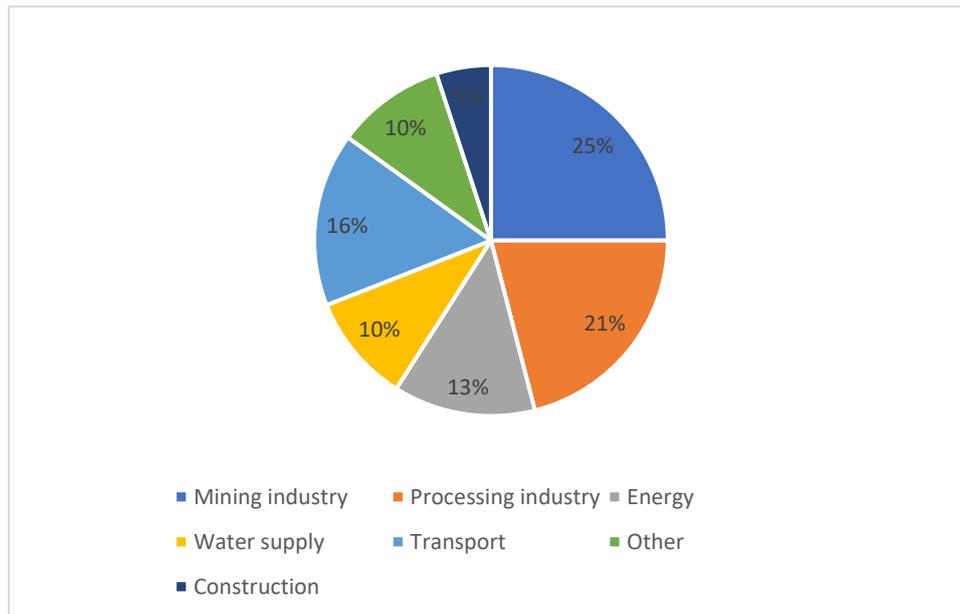
Figure 3: The share of the public sector in the economy [9]

If we look at the assets of enterprises and organizations across the country, we see that the private sector accounts for 62% of total assets. This means that the state plays a supporting role not only in itself, but also in the private sector. It is no coincidence that in 2016, by decree of President Ilham Aliyev, more than 300 new state-owned enterprises were declared open for privatization on the instructions of the Cabinet of Ministers. These include oil engineering, agriculture (including fishing), health, culture, tourism, and other areas [1].

2.1. Ecometric analysis of the public sector: Eviews analysis

The development of the public sector means an increase in GDP. Thus, as the number of companies producing products in the country grows, it plays an important role in the components of the common assets of this country. Thus, the development of the public sector leads to an increase in the country's gross income and an increase in the level of quality for the welfare of the population in its own sector. It should be noted that because our country is based on the oil industry, most private companies invest in industry, but not only private enterprises and organizations, the public sector is trying to use this advantage to invest more in industry and equalize its share with the private sector. Of course, the reason for this is the economic function performed by the state.

Variables	Coefficient	Standard error	T value	$P > |t|$
Revenues of public sector enterprises	0.7330	0.3346	2.1906	0.0361
GDP	0.1217	0.1417	0.8586	0.3971

Table 1: Income and GDP of public sector enterprises

Let's see if there is a connection between the assets of the public sector and GDP. To do this, we used the Eviews 10 program to determine the relationship between the total revenues of state-owned enterprises and GDP on the website of the Statistics Committee. As we have seen, there is a link between the revenues of state-owned enterprises and GDP, with a probability of less than 5%. That is, the revenues of state-owned enterprises operating in our country have a positive impact on GDP growth. In other words, according to the model, a 73% increase in the income of local enterprises means a 12% increase in GDP, or vice versa.

Variables	Coefficient	Standard error	T value	$P > |t|$
Assets of public sector enterprises	0.742453	0.278844	2.662614	0.0106
GDP growth rate	0.49568	0.175209	2.829078	0.0069

Table 2: Assets of public sector enterprises and GDP growth rate

		90% Confidence interval		95% Confidence interval		99% Confidence interval	
Variable	Coefficient	Down	Top	Down	Top	Down	Top
C	0.121738	-0.118648	0.362124	-0.167419	0.410894	-0.267305	0.510781
Public sector	0.733027	-1.300381	-0.165674	-1.415488	-0.050566	-1.651237	0.185182
By assets:		90% Confidence interval		95% Confidence interval		99% Confidence interval	
Variable	Coefficient	Down	Top	Down	Top	Down	Top
Public sector	0.742453	0.274369	1.210537	0.181170	1.303737	-0.006804	1.491710
C	0.495680	-0.789796	-0.201564	-0.848357	-0.143003	-0.966469	-0.024891

Table 2: Profitability analysis

At the same time, if we analyze whether the assets of public sector enterprises are related to the GDP growth rate, we will see that there is a positive relationship. In other words, according to the model, a GDP growth rate of 49% with a probability of 6% means an increase of 74% in the number of enterprises operating in the public sector.
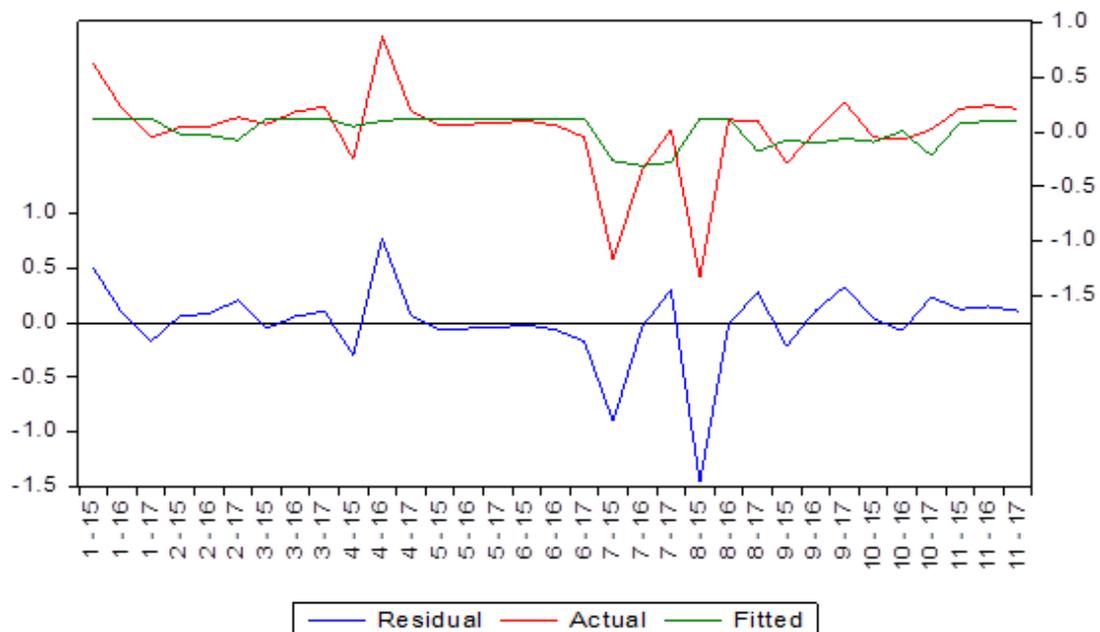
Figure 4: Analysis of the impact of the economic crisis on the performance of public sector enterprises

As can be seen from the diagram above, the economic crisis of 2015 had a serious impact on the performance of public sector enterprises. Since these econometric analyzes are analyzed with pooled panel data, random or fixed impact methods are not so important to us. Because both the period and the cross effect were taken as "None".
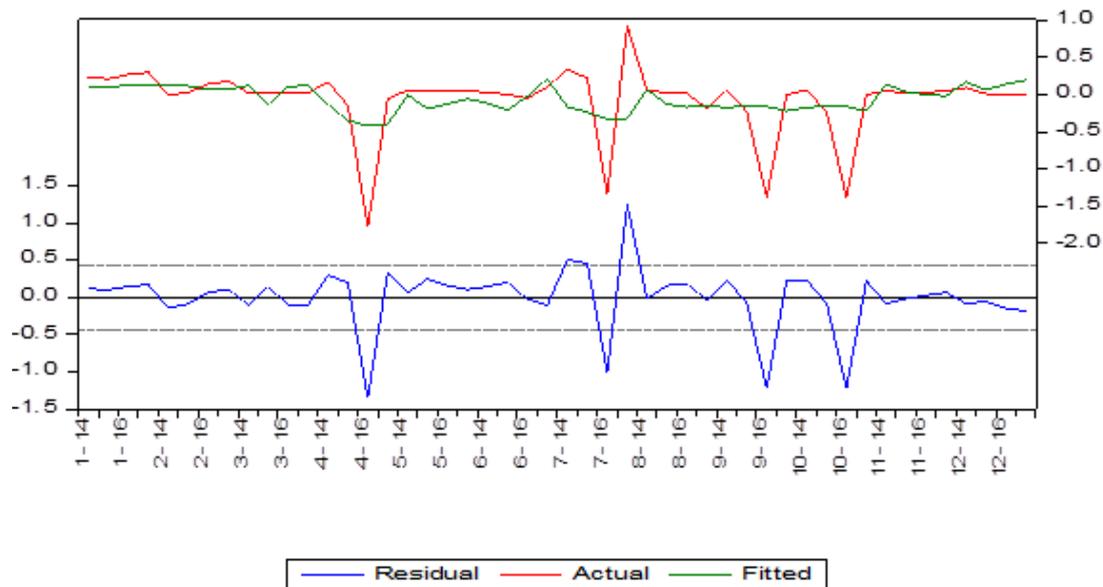
Figure 5: The impact of the economic crisis of 2015 on the assets of public sector enterprises

We can see from the diagram above that the effects of the economic crisis of 2015 had a greater impact on the assets of public sector institutions in Azerbaijan. Even the fact that this schedule, the public sector, is more volatile than the schedule is a clear proof of this. Due to the short period of the autocorrelation test, there is a dependence between the sectors, as we can see from the following tests.

Tests	Statistical coefficient	Probably
Breusch-Pagan LM	95.61711	0.0006
Pesaran scaled LM	2.823880	0.0047
Pesaran CD	1.330631	0.1833

Table 3: Autocorrelation test

Tests	Statistical coefficient	Probably
Breusch-Pagan LM	87.80635	0.0377
Pesaran scaled LM	0.853533	0.3934
Pesaran CD	0.671516	0.5019

Table 4: Breusch-Pagan test

The Breusch-Pagan test is a test of variable variants. Indicates whether the variant is variable or fixed. In both models, we see that this statistical test is important for our model because the significance rate is less than 5%. The Pesaran scaled LM test measures autocorrelation between sectors in our analysis, although it is not a widely used test, its probability is significant for assets and insignificant for enterprises. The Pesaran CD test measures cross-sectional dependence, and as we have seen, this ratio is not significant in either companies or banks, ie there is a dependency between the observed variables. That is, we cannot reject the null hypothesis based on the above result, because according to the results of the autocorrelation test, there is no cross-dependence in errors, but there is this dependence in the alternative hypothesis. The high probability of the Peseran CD test, which confirms the connection between the cross-sectional data, suggests this. This is an ideal situation for the regression equation. That is, the value of the variables does not differ much from the value we want.

2.1.1. Factors determining the efficiency of the public sector
Thus, if we compare the impact of public sector revenues or assets on GDP, we find that all dependent variables, which have a statistically significant effect on both groups, are more affected by GDP. Therefore, if economic crises are not observed in the country soon, we can say that the assessment of the public sector has a great role in the development of the country's economy.
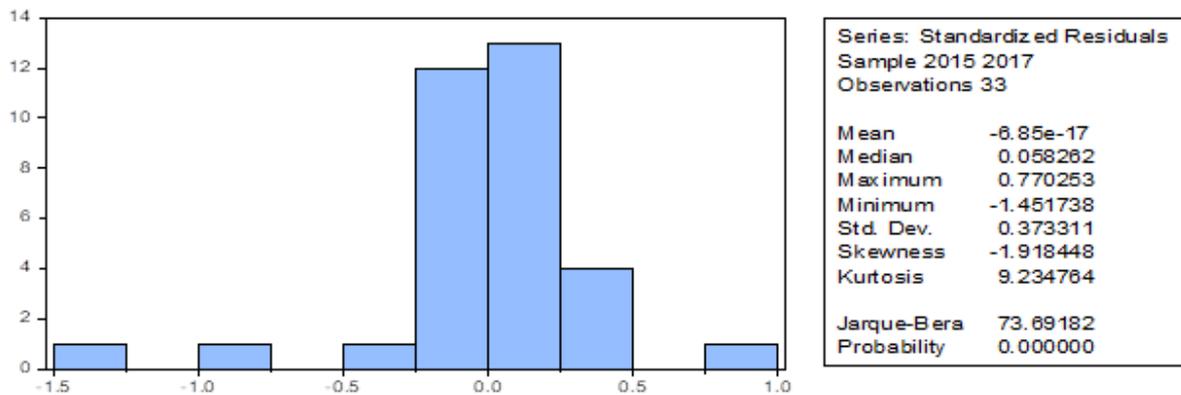
Figure 6: Analysis of the normal distribution of state-owned enterprises
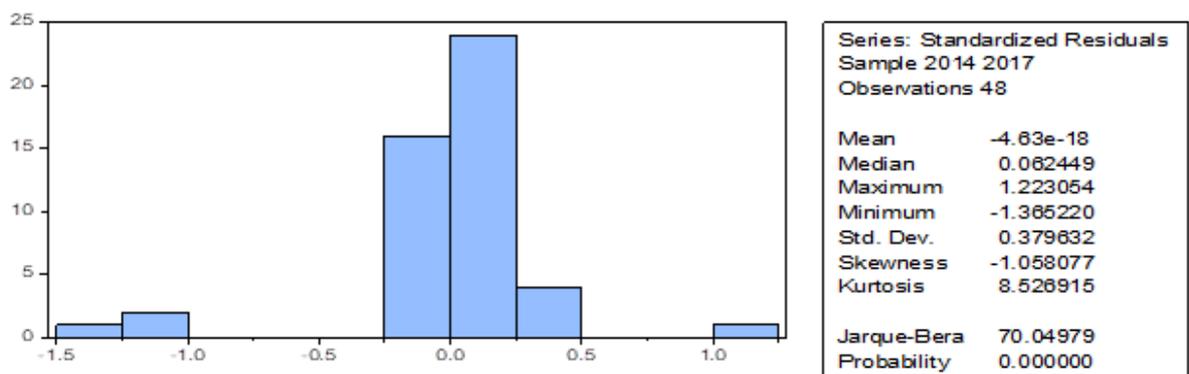
Figure 7: Analysis of normal distribution by banks

If we analyze the normalization test for errors, there should be more than 30 observations for each variable according to the normal distribution. In the models studied, the total number of observations does not correspond to the normal distribution of assets and income of public sector enterprises. The analysis shows that in 2019, the number of employees in the country's economy increased by 5.6% compared to the same period last year and amounted to 1639.1 thousand people, of which 909.5 thousand people in the public sector of the economy, 729.6 thousand people and operated in the private sector. 20.2% of employees are in education, 17.8% in trade; repair of vehicles, 13.3% industry, 8.2% health and social services, 7.6% construction, 6.9% public administration and defense; social security, 4.6% transport and warehousing, 3.4% professional, scientific and technical activities, 3.3% agriculture, forestry and fisheries, 1.7% financial and insurance activities, 13.0% of the economy engaged in other fields. The country's macroeconomic forecasts and expected economic trends for 2019-2022, prepared by the Ministry of Economy of the Republic of Azerbaijan, including real GDP growth of 3.6% in 2019 and 3.9% in the non-oil sector. The selling price of a barrel of crude oil was set at $ 60 in the calculation of the state budget and the revenues of the State Oil Fund. In general, the prevention of the negative impact of the ongoing processes in the world economy on the economy of Azerbaijan is on the agenda as one of the main priorities of monetary and fiscal policy in 2020.

As a result of comprehensive social reforms implemented by the relevant decrees of the President of the Republic of Azerbaijan, the minimum monthly wage in the country will be increased by 250 manat from September 1, civil servants, employees of a number of state-funded departments, enterprises and organizations, state oil companies. As a result of the increase in salaries of employees in the private sector and the acceleration of transparency in this area, in September 2019, the average monthly nominal wage in the country reached 723.4 manat, which is 35.8% compared to September last year. compared to 21.6% more [1].

3. PRIORITIES TO INCREASE PUBLIC SECTOR EFFICIENCY

In order to use new resources for economic growth, to diversify the economy and to attract more investment in the non-oil sector, important measures are being taken in our country to increase the share of the private sector in the economy. In addition, programs are being developed to increase the management experience and efficiency of local organizations in order to enable them to compete more successfully in the world market. To strengthen economic activity in the republic, to support private initiative, to carry out important structural changes in the economy in accordance with the will of the time, Intensification of privatization of state property in order to create a healthy competitive world and increase the efficiency of the national economy is considered one of the important aspects of economic policy [2]. The experience of many countries proves that the increase in the share of the private sector in the economy leads to significant progress in the asset and financial operations sector, as well as the normalization of capital outflows for investment. Three global trends in the world make it necessary to reduce the share of public sector property in the economy over time: first, a more global sector and more intensive technological progress make it necessary for management to respond quickly and adapt to new requirements; second, increasing attention to management and ownership policies makes this aspect one of the main driving forces of the value-setting procedure; third, Strengthening public control over the financing of the public sector increases the participation of the state enterprise (hereinafter - DM) in the valuation procedure. All of these areas provide an opportunity to achieve the goals set for each sector and, ultimately, the macroeconomic indicator by increasing the participation of the private sector in economic procedures.
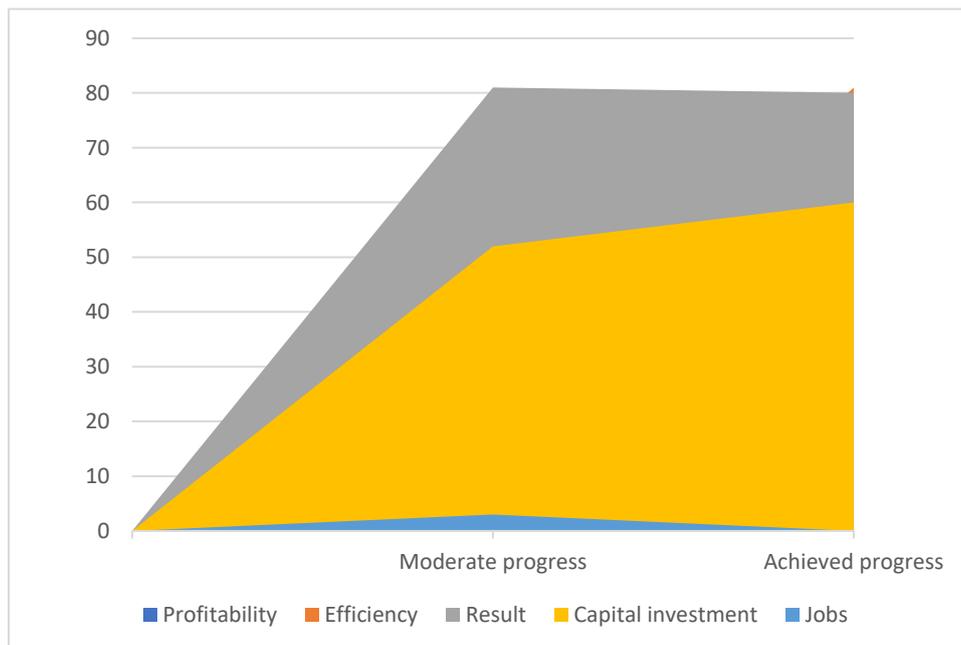
Figure 8: Progress in operating and financial areas after privatization, in%. [10]

Programs related to the privatization of state property in our country have enabled the growth of economic opportunities in our country, the establishment of an independent sphere of competition, the re-creation of many state enterprises, the use of modern equipment and technology, as well as modern management methods. Using the experience of DDCs around the world, it continues to serve the country to promote the liberation of state property and the development of the private sector. The state is preparing a new bill aimed at increasing the efficiency of the use of state property, the development and management of its management [7].

4. RESULT

After the economic independence of the Republic of Azerbaijan, significant changes took place in the political and economic life of the country. Thus, the choice of the path to a market economy, in turn, has created the basis for the privatization of property, the development of new organizational and legal forms of entrepreneurship based on individual and joint private property, including commercial activities. Since then, enterprises have been studying market demand, establishing economic ties, concluding contracts with foreign partners, seeking sources of financing and producing products in order to achieve full economic independence. Thus, effective independent economic entities also operate in competition with public sector enterprises. As a result of the consistent and well-thought-out economic policy pursued in Azerbaijan, many elements of the state's economic policy have been formed and have now become significant mechanisms of influence. In this regard, the current increase in the share of private property in market economic relations requires the study of ways to increase the efficiency of public sector development [6].

4.1. Offers

1) Accelerate the process of privatization and reconstruction in various sectors of the economy;
2) Improving the mechanism for developing and implementing measures for the re-establishment of industrial enterprises engaged in the production of high-demand products and the renewal of long-term fixed capital;
3) Ensuring full transition to the application of international standards on the organization of production and product quality in industrial enterprises equipped with modern technical means;
4) Rapid adoption of the Competition Code in order to ensure an efficient business environment in the country and improve the consumer characteristics of products;
5) Development and implementation of appropriate measures for the implementation of institutional measures that can play an important role in the economic development of the country;
6) Increasing the role of the state in promoting investment to accelerate the investment process at the expense of domestic and foreign financial sources;
7) Improving the material and technical base of scientific research institutes and centers for the creation and development of high-tech fields;

The formation of an effective macroeconomic policy framework that serves sustainable macroeconomic stability, the strengthening of the medium and long-term "driving forces" of economic development, requires the full provision of economic sovereignty.

Five National Priorities for the socio-economic development of the country should be implemented:
1) steadily growing competitive economy;
2) a society based on dynamic, inclusive and social justice;

3) Competitive human capital and space for modern innovations;
4) Great return to the liberated territories;
5) Clean environment and "green growth" country [8].

Modern economic policy of the Republic of Azerbaijan is aimed at diversification (diversification) of the economy, development of non-oil sectors, formation of a stable, competitive national economy [2]. The successful connection of the trio of society, business and the state will be strengthened for the long-term sustainable and rapid development of our country.

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THE IMPACT OF R&D INDICATORS ON THE ECONOMIC GROWTH OF AZERBAIJAN

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ABSTRACT

The study examines the impact of R&D indicators on economic growth in the case of Azerbaijan. GDP was used as a dependent variable, while as independent variables R&D capital stock, R&D employment, R&D expenditure (% of GDP), scientific papers and patent application indicators were used. The statistical indicators used in the article covering the years 2005-2019. Based on these indicators ARDL and EC models were constructed in both the short-term and long-term. Among the indicators for the R&D sector, five models was established to prevent multicollinearity. According to results, the impact of R&D indicators on economic growth is basically significant in the long run. The impact of R&D employment, R&D expenditure is negative, while the impact of scientific papers, patent applications and R&D capital stock is positive on GDP. In the short run the impact of most indicators on economic growth is insignificant. The effects of the scientific papers, R&D expenditure and R&D employment are negative and significant. As can be seen, there are some inconsistencies between the theory and the results obtained. The reason is that the structure of the R&D sector in Azerbaijan does not meet modern requirements.
Keywords: Azerbaijan economy, Economic growth, Paper, Patent applications, R&D sector

1. INTRODUCTION

As in the production function, productivity growth depends on the efficient organization of capital and labor. As a result, the role of technology in maintaining a competitive advantage, from an ordinary enterprise to the national level, is undeniable. And to meet the growing and changing needs, technology must be constantly changed and updated. That's why the R&D area needs to be kept in focus. Technological changes make a positive contribution to the economic development of each country. The main purpose of this study in the case of Azerbaijan is to study the impact of indicators in the R&D sector on economic growth. Insufficient statistics for the study and incorrect classification are the main limitations of our study. In the research, we selected the number of scientific papers, patent applications, R&D expenditure, R&D employment, R&D capital stock indicators in R&D sector.

ARDL and EC models were built to study the long-term and short-term impact of these indicators on GDP, covering the years 2005-2019. Among the indicators for the R&D sector, five models was established to prevent multicollinearity. This article assumes that the indicators of the R&D sector in Azerbaijan have a positive and significant impact on economic growth.

2. LITERATURE REVIEW

There is a lot of research on the impact of the R&D sector on economic growth, and the results vary. In his article, Inekwe (2014) examines the impact of R&D spending on economic growth on the example of developed and developing countries. GMM models were used in the study and covered 2000-2009. As a result, the impact of R&D spending on economic growth is positive for upper-middle income economies and insignificant for lower income economies. Bayerçelik and Taşel (2012) studied the impact of the R&D sector on economic growth in the case of Turkey. To do this, they created a panel regression model using R&D departments, R&D expenditures, and patent applications as innovation indicators. As a result, a positive and significant impact on GDP was identified. Another study in Turkey examined the relationship among high-tech exports, patent applications and economic growth. Tests (VAR and VEC Granger Causality, Johansen Cointegration tests) found a long-term relationship among the indicators for the period 1990-2015 (Dereli, 2019). Recep and Alabaş (2017) studied the impact of R&D expenditures on economic growth in Turkey using indicators for 1990-2014. The study used the ARDL model based on annual data and found that R&D costs had a positive effect on real GDP in both the short and long term. Takalo and Kanniainen (2000) argue the opposite of the theory that "patenting accelerates technical progress". Thus, their research concluded that those who did not patent their product used the innovations for a shorter period of time than those who received a patent. Also, patenting delays the introduction of a new product because it requires a lot of paperwork costs in their opinion. Crosby (2000) explored the impact of Australian patent applications on economic growth and productivity. Performed VAR analysis using indicators covered 1901-1997. According to the results, a 1 percent increase in patent applications leads to a 0.14 percent increase in GDP. Koutroumpis et al. (2019) surveyed R&D firms across Europe by sector. The study found that firms in the ICT sector which invest R&D capital brings in more revenue than firms in other sectors. Another article examines the impact of R&D expenditure on economic growth in the EU countries. The study covered 1995-2013 found that the impact was positive and statistically significant (Szarowská, 2017). Using a panel of data, Xiong et al. (2020) examined the relationship between R&D investment and economic growth on China. Research shows that the impact of the number of patent applications on economic growth varies by region. Also, patent applications cannot ensure growth in the public sector. The authors point out that the reason for this is that the patent owner is less motivated by the state, and there are large differences by region. As a proposal, they noted the implementation of a more comprehensive policy in this direction. Another study on China examined the impact of government public expenditure, government R&D expenditure and taxation on economic growth. As a result, it was noted that most government spending is financed by taxation, which reduces economic growth. Therefore, it was concluded that public spending will decrease and economic growth will increase as the choice of technological innovation increases (Zhou et al., 2020). In their study on OECD countries, Nair et al. (2020) researched to examine the relationship between R&D, ICT and economic growth in the short and long term. The results of the VECM analysis show that there is a relationship between the indicators for both periods. Another study for OECD countries found a positive effect of R&D expenditures and employment of researchers on economic growth for 1996-2015 (Bayraktutan and Kethudaoğlu, 2017). The study of ASEAN countries examined the impact of R&D indicators (high-technology exports, R&D expenditures, patent applications) on economic growth over 26 years.

Panel unit root and panel cointegration, FMOLS, DOLS tests were performed in the study. As a result, a significant impact of these indicators on economic growth was identified (Charutawephonnukoon et al., 2021). The study of EEA countries examined the impact of patent applications (residents, nonresidents, total) on economic growth for the period 1989-2014. Based on the results of the Granger causality test, it was noted that innovation has unidirectional and bidirectonal effects on GDP per capita, and these effects vary from country to country (Maradana et al, 2019). Using as patent, trademark and industrial design application indicators Benny (2020) explored the impact of economic growth on India. The impact of these indicators covered 2009-2019 on economic growth model is positive and significant. Law et al. (2020) examined the impact of innovation on economic growth on the basis of ARDL, using indicators covered 1985-2016 (patent applications, patent grant for innovation) on Malaysia. The empirical results show that patent applications (local or foreign) are statistically insignificant but patent grant has significant impact on economic growth. From this point of view, it was emphasized that qualitative innovations are more effective than quantitative ones.

3. THE SOURCE OF THE DATA
In the model were used monthly statistics for 2005-2019 in Azerbaijan. We used GDP indicator from the Central Bank of the Republic of Azerbaijan's (2021), capital stock for professional, scientific and technical activities (as R&D capital stock), employment professional, scientific and technical activities (as R&D employment) indicators from the State Statistical Committee of the Republic of Azerbaijan's (2021), research and development expenditure, patent applications indicators from World Bank's (2021), scientific papers (Scopus database (Elsevier BV)) from Scimago Institutions Rankings' (2021) official websites.

4. METHODOLOGY
There are five R&D models in the article. In the all models were used the Cobb-Douglas production function based on the Solow model (see Ismayilov et al. (2020) for details). All variables were seasonal adjusted. In the models as dependent variable - GDP, as explanatory variables – R&D capital stock, R&D employment, scientific papers, R&D expenditure, patent application indicators were used on a monthly basis. Due to the lack of monthly data for the R&D sector (as well as insufficient annual data), these indicators were calculated using the EViews program. Among the indicators for the R&D sector, various combinations was established to prevent multicollinearity. The Augmented Dickey-Fuller (ADF) test is used to test for unit root. Different models were tested on the indicators and the Auto-Regressive Distributed Lag (ARDL) model was selected as the optimal model in the case of Azerbaijan. Also, one of the advantages of this model is that it is OLS based. In the case of Azerbaijan, the impact of R&D indicators on economic growth was examined in both the short-term and long-term. As a dependent variable in the long run LOGGDP_SA, in the short run D(LOGGDP_SA) was used. Based on Akaike Information Criteria, optimal lag lenghts were selected. ARDL Bounds test was performed on each model. This test provides information on the existence of a long-term relationship among indicators. In the short run, the impact of R&D indicators is based on the Error Correction Model (ECM). Finally, CUSUM (Cumulative Sum Control Chart) and CUSUMSQ (CUSUM of square) tests were performed to test the stability of each model.

5. MODEL AND DISCUSSION
The results of the Unit Root test with trend and intercept term is shown in Table 1. All the variables are stationary. Because their absolute ADF values are higher than any of the absolute Mackinnon values.

Table 1: The results of Unit Root test

	LOGRDCAPSTOCK_SA (1st difference)		LOGGDP_SA (2nd difference)		LOGRDEMPLOY_SA (1st difference)	
	t-Statistic	Prob*	t-Statistic	Prob*	t-Statistic	Prob*
Augmented Dickey-Fuller test statistic	-5.600936	0.0000	-11.49862	0.0000	-3.720337	0.0236
Test crtical values: 1% level 5% level 10% level	-4.010740 -3.435413 -3.141734		-4.011663 -3.435269 -3.141649		-4.014635 -3.437289 -3.142837	
	LOGPAPERS_SA (2nd difference)		LOGRDEXPEND_SA (2nd difference)		LOGPATENT_SA (2nd difference)	
	t-Statistic	Prob*	t-Statistic	Prob*	t-Statistic	Prob*
Augmented Dickey-Fuller test statistic	-11.98815	0.0000	-5.455201	0.0001	-12.41450	0.0000
Test crtical values: 1% level 5% level 10% level	-4.011352 -3.435708 -3.141907		-4.014986 -3.437458 -3.142936		-4.011352 -3.435708 -3.141907	

*MacKinnon (1996) one-sided p-values
(Source: Compiled based on data from the EViews program)

5.1. Long term

In the long term the results of ARDL model are shown in Table 2. According to the Table 2 in model 1 all variables are significant. And the impacts of patent and R&D capital stock on economic growth are positive, while R&D expenditure and R&D employment have negative impact. In model 2 all variables also are statistically significant. In this model R&D expenditure and R&D employment affect to the GDP negatively. In model 3 only R&D employment has insignificant and negative impact. But the other variables are statistically significant. As we can see in model 4 all variables are statistically significant and only the coefficient of R&D employment is negative. In model 5 none of variables are significant. The numbers of scientific papers effect are positive and significant in both models. This shows that research contributes to economic growth. Patent applications are significant in both models too. So that, a 1 percent increase in the number of patent applications causes to approximately 0.8-1 percent increase on GDP. Although the impact of patent applications in Azerbaijan on economic growth is positive, there are shortcomings in this area in our country. Thus, there is a need to increase the number of patent applications, not only in terms of quantity, but also in terms of quality. This, in turn, can contribute more to economic growth. R&D expenditure is significant in model 1 and 2. A 1 percent increase in the R&D expenditure causes to approximately 0.8-1.5 percent decrease on economic growth. Given that the bulk of R&D expenditure belongs to the public sector (private sector participation is almost non-existent), this effect is expected to be negative. The R&D employment is significant in model 1, 2, 4 and has a negative impact on economic growth. Thus, this effect varies approximately between 1.4-3.4 percent. This can be explained by the fact that the salaries of R&D workers are many times lower than the average monthly salary and lack of motivation. The impact of R&D capital stock on GDP is positive and significant. This is consistent with the theory.

Table following on the next page

Table 2: The results of ARDL model

	Model 1	Model 2	Model 3	Model 4	Model 5
LOGGDP_SA(-1)	1.01*	0.999*	0.96*	0.96*	0.89*
LOGGDP_SA(-2)	-----	-----	-----	-----	0.11
LOGPAPERS_SA	-----	0.009	-0.37***	-----	-----
LOGPAPERS_SA(-1)	-----	-----	0.39**	-----	-----
LOGRDEXPEND_SA	-2.05*	-1.55*	-----	-----	-1.56*
LOGRDEXPEND_SA(-1)	2.52*	1.82*	-----	-----	1.67*
LOGRDEXPEND_SA(-2)	-0.52*	0.00	-----	-----	0.20
LOGRDEXPEND_SA(-3)	----	-0.31**	-----	-----	-0.35**
LOGPATENT_SA	0.70*	-----	-----	-0.002	-----
LOGPATENT_SA(-1)	-0.83*	-----	-----	-----	-----
LOGPATENT_SA(-2)	0.14	-----	-----	-----	-----
LOGRDEMPLOY_SA	1.49*	-0.02	-0.002	0.006	-0.02
LOGRDEMPLOY_SA(-1)	-1.63*	-----	-----	-----	-----
LOGRDCAPSTOCK_SA	1.01*	0.32**	0.01	0.02	0.34**
LOGRDCAPSTOCK_SA(-1)	-0.99*	-0.34**	-----	-----	-0.36*
C	0.21	0.11	0.22***	0.27	0.12
R^2	0.99	0.99	0.99	0.99	0.99
DW	2.14	2.25	2.06	2.07	2.05
Selected Model	ARDL (1,2,2,1,1)	ARDL (1,0,3,0,1)	ARDL (1,1,0,0)	ARDL (1,0,0,0)	ARDL (2,1,0,3)
Long Run Coefficients					
LOGPAPERS_SA	-----	1.05*	4.27*	-----	-----
LOGPATENT_SA	0.85*	-----	-----	1.05*	-----
LOGRDEXPEND_SA	-0.77*	-1.51*	-----	-----	7.99
LOGRDEMPLOY_SA	-1.40*	-1.57*	-0.22	-3.42*	4.36
LOGRDCAPSTOCK_SA	3.23*	1.40*	3.42*	3.22*	3.99
C	2.08	1.15	14.70*	-0.22	0.76

*Significant at the 1% level, **Significant at the 5% level, ***Significant at the 10% level,
dependent variable is LOGGDP_SA
(Source: Compiled based on data from the EViews program)

The results of the ARDL Bounds test on the each model are given in Table 3. The test results show that there is a long-term relationship among the indicators only in model 1. However, model 3 doesn't have this relationship. In model 2, 4 and 5 the coordination among the indicators cannot be explained because the F-statistic value is between the lower bound and the upper bound.

Table 3: ARDL Bounds test

	Model 1	Model 2	Model 3	Model 4	Model 5
F-statistic	5.55* (k=4)	2.86*** (k=4)	2.72** (k=3)	3.08*** (k=3)	4.10*** (k=3)

* there is a long-term relationship, ** there is not a long-term relationship, *** the existence
of coordination cannot be judged
(Source: Compiled based on data from the EViews program)

5.2. Short term

The results of the short-term impact of R&D indicators on economic growth in the case of Azerbaijan are given in Table 4. The results show that in these models, the impact of most indicators on economic growth is insignificant. The significant variables are the number of scientific papers, R&D expenditure and R&D employment. Thus, an increase in the number of scientific papers, R&D expenditure, R&D employment by 1 percent causes to a decrease on economic growth by 0.24, 0.26 and 0.37 percentage points, respectively.

The insignificant effect of patent applications on economic growth can be explained by the fact that its application takes some time.

Table 4: Short run analysis and ECM

	Model 1	Model 2	Model 3	Model 4	Model 5
D(LOGGDP_SA(-1))	-0.06	0.02	0.02	0.03	-0.07
D(LOGPAPERS_SA(-1))	-----	-0.03	-0.24*	-----	-----
D(LOGPATENT_SA(-1))	-0.02	-----	-----	-0.01	-----
D(LOGRDEXPEND_SA(-1))	-0.25	-0.13	-----	-----	-0.26***
D(LOGRDEMPLOY_SA(-1))	-0.14	-0.29	-0.19	-0.37**	-0.34
D(LOGRDCAPSTOCK_SA(-1))	0.22	0.08	0.04	0.02	0.07
C	0.01	0.01*	0.01*	0.01*	0.01*
ECT(-1)	1.00	1.00*	1.01*	1.00*	1.00*
R^2	0.51	0.60	0.93	0.94	0.60
DW	2.04	1.94	0.70	0.13	1.92

* Significant at the 1% level, ** Significant at the 5% level, *** Significant at the 10% level, dependent variable is D(LOGGDP_SA)
(Source: Compiled based on data from the EViews program)

The results of the CUSUM and CUSUMSQ (confidence interval for %5 level of significance) tests for each model are given in Figure 1, 2, 3, 4, and 5. Graphs show that a negative trend was been observed since 2008-2010. And almost all models except Model 4 are not stable.

Figure 1: CUSUM and CUSUMSQ (Model 1)
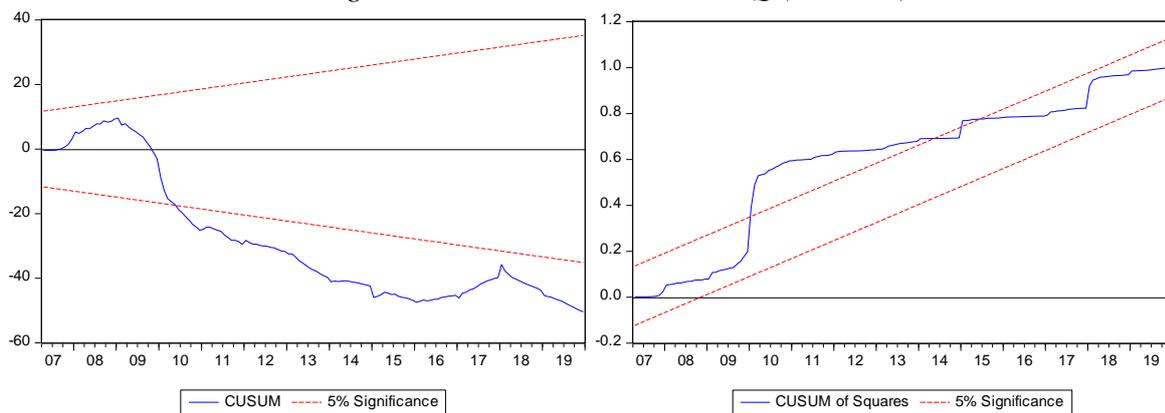
(Source: Compiled based on data from the EViews program)

Figure 2: CUSUM and CUSUMSQ (Model 2)
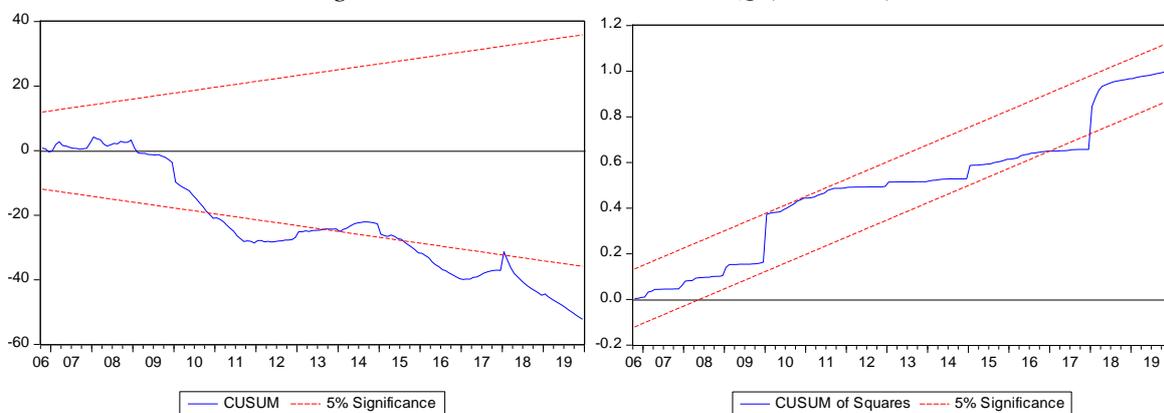
(Source: Compiled based on data from the EViews program)

Figure 3: CUSUM and CUSUMSQ (Model 3)
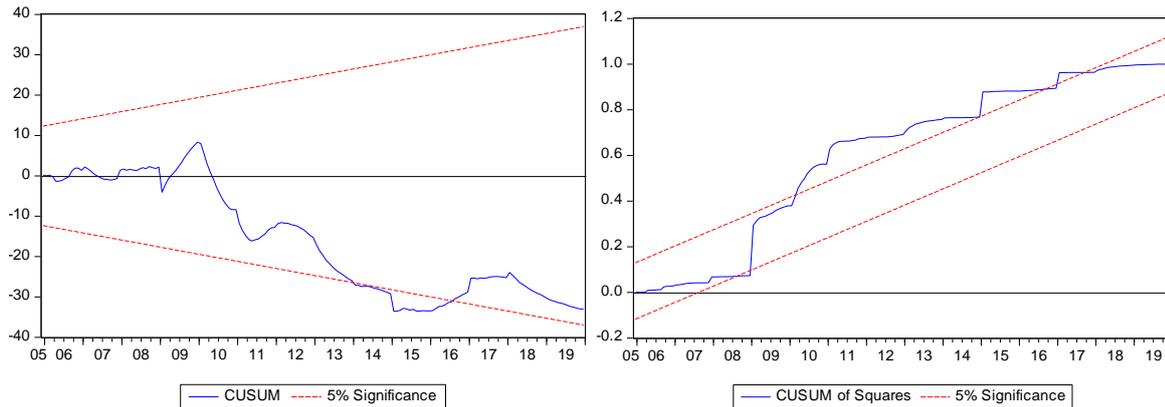
(Source: Compiled based on data from the EViews program)

Figure 4: CUSUM and CUSUMSQ (Model 4)
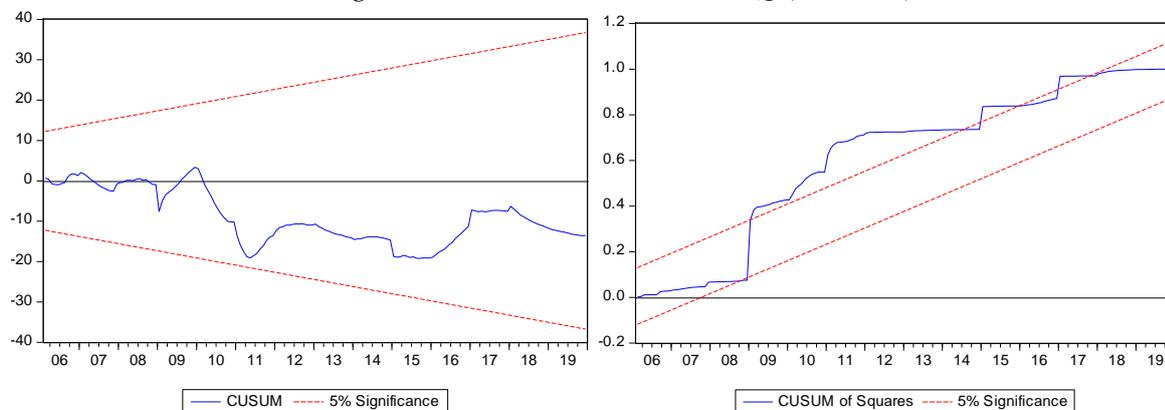
(Source: Compiled based on data from the EViews program)

Figure 5: CUSUM and CUSUMSQ (Model 5)
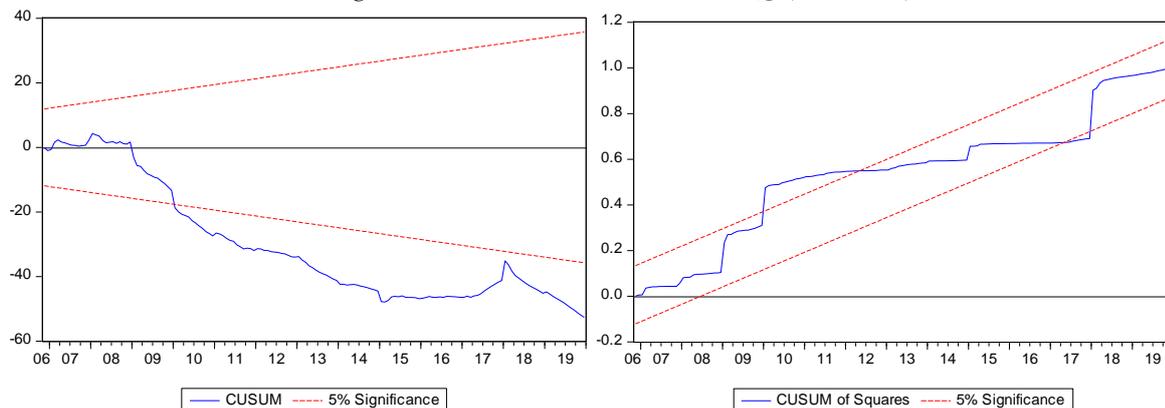
(Source: Compiled based on data from the EViews program)

6. CONCLUSION

This article examines the impact of selected indicators in the R&D sector on economic growth in the case of Azerbaijan for short and long term. ARDL and EC models were selected to study this effect. Various combinations of models were built to prevent multicollinearity. In the long run, the impact of R&D indicators on economic growth is basically significant. The impact of R&D employment, R&D expenditure is negative, while the impact of scientific papers, patent applications and R&D capital stock are positive on GDP.

In the short run the impact of most indicators on economic growth is insignificant. The effects of the scientific papers, R&D expenditure and R&D employment are negative and significant. As can be seen, there are some inconsistencies between the theory and the results obtained. The reason is that the structure of the R&D sector in Azerbaijan does not meet modern requirements. Thus, first of all, it should be noted that the classification of statistical indicators in this sector is inconsistent with international classifications and is insufficient. Other problems include the low number of articles published in "impact factor journals", the low quality of patent applications, the low salaries of R&D sector employees and the low share of private organizations in the R&D expenditures, the small number of research centers and the inefficient organization of their activities, and the weak role of universities in the R&D sector. In order to prevent these problems, as in developed countries, it would be expedient to establish individual research centers and transfer these powers to universities.

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COMPARING THE IMPACT OF SARS, EBOLA AND COVID-19 ON FINANCIAL MARKETS

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ABSTRACT
This research was selected to examine the impact of the epidemic crises faced by each country on financial markets at a certain interval. This issue has been chosen to present, interpret and value from a scientific point of view the views put forward on epidemic crises and the precautionary practices for protection. The main purpose of the research is to analyze the impact of epidemic crises in the late 20th century and early 21st century on financial markets and to investigate the measures taken. Analysis of the Problem: Crises defined as unforeseen events cause many financial market participants to face great losses. As in financial and economic crises, there are different reasons for the emergence of the epidemic crisis. One of these reasons is epidemics. In the crisis situation caused by the epidemic, all institutions in the countries where the outbreak occurs have to fight many problems. In this study, the effect of health crises due to epidemics on money and capital markets will be examined. Sars, EBOLA and COVID-19 outbreaks will be discussed in the study. In order to determine the impact of epidemic crises on money and capital markets, an evaluation will be made by analyzing them with econometric modes. In this context, econometric models will be used to reveal the relations between the epidemic crisis periods and indicators determined in accordance with the theoretical infrastructure. Research Method: In this research, it is considered within the framework of scientific studies and writing methods; it will be processed in accordance with principles such as openness, provenance, objectivity, originality, integrity. In this study, it will be searched for which econometric model or which models can be most accurately determined by the effect of epidemic crises on financial markets using the following methods. Econometricly, the effects of epidemic crises on financial markets in the case of Singapore and the United Kingdom will be analyzed with the help of co-integration and causality tests using daily data (number of tests, number of daily transmissions, number of recovering and deaths) in the years when SARS, EBOLA and COVID19 appeared.
***Keywords:** SARS, EBOLA, COVID-19, Financial Market, Epidemic crisis*

1. INTRODUCTION
Crises defined as unforeseen events cause many financial market participants to face great losses. As in financial and economic crises, there are different reasons for the emergence of the epidemic crisis. One of these reasons is epidemics. In the crisis situation caused by the epidemic, all institutions in the countries where the outbreak occurs have to fight many problems. In this study, the effect of health crises due to epidemic diseases on money and capital markets will be examined. Sars, EBOLA and COVID-19 outbreaks will be discussed in the study. An assessment will be made by analyzing the impact of epidemic crises on money and capital markets with econometric modes. In this context, econometric models will be used to reveal the relations between the epidemic crisis periods and indicators determined in accordance with the theoretical infrastructure. With the globalization of capital markets, both investors and academics have discussed the advantages of investing in capital markets. Due to globalization, the concept expressed as the integration or integration of financial markets in the market world is closely related and becomes interdependent.

As a matter of fact, companies operating on an international scale, investors in all areas of the financial sector, brokerages and actors have taken into account the relationship between other markets. At this point, the expectation of high returns in international portfolio diversification is possible, but with the low correlation between returns in different markets. In other words, we promise possible gains that can be achieved by diversifying on different national exchanges. This research consists of two parts. In the first part of the study, a short comparison of SARS, Ebola and COVID-19 epidemic disease was made. In the second part following this section, daily outbreak and financial market indicators related to Singapore and the United Kingdom were collected and their stasis was tested with the help of econometric expanded Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests.

2. THE COMPARISON OF SARS, EBOLA, COVID-19 VIRUSES

When looking at viruses that affect the masses, SARS is first found in Hong Kong; Ebola was first seen in West Africa, while the new type of coronavirus was first seen in China. The number of patients affected by Ebola on the first day was 86, compared to 14 in SARS and 27 in coronavirus. On the first day of the disease, 86 people died of Ebola. SARS continued to grow rapidly, with the number of patients affected by the virus rising to 133 by the time the disease reached its first week, while the death toll was 3. Ebola killed 77 people in the first week. While there were no deaths in the first week of the coronavirus, the coronavirus began to spread rapidly and affect other countries (www.haberturk.com,2020). COVID-19 and SARS are similar in many ways. For example, both have the following characteristics (www.aysetolga.com,2020):

- Respiratory diseases caused by coronaviruses
- it is thought that they came out of bats and passed to humans with intermediate host.
- they are transmitted by touching dirty objects as well as coughing and sneezing droplets of the infected person.
- has similar survival rates in the air and on surfaces
- sometimes they can cause serious diseases that require oxygen or mechanical ventilation.
- symptoms may worsen as the disease progresses
- have similar risk groups such as elderly individuals and those with health problems
- no special treatment or vaccine.

Although studies show that Covid-19 is particularly similar to SARS, there are also points where the virus differs. On March 3, 2020, the World Health Organization announced the death rate of Covid-19 at 3.4 percent. Covid-19 is less deadly than SARS, which causes the death of about 10 percent of the people it infects. (www.hurriyet.com.tr,2020). Although the transferability of severe acute respiratory syndrome (SARS) is lower than COVID-19, the case mortality rate is much higher for SARS than for COVID-19. However, the number of COVID-19 cases is significantly higher than the number of SARS cases. Although the clinical manifestations of the two recently mentioned infections are usually limited to the respiratory tract, it is noteworthy that there is a wide range of heterogeneous clinical findings in COVID-19 cases, although they have higher levels of disease severity. From a pathophysiological point of view, this phenomenon is explained by the ubiquitous presence of ACE2 receptors in multiple organs and blood vessels. At the clinical level, among some typical COVID-19 symptoms described during the pandemic is "silent anoxia", a discrepancy between an extremely low oxygen level measured by the pulse oximeter and simultaneous dyspnea deficiency; symptoms of cardiac involvement, including myocarditis, myocardial ischemia and myocardial infarction; hepatitis; reddish discoloration of malcats imitating cold bite or chilblains; intravascular coagulation, including pulmonary embolism; encephalitis; and acute renal failure.

3. ANALYSIS OF THE IMPACT OF SARS, EBOLA AND COVID-19 ON FINANCIAL MARKETS

3.1. Econometric Method and Data Set

In the analysis to be carried out, it was chosen to present the opinions put forward on epidemic crises and the precautionary practices for protection, to interpret and value them from a scientific point of view. Daily outbreak and financial market indicators related to the UNITED States, Singapore, Turkey, the United Kingdom and China will be collected. These indicators will be tested for stasis with the help of econometric expanded Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests. In order to provide information about the relationship between the variables, the direction and severity of this relationship, correlation test and the classification of the data obtained, frequency distributions, and identification of these distributions by measures such as averages, quarters and percentages, standard deviation, etc. will be performed.

3.2. Relationship Tests between Countries' Daily Corona Data and Exchanges

In this section, correlation between the daily corona data and the stock exchanges of the countries, descriptive statistics and the Phıllıps-Perron, the Augmented Dickey-Fuller (ADF) tests were performed.

Table 1: Correlation test between UK daily data and Price FTSE 100

	Number of infection	Death	Price FTSE 100	Volume
Number of infection	1			
Death	0.192467052	1		
Price FTSE 100	0.033555777	0.036650134	1	
Volume	-0.06972173	0.182477398	0.043426217	1

As shown from Table 1, there is a very weak positive relationship between variables from the correlation coefficient between the price of ftse 100 and the number of cases in the United Kingdom (0.033555777). There is also a very weak positive relationship between variables from the correlation coefficient between the price of the FTSE 100 and the deceased (0.036650134). The descriptive statistical test volatility (Standard Deviation) between the UK daily data and the Price FTSE 100 was 0.019542189 for the FTSE 100.

Table 2: Price FTSE 100 with UK daily data the Phillips-Perron, the Augmented Dickey-Fuller (ADF) tests

Variables	PP Unit root test		ADF Unit root test	
	Fixed	Fixed and Trendy	Fixed	Fixed and Trendy
Price FTSE 100 (level)	t-statistics - 15.1919	t-statistics - 15.2730	t-statistics - 7.5908	t-statistics - 7.4838
	Prob. 0.0000	Prob. 0.0000	Prob. 0.0000	Prob. 0.0000

As shown from Table 2, the price is higher than the fixed value fixed and trendy value in the PP unit root test for the FTSE 100, but the ADF unit root test shows that the fixed and trendy value is greater than the fixed value. Since the probability value is less than 0.05, it is concluded that the level value is stable.

Table 3: Singapore daily data vs. Price FTSE Singapore

	Number of infection	Healed	Death	Price FTSE
Number of infection	1			
Healed	0.03777862	1		
Death	-0.01060676	0.032274412	1	
Price FTSE Singapore	0.05455919	-0.025059853	-0.001799994	1

As shown from Table 3, there was a very weak positive relationship between the variables from the correlation coefficient between FTSE Singapore and the number of cases (0.05455919). From the correlation coefficient between FTSE Singapore and the number of cases recovering, it was determined that there was a very weak negative relationship between the variables (-0.025059853). When we look at the correlation coefficient between death and FTSE Singapore price, it is determined that there is a very weak negative relationship between the variables (-0.001799994). According to the descriptive statistical test between Singapore daily data and Price FTSE Singapore, the volatility (Standard Deviation) was 0.01617834 for PRICE FTSE Singapore.

Table 4: Price FTSE Singapore with Singapore daily data the Phillips-Perron, the Augmented Dickey-Fuller (ADF) tests

Variables	PP Unit root test		ADF Unit root test	
	Fixed	Fixed and Trendy	Fixed	Fixed and Trendy
Price FTSE Singapore (level)	t-statistics -15.1407	t-statistics -15.3028	t-statistics 15.0600	t-statistics -15.2711
	Prob. 0.0000	Prob. 0.0000	Prob. 0.0000	Prob. 0.0000

As shown from Table 4, the price is higher than the fixed value constant and trendy value for FTSE Singapore in both the PP unit root test and the ADF unit root test. Since the probability value is less than 0.05, it is concluded that the level value is stable.

3.3. Relationship Tests between World Daily Ebola Data for 2015 and Countries' Exchanges

In this section, correlation between daily Ebola data and exchanges around the world, descriptive statistics and tests of the Phıllıps-Perron, the Augmented Dickey-Fuller (ADF) were performed.

Table 5: 2015 World Daily Ebola Data and price FTSE Singapore correlation test

	Number of infection	Death	Price FTSE Singapore
Number of infection	1		
Death	0.99717037	1	
Price FTSE Singapore	0.060972176	0.059714121	1

As shown from Table 5, there was a very weak negative relationship between the variables from the correlation coefficient between FTSE Singapore and the number of cases. (0.060972176).

When we look at the correlation coefficient between the deceased and the PRICE of FTSE Singapore, it is determined that there is a very weak positive relationship between the variables (0.059714121). According to the 2015 world daily ebola data and the descriptive statistical test between PRICE FTSE Singapore, the volatility (Standard Deviation) was 0.037829458 for FTSE Singapore.

Table 6: 2015 world daily Ebola data and price between FTSE Singapore the Phillips-Perron, the Augmented Dickey-Fuller (ADF) tests

Variables	PP Unit root test		ADF Unit root test	
	Fixed	Fixed and Trendy	Fixed	Fixed and Trendy
Price FTSE Singapore (level)	t-statistics -5.5298	t-statistics -6.6179	t-statistics -5.5581	t-statistics -6.6179
	Prob. 0.0001	Prob. 0.0001	Prob. 0.0001	Prob. 0.0001

As shown from Table 6, the price is higher than the fixed value constant and trendy value for FTSE Singapore in both the PP unit root test and the ADF unit root test. Since the probability value is less than 0.05, it is concluded that the level value is stable.

3.4. Relationship Tests between World Daily Sars Data and Countries' Stock Exchanges
In this section, correlation between daily SARS data and exchanges around the world, descriptive statistics and tests of the Phıllıps-Perron, the Augmented Dickey-Fuller (ADF) were performed.

Table 7: World daily Sars Data and Price FTSE Singapore Correlation Test

	Number of infection	Death	Price FTSE Singapore
Number of infection	1		
Death	0.000834891	1	
Price FTSE Singapore	-0.15434211	-0.0518	1

As shown from Table 7, the correlation coefficient between FTSE Singapore and the number of cases in which there is a very weak negative relationship between the variables (-0.15434211). When we look at the correlation coefficient between the deceased and the price of FTSE Singapore, it was determined that there was a very weak negative relationship between the variables (-0.0518). According to the world daily Sars data and the descriptive statistical test between Price FTSE Singapore, the volatility (Standard Deviation) was 0.013894565 for FTSE Singapore.

Table 8: Price FTSE Singapore with world daily Sars data the Phillips-Perron, the Augmented Dickey-Fuller (ADF) tests

Variables	PP Unit root test		ADF Unit root test	
	Fixed	Fixed and Trendy	Fixed	Fixed and Trendy
Price FTSE Singapore (level)	t-statistics -7.4462	t-statistics -7.5781	t-statistics -7.4462	t-statistics -7.5183
	Prob. 0.0000	Prob. 0.0001	Prob. 0.0000	Prob. 0.0000

As shown from Table 8, the price is higher than the fixed value constant and trendy value for FTSE Singapore in both the PP unit root test and the ADF unit root test. Since the probability value is less than 0.05, it is concluded that the level value is stable.

4. CONCULSION

Both its rapid spreading power and its global effectiveness have been effective in causing not only health problems, but also some economic problems. These unexpected outbreaks have inherently different consequences from previous global economic crises due to the breadth of measures taken and the fact that they are directly related to health. Although the measures taken are very important for health, it is also known that there will be some economic consequences. The epidemic has caused some sectors to slow down and others to come to a standstill. This has put pressure on the real sector and increased demand for precautionary liquidity in the economy. The study aimed to determine the impact of the coronavirus, which has caused widespread and significant shockwaves in global financial markets, on financial markets, given the negative effects on economic activity in the United Kingdom and Singapore. In addition, in this study, the model created differs from other studies in terms of estimation and tests used. From here; The magnitude of the relationship between the daily epidemic and financial market indicators related to Singapore and the United Kingdom and the stock and stock indexes of companies in these countries was measured. With the help of Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests applied to the level levels of variables, the stasis level was tested to the level of 5% and 10% signiability. This feature is important for VAR analysis. In addition, correlation tests were performed between the world and countries' own case, death and recovering data and country indices. According to the results of this study, it may also be useful to present a few evaluations and recommendations for investors. Sector indices are generally influenced by sector dynamics and the overall macroeconomic framework. It has been seen from these studies that there is also an industry index that is positively affected by negative developments due to the epidemic. Therefore, if investors integrate their portfolios in accordance with the conditions, the possible losses are reduced and allow for profit.

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FEATURES AND PROSPECTS OF DEVELOPMENT OF TOURISM IN KARABAKH

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ABSTRACT

Tourism in the modern world is considered as a socio-economic phenomenon that has a direct and indirect impact on the development of all related infrastructure. Modern tourism is based on a high level of development of transport, social and service sectors, which ultimately turns it into a highly profitable sector of the economy. The main purpose of the study is to analyze the prospects for the development of tourism in Karabakh. The article discusses the main prospects for the development of the tourism industry in the Karabakh region. The main ways of sustainable development of tourism in the region are proposed. The development of tourism in the Karabakh region will be of great interest to foreign tourists. Meanwhile, in Nagorno-Karabakh, the development of tourism is given priority, Karabakh will become an ecotourism center of regional importance, and in the future it can acquire the status of a world-class tourist zone. Nagorno-Karabakh has a huge tourism potential, and with the restoration of lost infrastructure communications in the liberated territories, favorable conditions for business, including for the development of tourism, are expected to be formed.
Keywords: Tourism, hotel, development, prospects, restoration, Karabakh

1. INTRODUCTION
1.1. Relevance of the topic
Tourism in the modern world is considered as a socio-economic phenomenon that has a direct and indirect impact on the development of all related infrastructure. Modern tourism is based on a high level of development of transport, social and service sectors, which ultimately turns it into a highly profitable sector of the economy. According to the World Tourism Organization (WTO), tourism is today one of the most profitable and most dynamic sectors of the world economy. In terms of profitability, it is second only to oil production and refining. Tourism accounts for about 6% of the world's gross national product, 7% of global investment, every 16th job, 11% of global consumer spending and 5% of all tax revenues. In this regard, in many countries, the tourism sector is actively developing with government support. The main purpose of the study is to analyze the prospects for the development of tourism in Karabakh.

1.2. Significance of the study
Nagorno-Karabakh has a huge tourism potential, and with the restoration of lost infrastructure communications in the liberated territories, favorable conditions for business, including for the development of tourism, are expected to be formed. The article discusses the features of tourism in Karabakh, the concept of tourism development prospects, as well as its problems.

2. FEATURES OF TOURISM IN KARABAKH
Karabakh, with its many magnificent landscapes, stunning mountains, lakes, plains and valleys, as well as ancient history and cultural heritage, has a rich tourism potential. The city of Shusha, located on a picturesque hilltop, is the cultural capital of the region. Shusha is the cradle of mugham, the center of carpet weaving and breeding of the world famous Karabakh horses - all this is included in the UNESCO Intangible Heritage List. The process of including the historical center of Shusha city in the UNESCO World Cultural Heritage List has already begun - Shusha has been included in the preliminary list since 2001.

Preliminary studies are underway on the use of the tourism potential of the territories of Azerbaijan, liberated from occupation. Also, large-scale work on the construction of a new road to Shusha and the implementation of all the necessary infrastructure in Karabakh for the return of Azerbaijanis home to their historical lands are in full swing. Of course, the full restoration of the liberated territories will take time, since the occupation has continued since the early 90s, which led to the destruction or damage of many cultural and historical monuments. However, we are developing various tourist routes and projects, and we are confident that hiking, outdoor activities, visits to cultural and religious heritage sites, wineries, parks and museums, as well as many other tourist destinations will soon become popular here, and we Let us introduce Karabakh to the world as a new tourist destination. When traveling to Azerbaijan, you should definitely visit Nagorno-Karabakh. The incredible nature of the local regions is due to the presence of mountainous reliefs, lakes, caves, grottoes, alpine meadows, gorges and deep canyons, which are located on the local plateau. Azerbaijan has always been famous for its mesmerizing, fantastic and captivating mountains. And visiting the area on vacation in the near year 's, will personally experience the truthfulness of these words. Most tourists will visit the floor and the area and finding wonderful holiday filled with equestrian and hiking, backpacking and exciting fishing. In addition to the creatures acce many excursion routes, which are based on the huge potential and cultural heritage of the ancient region. You can budet visit countless attractions such as the historical and archaeological, and architectural character. The heavily indented mountainous terrain predetermines the unique and amazing nature of the local edges: sheer wooded mountain ranges alternating with deep canyons and gorges with raging mountain streams, alpine meadows, mysterious grottoes and caves, picturesque lakes. And the mountains are unique, fantastic, mesmerizing, captivating with endless variety and versatility. In addition, there are excellent opportunities for excursion routes in Karabakh - this is an ancient region with a rich cultural heritage, where a huge number of attractions are concentrated - architectural, archaeological, historical.

3. RESTORATION AND DEVELOPMENT OF TOURISM IN KARABAKH

In accordance with the agreements specified in the joint statement of the President of the Russian Federation, the President of the Republic of Azerbaijan and the Prime Minister of the Republic of Armenia, from 00:00 Moscow time on November 10 of this year. a complete ceasefire and all hostilities in Nagorno-Karabakh have been declared. The Azerbaijani authorities plan to allocate 2.2 billion manats (1.3 billion dollars) for the reconstruction of the territories of Nagorno-Karabakh, which came under the control of Baku during the armed conflict in the fall of 2020. Funding is included in the bill on the state budget for 2021, submitted to the country's parliament. The money will be spent on "restoring cities and villages" and creating modern infrastructure, including roads, communications, housing, and social facilities. This was stated by the chairman of the board of the Association of Hotels and Restaurants of Azerbaijan (DAIR) Samir Dubendi, Trend.az. According to him, Nagorno-Karabakh has a huge tourism potential, and with the restoration of lost infrastructure communications in the liberated territories, it is expected that favorable conditions will be formed for business, including for the development of tourism. At the same time, ecotourism activities in Karabakh will rapidly develop, since these lands are rich in natural resources. Taking into account the mountainous terrain, it is possible to develop various types of extreme tourism, agritourism, rural and "green" tourism, hiking, mushroom tours, birdwatching (bird watching) and other areas, says Dubandi. Directly referring to the development of extreme tourism, the head of the association indicated that the development of rafting, rock climbing, mountaineering and so on will be considered. The Association of Hotels and Restaurants was founded in 2009 and is a non-profit organization that supports and promotes the interests of the hotel and restaurant business in Azerbaijan.

In the post-war period, tourism is one of the priority areas in the economy. Thousands of historical, cultural and natural attractions, infrastructure rehabilitation, attraction of investments, participation in the economic and tourism fairs and forums budet Contributing acce development of the industry. Every year the number of tourists visiting to age five, because of the attraction of this direction and prospects. The Kelbajar and Lachin regions, the Karabakh region as a whole have great tourism potential. Significant work needs to be done to realize this potential. The Kelbajar region is located mainly in mountainous areas, the highest peaks are Jamyshdag (3 724 m) and Delidag (3 616 m). Broad-leaved forests (oak, beech, elm), forest-steppe vegetation in the highlands are widespread here. subalpine meadows, and from the fauna - mountain goat, roe deer, brown bear, wild boar, squirrel, snowcock, bearded vulture, eagle.Kelbajar is also one of the habitats of primitive man.This is evidenced by numerous caves, rock paintings, various hunting and household tools, found here during excavations, the history of which spans the IV-III millennia BC. At the same time, Kelbajar is the cradle of the ancient Turkic culture. Samples of the Kur-Araz culture dating back to the Bronze Age were also discovered in this area. Kelbajar is also rich in thermal water sources... On the territory of the Lachin region, bordering in the north with Kelbajar, there are more than 3 thousand historical architectural monuments. Among them, you can list mounds, monuments, fortresses, gravestones, figures of horses, rams, plot stones and much more. The highest peak of Lachin is Mount Gizilbogaz (3,594 m). The region has a relief rich in subalpine and alpine meadows and forests. Lachin (as well as Kelbajar) has a rich and ancient carpet weaving tradition. I would like to mention the world-famous Gasimushagi carpet weaving school in Lachin. Lachin also has rich water springs, thermal springs. Monuments of Albanian culture existed on the territory of both regions. Many of them were falsified by the Armenians who tried to ascribe their fake history to them. With this in mind, it is safe to say that these areas have a wide tourism potential. These areas are rich in natural and man-made resources. Referring to the above, we can say with confidence that in the near future such activities as ecotourism, including rock climbing and mountaineering, green tourism, educational tourism, archaeological tour, medical tourism, recreation will be developed on the territory of these regions. Demining is currently underway. Infrastructure work must be carried out. Today it is too early to talk about organizing any tour to that region. This work must be done first. Most importantly, the state of historical architectural monuments should be studied. They must be reviewed anew. A number of scientists have studied historical monuments located in Karabakh, but 30 years have passed. Naturally, they need to be revised. What monuments should be taken under state protection? It is necessary to restore them. It is necessary to build hiking trails, lay and mark hiking trails. Preparation of tourist maps and other work should be done. We will be able to deal with this in the coming years. This work should be performed by a number of departments, ministries and institutions. There are issues that need to be addressed by various institutions and institutional structures. In general, Karabakh will become a new tourist destination for us. Not only two regions, but the entire territory of Karabakh will become a new tourist destination. It is necessary to ensure the safety of these areas. For a tourist, the trip there must be safe. I hope that all scientists will jointly analyze the territory of Karabakh, create new tourist routes, tourist products. After the crisis in the tourism sector is overcome, by selling these products, we will attract many tourists. Special new types of tourism will appear. I am sure that Karabakh will become a territory of ecological tourism and will be recognized as a regional territory for ecological tourism. The time will come when we will create more beautiful places in Karabakh and adjacent regions than resorts in the Swiss Alps, resorts in France, Italy and Germany.

4. RESULTS AND DISCUSSION

The tourism potential of Karabakh is very rich, there are all opportunities for the development of many types of tourism - ecological, mountain, winter, hunting, health. This region, which has an ancient history, has unique flora and fauna, cuisine, historical, cultural and religious monuments, springs, dense forests and other attractions and benefits that attract tourists. Shusha, pearl culture, located at 1,400 meters above sea level, you can create new tourist routes, "In Susa the mild climate and mineral waters have medicinal properties here have grown famous composers, masters of mugham and artists of all this will allow.. I is we create interesting routes for tourists ". To begin with, civilians must return to the liberated territories, it is necessary to carry out work to restore housing and infrastructure, to ensure security. Only then can entertaining trips to Karabakh be organized. The trilateral statement on Karabakh by the leaders of Azerbaijan, Russia and Armenia was signed on November 10, 2020. President of the Republic of Azerbaijan Ilham Aliyev and President of the Russian Federation Vladimir Putin announced a complete ceasefire and all hostilities in the zone of the Nagorno-Karabakh conflict from 00:00 Moscow time (01:00 Baku time) on November 10, 2020. By this agreement, the Aghdam region is returned to the Republic of Azerbaijan until November 20, 2020. Until November 15, 2020, the Kelbajar region will be returned to Azerbaijan, and by December 1, 2020 - the Lachin region. At the same time, a peacekeeping contingent of the Russian Federation will be deployed along the line of contact and the Lachin corridor. Parallel to the occupied territories of the former yli withdrawn by Armenian Armed Forces. Unblocking of economic and transport links is expected. Transport links will be provided between the western regions of Azerbaijan and the Nakhchivan Autonomous Republic.

5. CONCLUSION

Forest, water and land resources in the territories liberated by Azerbaijan create great opportunities for the development of agriculture, processing industry and tourism. Most importantly, the economy of the liberated territories will be restored, and new technologies will be introduced, which will affect the increase in the productivity of the economy. P od occupation find L Xia Sarsang reservoir - the highest reservoir Azerbaijan (125 m) with a total capacity of 560 million cubic meters. In the past, the Sarsang reservoir provided irrigation water to the Terter, Agdara, Barda, Goranboy, Yevlakh and Agjabad districts. By creating artificial floods, the Armenian side dumped water in the spring and autumn months to damage the lands of Azerbaijan. In the hands of Armenian Sarsang Reservoir Presenting To a threat to the region's environment and national security. Up to 40 percent of Azerbaijan's mineral water reserves are located in the occupied territories. This water can be sold as bottled water, as well as create resort and recreational areas around the springs. 2 nature reserves, 4 reserves and historical monuments located in the occupied territories have great potential in terms of tourism development. The Azikh cave, which is one of the oldest settlements in the world, also has a tourist potential. Meanwhile, in Nagorno-Karabakh, the development of tourism is given priority, Karabakh will become an ecotourism center of regional importance, and in the future it can acquire the status of a world-class tourist zone. Nagorno-Karabakh has a huge tourism potential, and with the restoration of lost infrastructure communications in the liberated territories, it is expected that favorable conditions will be created for business, including for the development of tourism. At the same time, ecotourism activities in Karabakh will rapidly develop, since these lands are rich in natural resources. Taking into account the mountainous terrain, here you can develop various types of extreme tourism, agritourism, rural and "green" tourism, hiking, mushroom tours, birdwatching (bird watching) and other areas.

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ECONOMETRIC ANALYSIS OF THE POSSIBILITY OF IMPACT OF PANDEMIC PROCESSES ON THE DEMOGRAPHIC SITUATION OF THE POPULATION AND OTHER ECONOMIC PROCESSES ALONG WITH THE LEVEL OF UNEMPLOYMENT

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ABSTRACT

As the pandemic process covers all stages of the world economy and social life, there arises a great need to study this process. Taking into consideration that pandemic processes have weakened economic development many times, it is important to focus on investigating and eliminating shortcomings in other areas that have been damaged by this. Statistical study of demographic processes, which is another economic indicator, is one of the priorities of statistics. In addition, we would like to note that as the current problem affects the entire world economy, it will reduce the chances of countries to help each other. For this reason, the problem of unemployment has emerged as a key element in the current situation as a major shortcoming. The pandemic has had a profound effect on the unemployment problem along with the economy, which in itself has led to a greater need for new areas. The great damage caused by the COVID-19 pandemic to employment will, of course, be eliminated in parallel with the recovery of the economy. However, the positive developments created by the pandemic in some areas of employment should also be noted. These developments are expected to continue in the postpandemic period. COVID-19 will make digitalization necessary in many areas of employment. New specialties are expected to emerge, particularly in the IT sector, and the trend of people working remotely online will continue in the post-pandemic period. If we look at what is happening from a more positive angle, it can be noted that the sharp declines usually caused by sudden events such as the coronavirus pandemic are then replaced by rapid recovery and rise. The full transition to digitalization, which has long been delayed under the pretext of lack of funding and time, is already one of the main topics of discussion in the business world. We see that the unexpected COVID-19 pandemic in the world plays a big role in this issue. The current situation will accelerate and make digitalization necessary in many areas of the labor market. At present, we see that countries that are more advanced in terms of digitalization will be able to cope with the losses of this pandemic more easily. Millions of people are working from home as workplaces are temporarily closed and remote working system is switched to prevent the spread of the virus. Joint teleconferences, video meetings are organized. Many companies, which see these new digital rules as saving time and other resources and more convenient, are expected to continue to work in this way in the post-pandemic era. In general, digitalization of work, automation of production technologies, integration of new generation of software and equipment, organization of teleconferences are expected to be at the forefront of the business world in the post-pandemic period. The results of the analysis show the level of unemployment in the pandemic and what methods can be used to make the solution for this process more innovative.
Keywords: pandemic, human potential, demographic processes, unemployment, correlation-regression, econometric analysis

1. INTRODUCTION

The pandemic, one of the new economic problems of our time, is having a negative and positive impact on almost the entire world economy. The world economy with a monotonous standard

of development has stopped all economic processes, creating a shock effect from the almost sudden pandemic process. Implementation of the social isolation of many of the area itself has pushed at least temporarily, to suspend its activities[1. AA Ismayilzade, S Guliyeva]. But over time, have countries in the world continued to seek ways out of this situation. For today, vaccination has almost helped to reverse the economic process, albeit in small amounts. In addition, it should be noted that the problem of unemployment in accordance with the processes of social isolation brought on even more pronounced. According to the demographic challenges as well as the problem of unemployment during the pandemic began to manifest it more vividly. In view of the above, it was stressed that the problem of unemployment should be kept in mind, and there is a need for a more active analysis of the problems that have arisen in the current period. The realization of these requirements is possible on the basis of the use of a developed market economy mechanism together with state regulation. First of all, it is necessary to improve the territorial structure of production, ie: eliminate unequal development of production capacity in the regions, over-specialization of regions, more complete use of local resources and opportunities, taking into account personal labor potential, eliminate backwardness of regional social infrastructure; . This requires territorial flexibility of the workforce, which requires some regulation, as there is a risk of increasing disparities in the supply of labor to the regions, including an increase in staff shortages in regions with difficult living standards. Moreover, the desire to appeal to the modern era, content reveals new areas and professions[8. Trade and Development Report 2020]. For example, social media manager, marketing manager, digital manager, CEO Officer and others is one of the new areas of this kind. Of course, in order to acquire both the required and high-paying professions in the globalized world, it is necessary to be sufficiently familiar with the world labor market and conduct research. It is everyone's dream to find a good job, to work with enthusiasm, to gradually rise in the field where you work. Another issue is that when choosing a profession, it is important to take into account not only the level of wages, but also the demand for specialization in the labor market. Unfortunately, these two indicators do not always coincide. Therefore, a successful career and young professionals looking for success in the profession are sometimes disappointed [3. The Human Capital Report 2015.]. It should be noted that the coronavirus pandemic has also caused many changes and difficulties in the labor market. During the pandemic, the activity of both employers and job seekers decreased. For more than a year, the whole world is fighting with COVID-19. During this period, small and medium enterprises, especially around the world, have suffered greatly[2. Andreas Savvides and Thanasis Stengos]. During pandemic period, both developed and developing countries as well as the companies, institutions faced serious problems. The statements of the International Labor Organization were not heartening. According to a report released by the ILO, 305 million people lost their permanent jobs during the period in question. It is quite a large number. However, during the coronavirus pandemic, the need for health care workers doubled. Demand for caregivers without chronic disease has increased worldwide. Due to the increase in demand, the salaries of employees in this sector have also increased. The Bureau of Labor Statistics in the United States ranked the highest paid professions, noting that the salaries of health workers in one of America's most prestigious and competitive professions reached $ 260,000 a year. Tightening quarantine rules, minimizing live communication between people accelerates digitalization in many areas of the labor market. We now see that the digitally advanced countries are more comfortable coping with the effects of the pandemic. Therefore, in the post-pandemic period, it is predicted that physical exchange will be replaced by digital exchange. Experience has shown that digitalization is necessary in many areas of employment. In particular, the information technology sector will create new specialties, in addition, people working in remote online trend is expected to continue during the post-pandemic period. The rapidly changing world order, of course, also affects specialties. Professions go beyond their own, that is, different specialties emerge.

The rapid development of e-services, in particular, has made this area even more important[7. World Employment and Social Outlook.]. The World Industry Index DOW JONES and the Nasdaq Index have led to a sharp rise in the share of innovative companies in world industry. If the countries of the world are considering integration into the modern world market and want to eliminate the problem of unemployment in the labor market, they should expand their activities in the areas covered by these indices. Their implementation will create a basis for the development of the country's economic processes and expand its geolocation in the world economy. In addition, along with the labor market, there is a need to implement a policy to constantly improve the economic situation in the country. Azerbaijan's labor market, as in a number of leading countries, continues to close both legal and illegal jobs during the crisis caused by the Covid 19 pandemic.

2. REAL SITUATION IN AZERBAIJAN

The number of economically active population in the labor market has increased by 70,800 over the past year. As of March 1, 2020, the official unemployment rate in Azerbaijan was 4.8%. Since then, as a result of closures in the country, the service sector has minimized its activities. In this case, those who worked illegally were fired, and those who worked legally continued their activities with the help of the government and the reduction of wages. However, in some cases, the contract was terminated. There was also an increase in dismissals at the end of the agreement. As of March 1, 2021, the official unemployment rate in Azerbaijan is 7%[4. V Teymurova, M Abdalova,]. This was due to the growing number of economically active population, as well as a decrease in the number of employees. The 2.2% increase in unemployment in the country over the past year is 40% of dismissals or contract expirations. The other part is based on the growth of the economically active population. At present, 376,000 economically active people are unemployed in the country. In order to ensure the livelihood of the population during the fight against coronavirus last year, in Azerbaijan, along with the unemployed, informal workers and temporary workers, temporary workers, as well as economically inactive population were paid 190 manat 4 times in 2020. This means a total of 450 million manat. In addition, it should be noted that in 2021, those who lost their jobs were always given the same amount of state support. In addition, it should be noted that financial assistance in connection with social isolation measures has always been provided to businesses suffering from the pandemic as a state support[5. В.Т. Смирнов, И.В. Сошников]. The main purpose here is to provide state support to individual economic entities. In this case, the development of the private sector in the field of economic activity will be unsatisfactory. After the post-pandemic, the loss of economic activity will in itself form a large army of unemployment[9. Handbook of Statistics 2020].

Infected with the virus	331883
Healed	319271
Death case	4839
Tested	3435192

Table 1: Current situation with coronavirus in the country (according to the number of people)
(Source:[14. https://koronavirusinfo.az/az])

As we know, knowing that the country's population will reach 10 million in 2020, and as shown in the table, the economic damage of this process is not so great, as it is a very small part of the proportion of infection during a pandemic.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Economically active population	4587.4	4626.1	4688.4	4757.8	4840.7	4915.3	5012.7	5073.8	5133.1	5190.1	5252.6
Employed population	4329.1	4375.2	4445.3	4521.2	4602.9	4671.6	4759.9	4822.1	4879.3	4938.5	4876.6
Unemployed population	258.3	250.9	243.1	236.6	237.8	243.7	252.8	251.7	253.8	251.6	376.0

Table 2: Labor market indicators of the country for 2010 – 2020 (in thousands of people)
(Source:[12. https://www.stat.gov.az/source/labour/])

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Product release in the main sectors of the economy in the country	45.7	56.3	60.0	61.8	61.3	57.4	66.2	78.2	86.5	89.1	79.3

Table 3: Product release in the main sectors of the economy in the country in 2010 – 2020.
(in billion manats)
(Source: [13. https://www.stat.gov.az/source/system_nat_accounts/])

The table presented above we can see clearly that the unemployed population in 2020, compared to the 49.4 per cent increase over the previous year 11.1 percent decline in total output in the country has led to the next round. Hence it is clear that 2020 is the reduction in total output for the year as a result of the increase in the unemployed population has a direct impact. Given all this, the problem of unemployment will always need to be explored in the future.

3. EVALUATION OF EFFECTS OF EMPLOYMENT ON PRODUCT RELEASE

The main areas of research in the country, the number of employed people have tried to evaluate the effects of the product release. The database of the State Statistics Committee, covering the period of 2010 – 2020 based on annual performance. The evaluation of the econometric regression equation was chosen as the methodological approach. The model was empirically implemented in the EViews 9 statistical software package.

	Product release	EMPLOYMENT
Product release	1.00	0.92
EMPLOYMENT	0.92	1.00

Table 4: Correlation coefficient

The results show that there is a strong linear relationship between employment and product release (0.92). This gives us a basis for constructing the regression equation in a linear form.

Table following on the next page

Descriptive statistics

	Y	X
Mean	67435417	4656.518
Median	61823253	4671.600
Maximum	89106357	4938.500
Minimum	45721264	4329.100
Std. Dev.	13821134	216.3460
Skewness	0.260015	-0.203337
Kurtosis	1.925192	1.611126
Jarque-Bera	0.653419	0.959913
Probability	0.721293	0.618810
Sum	7.42E+08	51221.70
Sum Sq. Dev.	1.91E+15	468055.7
Observations	11	11

Regression results

Dependent Variable: LOG(Y)
Method: ARMA Maximum Likelihood (OPG - BHHH)
Date: 05/21/21 Time: 17:58
Sample: 2010 2020
Included observations: 11
Convergence achieved after 14 iterations
Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(X)	4.229270	1.031065	4.101844	0.0046
C	-17.71351	8.688984	-2.038617	0.0809
AR(1)	0.409391	0.426121	0.960739	0.3687
SIGMASQ	0.005048	0.003093	1.631773	0.1467

R-squared	0.868955	Mean dependent var	18.00752
Adjusted R-squared	0.812794	S.D. dependent var	0.205839
S.E. of regression	0.089061	Akaike info criterion	-1.707026
Sum squared resid	0.055523	Schwarz criterion	-1.562337
Log likelihood	13.38864	Hannan-Quinn criter.	-1.798232
F-statistic	15.47232	Durbin-Watson stat	1.408137
Prob(F-statistic)	0.001797		

Inverted AR Roots	.41

Table 5: Evaluation of effects of employment on total product release

Thus,

PRODUCT RELEASE = -17.71+ 4.23 * EMPLOYMENT

According to the model results, the explanatory variable explains the dependent variable by 86.9% (R-squared = 0.869). The coefficients of the regression equation are statistically significant at the 1% significance level. The ratio suggests that a 1% increase in employment leads to a 4.2% increase in product release and the Durbin Watson coefficients (1.41) suggest that the model is adequate.
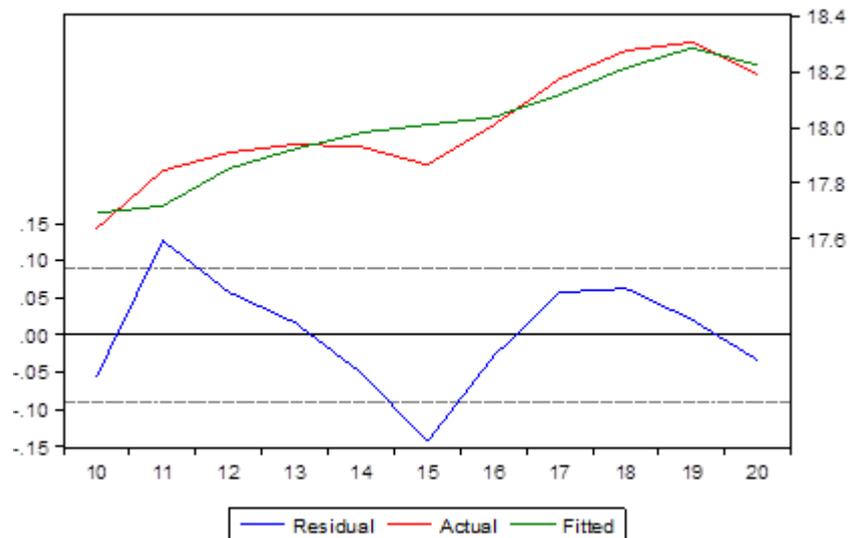
Figure 1: A graphical description of the remains is given below

During the pandemic, there have always been negative effects on the demographic situation. Thus, the reduction in the number of marriages during the process of social isolation, the reduction in the migration process of people has an artificially negative impact on demographic processes.

4. CONCLUSION

Studies show that migration indicators have a positive and direct impact on the number of economically active population. In the process of econometric research, a multivariate linear regression equation of dependence of the employed population of the Republic of Azerbaijan on output in key areas and demographic and social factors was constructed and the model was transformed into a mechanism adequate to real conditions. Given the satisfactory quality of the established econometric model, it should be noted that the model obtained to express the dependence of the employed population is indeed sufficiently adequate to real conditions and suitable for forecasting.

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ABOUT THE STRUCTURE AND VOLUME OF GLOBAL FINANCIAL MARKET

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ABSTRACT

The financial market is the economic plane in which financial resources are bought and sold. I propose a new structure:

1) *Credit market - The credit market is an economic plane that allows money to be transferred from a lender to a borrower. The annual volume of the global credit market is more than 40 trillion US dollars.*
2) *Currency market is the economic plane in which the purchase and sale of foreign currency takes place. The global currency market is more than $ 2 quadrillion.*
3) *Classical securities market - is the economic plane in which the circulation of securities is organized. The global securities market is over $ 95 trillion (without DFI).*
4) *Derivative financial instruments - a derivative is a written certificate confirming that the buyer undertakes to buy goods, currency, securities at a pre-agreed price and the seller undertakes to sell. The global derivatives market is said to be worth more than $ 1 quadrillion.*
5) *Precious metals market is an economic plane in which the purchase and sale of gold, platinum group metals, silver is organized. According to our calculations based on LBMA data, the annual trade of the London gold market alone is $ 7 trillion.*
6) *Precious stones include natural diamonds, emeralds, rubies, sapphires, alexandrites. The volume of only global diamonds markets is $ 87,31 billion.*
7) *The insurance market is the economic plane in which the sale of insurance certificates is organized. The global insurance market is worth $ 6.3 trillion (2019).*
8) *Leasing, forfeiting, factoring market-is the economic plane that organizes to conclude leasing, forfeiting, factoring deals. The volume of only global leasing market is $ 1.2 trillion.*

Keywords: *global financial market, structure, volume*

1. INTRODUCTION

"There is no second tool in the world that unites people and nations as much as the market." John Maynard Keynes proposed to divide the economy into financial and real sectors. According to the data of World Bank, our planet's GDP is $ 87.7 trillion in 2019 and $ 83.8 trillion in 2020, which is severely affected by the pandemic.[1] The volume of labor market is $ 4.4 trillion.[2] At present, the commodity and labor markets together form for about 3-4% of the total global market, 96-97% falls on the financial market. Thus, a significant part of finance created to ensure the turnover of goods has moved away from its original functions and turned into finance for finance. Because classically, finance is a system that serves the purchase, sale and turnover of goods.

2. THE ROLE OF FINANCIAL MARKET IN ECONOMY

Former Italian Prime Minister Matteo Renzi said before referendum in 2016: "Let the financial markets know that we will continue to work to improve the structure of the economy." Why did the government official apply to the financial markets? Because the situation in the financial markets has the potential to have both strategic and immediate impact on national economies. The efficiency of the economy as a whole depends on the efficiency of the financial system.

J. Schumpeter wrote about this in 1912, Gurley- E. Shaw in 1955, R. Goldsmith in 1969, and R. McKinnon in 1973. Richard Sylla , a professor at New York University, proves according to the data of Netherland and England in the XVII century, USA in the XVIII century, Germany, Japan, Russia in the XIX century that financial revolution, or more precisely, the strengthening of the banking system was a prerequisite for the industrial revolution and subsequent economic growth. However, the impact of financial markets on the economy can also be negative. In this case, the process of remanufacturing is disrupted. Borrowing becomes difficult, communication between economic entities is cut off, investment and employment are reduced. As a result, a crisis occurs. The rapid exit of up to $ 400 billion from Southeast Asia during the 1997-1998 Global Financial Crisis, 5 times depreciation of the South Korean currency-won urge not to forget the effect of the global financial winds.

3. "THE SYSTEM IS LARGER THAN THE SUM OF ITS ELEMENTS" - PLATO

Experts have different views on the structure of the financial market. Taking advantage of their ideas, I propose a new structure:
1) Credit market
2) Currency market
3) Securities market
4) Precious metals market
5) Precious stones market
6) Insurance market
7) Leasing, forfeiting, factoring market

Each segment of the structure deals with the transfer of funds from a thrifty economy to a deficit economy by offering financial instruments. Let's talk briefly about the volume of segments.

1) Credit market. Here we are talking about the type of bank loan. The credit market is an economic plane in which money is transferred from a lender to a borrower. Lenders include international financial institutions, regional banks, the central bank, banks (working based on profit), and non-bank credit institutions. The global credit market is worth more than $ 40 trillion. The main role in the world interbank market belongs to LIBOR. LIBOR is the weighted average interest rate in the interbank market. Thomson Reuters, a commissioner of the British Banking Association, determines it every banking day based on a survey of 16 first-tier banks that are considered market makers in the London money market. Thus, LIBOR is defined in 10 currencies: US dollar, Canadian dollar, Australian dollar, New Zealand dollar, euro, British pound, Swiss franc, Japanese yen, Danish krone, Swedish krona. Interest rates on a $ 360 trillion financial instrument worldwide is based on LIBOR.[3] There are also EURIBOR, PIBOR (Paris Interbank Supply Rate) in the global financial market.
2) Currency market is the economic plane in which foreign exchange is traded. The global currency market is more than $ 2 quadrillion in a year, surpassing other parts of the financial market. The total market value of cryptocurrencies is $ 2.48 trillion.[4]
3) Securities market is the economic plane in which the turnover of securities is organized. This market is divided into small parts: share and debt, state and corporate, primary and secondary market, stock and over-the-counter market etc. The global securities market is worth more than $ 95 trillion (excluding derivative financial instruments). Derivative financial instruments, (in latin derivare – derivative from water), a derivative is a written certificate confirming that the buyer undertakes to buy goods, currency, securities at a pre-agreed price and the seller undertakes to sell. The purpose of this operation is to protect against price increases and decreases.

Of course, one of the parties can gain money and the other can lose. Some experts say that the volume of global derivatives market is $ 1 quadrillion. The reason for the growth of this market is global uncertainty and the desire to protect against it. This part of the financial market is often difficult to account for because it is outside the control of national states. Therefore, some researchers consider this figure exaggerated.

4) Precious metals market is an economic area where the purchase and sale of gold, platinum, silver and platinum group metals (ruthenium, rhodium, palladium, osmium, iridium) is organized. Let's remember the history that in the past there were metal coins in turnover. Then turnover of paper money which is based on metal became. After the Jamaica Agreement of 1976-1978, a turnover based on a non-metallic emerged. As a result, gold-the brightest representative of precious metals lost its role as the basis of the monetary system. However, despite the exclusion of gold from official turnover, this precious metal and others remain in the interest of investors as a reliable financial instrument. These stainless, high-conductivity and rare metals are opportunity to protect and increase resources in times of uncertainty. They are sold in London Metal Exchange, New York Stock Exchange. The biggest gold market is in London. According to our calculations based on LBMA- (London Bullion Market Association) data, the annual trade of the London gold market alone is $ 7 trillion. Switzerland buys 40 % gold which is sold in the world. The IMF, which has the world's largest gold reserves, holds 90.5 million ounces of gold worth $ 168.6 billion.[5]

Table 1: Prices of precious metals

Name of precious metals	Price in 2019	Price in 2020
1.Gold [6]	$ 1,393.34	$ 1,773.73
2.Silver[7]	$ 16.22	$ 20.69
3.Platinum[8]	$ 868.04	$ 893.39
4.Palladium[9]	$ 1,518.99	$ 2,178.96
5.Rhodium(per ounce)[10]	$ 6,050	$ 17,000

Source: compiled by author based on these sources:
((6) https://www.macrotrends.net/1333/historical-gold-prices-100-year-chart,
(7) https://www.macrotrends.net/1470/historical-silver-prices-100-year-chart,
(8) https://www.macrotrends.net/2540/platinum-prices-historical-chart-data,
(9) https://www.macrotrends.net/2542/palladium-prices-historical-chart-data,
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U.S.%20dollars%20in%20January%202017.)

Banks accept metal deposits. The metal itself is not participated here. It is simply used as a unit of measurement. For example, if 100 grams metals are deposited, 3 grams metals per year will be added to it, regardless of the increase or decrease in the price of the metal.

5) Precious stones include processed and unprocessed natural diamonds, emeralds, rubies, sapphires, alexandrites. The volume of only global diamonds markets is $ 87,31 billion. According to the idea that diamonds are eternal, financiers diversify their assets by investing in precious stones.

6) The insurance market is the economic plane in which the sale of insurance certificates is organized. Payments collected by insurance companies act as investment resource. The global insurance market is worth $ 6.3 trillion in 2019.

7) Leasing, forfeiting, factoring market-is the economic plane that organizes to conclude leasing, forfeiting, factoring deals. Leasing is the sale of property (mainly equipment) by a

leasing company from the seller to the consumer on a long-term lease or in installments. Factoring (Latin factor - intermediary, sales agent) and Forfeiting (French à forfait - whole, full amount) are buying loan claims from the seller at a discounted price and then to ensure that the money is paid by the borrower. In factoring, the seller is initially paid part of the amount, and after receiving it from the buyer, the rest is paid with discount. In forfeiting, the risk remains in the forfeiter so after deducting a certain discount to the seller, the rest of the amount is paid immediately. Discount means the profit of a factor or a forfeiter. Leasing equipment alone in the world is $ 1.2 trillion.

4. ALTERNATIVE DIVISION
The financial market is also divided differently: money market and equity market. The money market is the economic plane in which deals of up to 1 year are concluded. It includes transactions in loans, securities and other financial instruments. The equity market is the economic plane in which deals are concluded for more than a year. In some literatures, both money and equity markets are referred to as larger equity market. Such a division is interesting for a financial market participant because he applies to the money market for short-term trading and to the equity market for long-term trading.

5. CONCLUSION
In my opinion, the division I present more accurately reflects the reality of the financial market and does not allow recalculation of funds. According to my calculations, the annual volume of the world financial market exceeds 3 quadrillion US dollars. The market is sharply dynamic and statistics are changing rapidly.

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COUNTRY BRAND RANKINGS DURING THE COVID-19 PANDEMIC: "ONE THING IS IMPORTANT: TO BE GOOD NOW"

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ABSTRACT

Brand rankings have long been common in the world of products and services: rankings of the top 100 global brands are released by Interbrand and BrandZ-Kantar-WPP among others. For example, the top five brands of the Interbrand 2020 list are Apple, Amazon, Microsoft, Google and Samsung, followed by the first non-technological brand, Coca-Cola. The situation is similar in the case of the BrandZ-Kantar-WPP 2020 ranking, with the order of the top five being Amazon, Apple, Google, Microsoft and Visa. Like classic brand rankings, country brand rankings are also available. Moreover, there is a new one almost every year, such as the Anholt Nation Brands Index, the FutureBrand Country Brand Index, the Anholt Good Country Index, the Bloom Consulting Country Brand Ranking (Tourism Edition and Trade Edition), the Young&Rubicam Best Countries, the Reputation Institute Country RepTrak and the Global Soft Power Index. It is impossible to discuss all of these in a single article, and not all of them have published a fresh country brand ranking that was created during the COVID-19 pandemic, therefore we only scrutinize the first three of them. One of the aims of the publication is to present their methodology, dimensions and attributes, as well as the results of the individual rankings, with special regard to how they changed in 2020. The other purpose of this writing is to highlight that the basis of a good country brand and a good country image is in fact nothing more than the good country itself – similar to a classic brand, where the starting point is a good product and service.
Keywords: Country branding, Country brand indexes, Country brand rankings, Nation branding, Covid-19

1. THE COMPETITION OF COUNTRIES IN OUR MINDS

Let us face it, we tend to compare our own country with other countries. There are nations that stand on a lower rung of the imaginary ladder, and there are countries above us. Maybe this is also related to our superiority or inferiority complexes, but we can also find a marketing-based explanation in the background – namely, the position of a country or a country brand on that ladder basically depends on the value or values we associate it with, and the thoughts and emotions that emerge in us when we hear the name of the country. As Kotler and Keller point out (2012), brands exist in consumers' minds. The strength of a brand depends on what the customer has seen, read, heard, learned, thought and felt about the brand over time. In other words, the strength of a brand exists in the minds of existing or potential customers and the direct or indirect experiences they have had with the brand. The question is, of course, whether the value of all this can be calculated and scientifically proven. This is not so simple in the case of traditional products and services either, but brand rankings such as Interbrand Best Global Brands or BrandZ-Kantar-WPP The Most Valuable Global Brands attempt to do so. Similar lists of countries are published from time to time as well – some of them can be disputed, but there are also lists that have become accepted in recent years, insomuch that foreign ministers and prime ministers of governments draw conclusions according to the results. These lists include examples that are not specifically brand rankings, but are still worth mentioning because of their frequency of being cited. Such rankings include the IMD competitiveness report and the World Economic Forum global competitiveness report As Péter Ákos Bod points out in his

article on the topic (2009, 32.), "In a professional sense, we can consider these lists as beauty contest rankings that we do not have to agree with, and – as it often happens in beauty contests – a high ranking on the list does not always reflect real values. However, a significant step backwards on these lists has a negative effect on the global perception of the country." Similar rankings are also regularly published by renowned journals such as The Economist, Forbes or Euromoney. Country lists by credit rating agencies such as Moody's Investors Service, Standard&Poor's, Fitch-IBCA or Japan Credit Rating Agency can be considered some kind of thematic rankings. However though, this article aims to stay true to the theme and specifically discuss country brand rankings, not the abovementioned lists. It is worth considering that almost every year at least one new ranking is published, which is then re-released each year. These include the Anholt Nation Brands Index, FutureBrand Country Brand Index, Anholt Good Country Index, Bloom Consulting Country Brand Ranking (Tourism Edition and Trade Edition), Young&Rubicam Best Countries, Reputation Institute Country RepTrak and Global Soft Power Index. It is impossible to cover all of these in a single article, and not all of them have recent country brand rankings created during the Covid-19 pandemic, therefore the study only looks at the first three. The article describes the methodology, dimensions and factors of the Anholt Nation Brands Index, the FutureBrand Country Brand Index and the Anholt Good Country Index, and then analyses the countries' shifts in the rankings during the Covid-19 pandemic. Before going into detail, however, it is worth discussing the usefulness of these rankings. First of all, publicly available rankings are important for the public opinion: everyone may be interested in where their own country ranks, how they compare with their neighbours, or which countries are rated the best or worst in the world, according to different criteria. It is no coincidence that the media are also happy to receive new rankings and report on them, as the subject is sure to be of interest to readers, viewers and listeners. The results of the rankings are useful for one more thing besides a comparison with other countries: to show how a country's ranking has changed compared to previous years or even earlier years. As country image (or country brand, if you like) changes slowly, it is worth paying attention to any significant shifts in the overall ranking or in any of its dimensions. The importance that some governments attach to this is illustrated, for example, by Finland's annual publication Building the image of Finland – Review of the country image. One of the main chapters of the review is about where Finland ranks in the various country brand surveys. On the basis of these, the document explains the country's main strengths and weaknesses and, more specifically, what the public thinks of them worldwide, i.e. how they perceive the Finland brand (Finland.fi Toolbox, 2017). But rankings also have another significance: they provide PR value for those compiling the lists, and can therefore result in paid government contracts. This may include consultancy, but many rankings are produced in such a way that detailed country analyses are only available for a fee, as the researchers have to be paid. The Scottish Government, for example, does this every year in the case of the Anholt Nation Brands Index and then publishes the detailed results, ensuring that people in Scotland can see how their country is perceived. This also helps to better inform the government (especially organs of state responsible for foreign affairs) of all the actions that need to be taken to further improve the country, and, consequently, the country brand (Gov.scot 2021). Last but not least, rankings can be particularly important in a situation where the whole world is affected by a topical issue – in this case, a pandemic. A change in the perception of a country can be an indicator of how well or badly it has managed the pandemic, and more specifically how this management has been reported in the international media. After all, our judgement of a country is greatly affected by the most important information pieces we have about it, that is, what news we have received about it, if any. The above information may well summarise the practical relevance and usefulness of each of these rankings.

If the analysis of rankings is done systematically by a country's government, it will certainly be more aware of what the country is perceived to be by the broad international public – whether before, during or after the pandemic.

2. THE ANHOLT NATION BRANDS INDEX

This index was the first attempt to set up a ranking of countries as brands. It was launched in 2005, and it has now grown into one of the world's largest social science research projects. It has had various complicated names: first it was called Simon Anholt's Nation Brands Index, then it was mentioned as Anholt-GMI Nation Brands Index and from 2008 as Anholt-GfK Roper Nation Brands Index, then in 2017 it was renamed Anholt Nation Brands Index powered by Ipsos, its current name. It can be seen that these names all include the word Anholt, referring to Simon Anholt, the creator of the concepts of country brand and country branding, and at the same time the best-known international authority in the field, the author of several books on the subject. In terms of research methodology, it must be pointed out that the research is conducted in 20 countries, and uses a representative sample to monitor the influence and attractiveness of 50 countries. This is also the most common reason for criticism regarding the ranking: on the one hand, only 50 countries are included (although, for example, Hungary is on the list), and on the other hand, the survey itself only takes place in 20 countries. However, as they say, if a research makes exactly the same mistake from time to time, the changes can be interpreted in the very same way, and that is the point. In addition, the sample itself is relatively large, with a total of 20,000 people being interviewed – and the last time it was conducted between 7 and 30 July 2020, when the COVID-19 pandemic had been tangible for more than four months (Ipsos 2020). The measurement is based on six dimensions, that is, competence fields, alongside 23 attributes in total. These are summarised in Table 1. According to the above criteria and the results of the survey, Germany had the best country brand in 2020, which means it is now in the lead for the sixth year in a row. The Top 10 is dominated by European countries (Germany, United Kingdom, France, Italy, Switzerland, Sweden), but Canada, Japan, Australia and the Unites States are also included. It is also true that the latter country finished in 1st place a few years ago, and now it is only 10th, which shows that the public perception of the US is deteriorating globally (or at least among the respondents in the 20 countries surveyed) (Ipsos 2020). In the context of the latter, it may be interesting to note that when we examine each dimension (see Table 2), the United States does best in the dimensions Exports and Culture. The former is no particular surprise, as the vast majority of global brands are American, be it technology companies, food, fast food chains or financial service providers, and the list goes on. In the field of culture, however, the United States' 5th place out of 50 countries may seem overly upscale at first. But if we consider that this includes not only cultural heritage (in which the country, having been founded in 1776, has limited opportunities), but also modern culture such as movies, pop music or sports, we may easily understand the result.

Table following on the next page

Dimension	Attributes of the specific dimension
Tourism	Visit if Money was No Object; Natural Beauty; Historical Buildins; Vibrant City
Exports	Science and Technology; Buy Products; Creative Place
Governance	Competent & Honest; Rights & Fairness; Peace & Security; Environment; Poverty.
Investment and immigration	Work & Live; Quality of Life; Educational Qualifications; Invest in Business; Equality in Society
Culture	Sports; Cultural Heritage; Contemporary Culture
People	Welcoming; Close Friend; Employability

Table 1: The dimensions and attributes of the Anholt Nation Brands Index
(Source: Papp-Váry, Árpád (2019): Országmárkázás – Versenyképes identitás és imázs
teremtése ("Country Branding – Creating competive identity and image"). Budapest,
Akadémiai Kiadó.)

Ranking	Total of all dimensions	Tourism	Exports	Governance	Immigration and investment	Culture	People
1	Germany	Italy	Japan	Canada	Canada	Italy	Canada
2	United Kingdom	France	United States of America	Switzerland	Germany	France	Australia
3	Canada	United Kingdom	Germany	Sweden	Switzerland	United Kingdom	Italy
4	Japan	Spain	United Kingdom	Germany	United Kingdom	Germany	United Kingdom
5	France	Greece	Canada	Australia	Sweden	United Kingdom	New Zealand

Table 2: The top 5 countries in the overall ranking and 6 dimensions of the Anholt Nation
Brands Index
(Source: Ipsos (2020): Germany Retains Top "Nation Brand" Ranking, the UK and Canada
Round Out the Top Three (https://www.ipsos.com/en-ca/news-polls/Germany-Retains-Top-
Nation-Brand-Ranking-the-United-Kingdom-emerges-ahead-of-Canada-to-Round-Out-the-
Top-Three-US-and-China-Experience-Significant-Decline, published: 27 October 2020,
retrieved: 2 April 2021.)

Table 2 also highlights another interesting fact: if we are seeking to find the most ideal country brand, it is probably nothing but a combination of Italy and Germany. This is because one of the countries is weak in aspects that the other is strong in, and vice versa.

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While Italy's tourism and culture are highly valued, as are the people who live there, the investment and immigration dimension receives significantly lower scores, not to mention governance. In contrast, people, landscapes, culture, food, and even fashion are weaker in Germany, while governance, the economy, and "engineering" brands are generally highly valued. Thus, in fact, if Italy and Germany were united, it would create the best country – or at least the best country brand – in the world. Of course, if we recall that there were aspirations for this in the 20th century, we may quickly realize that this is not a good idea after all.

3. THE FUTUREBRAND COUNTRY BRAND INDEX

The second best-known ranking following Anholt Nation Brands Index is related to FutureBrand, a global consultancy, and evaluates 75 countries – those that belong to the top 75 countries based on World Bank data regarding their GDP (gross domestic product). The dimensions under assessment are shown in Table 3.

Dimension	Factors of the specific dimension
Value system	Political freedom; Environmental friendliness; Tolerance
Quality of life	Education; Health; Standard of living; Safety and security; Would like to live/study there
Business potential	Good infrastructure; Advanced technology; Good for business
Tourism	Value for money; Attractions; People's desire to visit for a holiday; Resorts/Lodging; Gastronomy
Heritage and culture	Heritage; Historical points of interest; Art and culture; Natural beauty
Made in	Authentic products Quality products Unique products People's desire to buy products made here

Table 3: The dimensions and factors of the FutureBrand Country Brand Index
(Source: FutureBrand (2020): The FutureBrand Country Brand Index 2020 – A unique
country perception study. (https://www.futurebrand.com/futurebrand-country-index-2020,
Published: November 2020. Retrieved: 4 December 2020))

While the first three associations (value system, quality of life, business environment) define the country's so-called status, the other three (tourism, heritage and culture, made-in) define the (country) experience. As a result, a separate ranking can be set up for each of the six dimensions, and a summary list can also be created based on them. According to the latter, the Future Brand Index 2020 summary list is headed by Japan, followed by Switzerland, Norway, Germany, Canada, Denmark, Finland, Sweden, the United Arab Emirates, and finally New

Zealand. It is worth highlighting the dominance of Scandinavian countries, because all 4 made it to the Top 10. It is also interesting that Hungary ranked 56th out of 75 countries, which is a significant decline as the country ranked 38th in the 2019 ranking. The data for the research was collected between 2 and 11 September 2020, when the COVID-19 pandemic had already been raging for six months. Thus, the experts involved in the survey were also interviewed about this, asking how their countries had dealt with the pandemic. Based on the experts' opinions, according to the citizens, the most typical activities and measures that contributed to the crisis management of the given countries were: Acting swiftly and rapidly; Preventative measures put in place; Clear and actionable guidance; Consistent guidelines; Strict rules and regulations; Borders shut down; Equipment provided; National unity/togetherness; Everyone's responsibility; Financial support given; Calm and level headed approach. According to the opinion of the 2,000 experts interviewed in September 2020, the countries that had handled the pandemic the best by the time of the survey were Thailand, Taiwan, Japan, USA, Sweden, South Korea, Germany, China and New Zealand. The Future Brand report also highlighted that country brands are more important than ever during the COVID-19 pandemic – and although we cannot control events, we may control how resistant the country is to them. In this context, Future Brand also surveyed when people view a country as successful from the outside and when they do not. This is summarised in Table 4.

For a country to be viewed successfully as a country brand it is seen as:	For a country to be viewed unsuccessfully as a country brand it is seen as:
Confident	Untrustworthy
Influential	Unreliable
Poltitically stable	Weak
Economically progressive	Outdated
Innovative	Corrupt
Trustworthy	Economically and politically unstable
Respected	Unsafe
Tolerant	Agressive
Reliable	Bad for business
Safe	Slow
Honest	Unfriendly/intolerant and lacking respect
Well developed	
A leader	
Good for business	
Independent	
Authentic and with a good quality of life	

Table 4: What makes us think that a country is successful and what makes us believe it is not (Source: FutureBrand (2020): The FutureBrand Country Brand Index 2020 – A unique country perception study. (https://www.futurebrand.com/futurebrand-country-index-2020, Published: 1 November 2020. Retrieved: 4 December 2020))

4. THE ANHOLT GOOD COUNTRY INDEX

The table that can be linked to FutureBrand's name already shows, in part, that a good country brand depends on a good country – just like a classic product, where the starting point is good product and good service. It is no coincidence that in 2014, the most prestigious international authority on the subject, Simon Anholt, came up with a new ranking that no longer lists countries according to their attractiveness and brand image, but according to how much good they do for the world. It was a big philosophical shift, as Anholt has been talking and writing about the importance of brand image for almost fifteen years since the early 2000s: according

to his country brand hexagon model, when we judge countries, we think of them on the basis of six dimensions, that is, tourism, exports, governance, immigration-investment, culture and people. The best possible image of these must be displayed outwards, which of course is also related to what a country does in each area, that is, what the reality is regarding that image. The previously described Anholt Nation Brands Index was created in 2005 on the basis of the image of each country assessed according to the above six dimensions, as well as their overall image, which became decisive indicators in the assessment of brand building as an activity for many years. It is also true that Anholt was already trying to avoid the term 'country branding', using the term 'competitive identity' instead (Anholt 2007). He also pointed out how ineffective country brand campaigns are in many cases. "Since I started working in this field, I have never seen a whit of evidence or properly substantiated study proving that marketing communications programmes, slogans or logos have ever successfully changed or could change the international perception of various places." (…) "Governments that spend taxpayers' money on showing the world how cool, fantastic, wonderful or attractive the country is are not only unworthy of power, but should go to jail because that activity is pointless", he said, adding that "The annoying thing about this lie called country branding is that it encourages many countries to spend crazy amounts on futile propaganda programmes that they could not actually afford, and in the end only those vile PR agencies make a profit" (Anholt 2016). "I don't believe in the existence of this method, but if it does exist, it certainly has nothing to do with communications, logos or slogans; or it is only related to governmental measures", he stated emphatically. Starting out along this line, his focus shifted to deciphering what could be good governmental measures and what could be bad – not primarily for the country in question, but for the whole world. The problems that individual nations need to solve are, in fact, global problems such as climate change, migration, terrorism, deep poverty, inequality, war conflicts and enforcement of human rights. In addition, Anholt highlighted another aspect, pandemic and biosafety, when he gave his first big speech on the topic in 2014. He emphasized that this global problem can only be tackled by countries jointly, and it cannot be solved with inward thinking. According to him, "we've got to start collaborating a bit more and competing a bit less" (TEDx Talks 2014). So it is not enough for countries to be beautiful, it is also important to be good. Anholt's latest book, published in 2020, is therefore titled 'The Good Country Equation: How We Can Repair the World in One Generation'. It is quite funny that a good few years before that, British comedian Danny Wallace (who most of us know in connection with his book and film titled Yes Man) came to the same conclusion. In 2005, Wallace made a six-episode documentary comedy for the BBC about how to start our own country ("How to start your own country?"). In the series, he did a lot of research, interviewed various EU officials and mini-state leaders, then established his country in his own apartment, designed a flag for it, recorded its anthem, and recruited citizens. The name of the country was announced at an event in London that attracted thousands of people: the micronation was named "Kingdom of Lovely". However, there is a point that is even more relevant to our topic – he summarised the country's constitution in just two words: "Be good". Well, even if Anholt did not know Wallace's series "How to start your own country" for some reason, the Good Country Index was actually based on the principle of "Be good" – it shows what each country does on its own for others, for the well-being of the global community. Simon Anholt explained the essence of the Good Country Index in his TED presentation in 2014, which has since been viewed on Youtube by nearly five million people – he stated that the idea of the Good Country Index is quite simple: you just have to measure how the countries of the Earth contribute to common good at the level of humanity and what they take away from it. A wide range of data from the UN and other international organizations are used for this purpose, and for every country, we take stock so that it is immediately visible whether a country is the net creditor of humanity, or vice versa, that is, a burden to the planet, or somewhere in between.

Thus, there is no country image dimension in the Good Country Index, and there is no opinion poll to assess the image of each country, as in the case of the Nation Brands Index, which can also be linked to Anholt. Instead, there are 'hard numbers': complex statistics of 35 data points, many of which are provided by the UN – however, it is also worth noting that when the Good Country Index for a specific year is published, the statistics available for the analysis are in fact already a few years old. The 35 data points can be divided into 7 categories as shown in Table 5.

Category	Indicators (divided by GDP)
Science & Technology	The number of international students The export of scientific journals The number of international publications The number of Nobel Prizes (cumulated value) The number of patents
Culture	Creative goods exports Creative services exports UNESCO dues in arrears as % of contribution (negative indicator) Freedom of movement, i.e. visa restrictions Freedom of the press (based on mean score for Reporters without Borders and Freedom House index as a negative indicator)
International Peace & Security	Number of peacekeeping troops sent overseas for UN missions Dues in arrears to financial contribution to UN peacekeeping missions as percentage of contribution (negative indicator) International violent conflicts: Attributed number of casualties of international organised violence (negative indicator) Exports of weapons and ammunition (negative indicator) Internet security: Global Cybersecurity Index score
World Order	Percentage of population that gives to charity Number of refugees hosted Number of refugees overseas (negative indicator) Population birth rate (negative indicator) Number of UN treaties signed
Planet & Climate	National ecological footprint (negative indicator) Environmental agreements compliance Hazardous pesticides exports (negative indicator) Renewable energy share in total energy consumption Ozone: consumption of ozone-depleting substances (negative indicator)
Prosperity & Equality	Open trading: The situation of trading across borders UN volunteers abroad Remittance cost (negative indicator) Foreign direct investment (FDI outflow) Development assistance: Development cooperation contributions
Health & Wellbeing	Food aid Pharmaceutical exports Voluntary excess donations to the WHO Humanitarian aid donations International Health Regulations Compliance

Table 5: The seven dimensions of the Good Country Index Version 1.3
(Source: The Good Country Index (2021): (https://index.goodcountry.org/, retrieved: 2 April 2021))

While the 2019 ranking of the good country index examined 153 countries, their number was only 149 for the year 2020 because of the amount of publicly available adequate data for the analysis. Based on the results, the nations in each category can be ranked here as well, and the absolute winner can also be announced. However, Anholt already emphasized in his 2014 TED presentation on this topic that the ranking is not about good, better and best countries but rather about good, gooder and goodest countries. More importantly, it is advisable to avoid the interpretation 'bad, worse, worst countries' as these countries are not bad, but rather selfish. They only pay attention to themselves and are not interested in the fate of the world. But which is the best (or more accurately: the goodest, that is, most unselfish) country based on the latest rankings of 2020? Well, it is none other than Sweden, which finished in the first place in the overall list without winning any of the categories, but performing well in general. It is in the top 10 of 149 countries in 5 categories, and if we look at its statistics, it is essentially a net creditor of humanity in all of the seven dimensions listed, that is, it does more good for the planet than bad. It is also striking is that the top 10 countries of the overall ranking are all but one European. Sweden, Denmark, Germany, Canada, the Netherlands, Finland, France, the United Kingdom, Spain and Norway were ranked in the top 10. According to Anholt, this is because these countries are really doing a lot (of good) for other countries, especially within Europe of course, and (if they are members) within the European Union as well. As Anholt points out in all his speeches, one of the most fantastic things to create a better world is in fact the European Union itself. But what is the situation if we examine the top 3 countries in each category? Looking at the table, we can immediately see some interesting findings. One of these is that the country doing the most positive things for world order (at least according to UN data and this ranking) is the country that broke out World War II many decades ago. Moreover, Germany is at the forefront in another dimension, health and wellbeing. Even more interestingly, Georgia is on top in two categories: they do the most for the world in terms of international peace and security, and prosperity and equality – this result is easier to understand if we consider that data received are always weighted by the country's GDP, which is not very high in the case of Georgia. However, the most interesting category for us Hungarians is probably science, where Hungary finished in 2nd place. All this is due to the fact that (again, in relation to GDP) we perform well in attracting foreign students, international publications and the number of Nobel laureates – and this ranking takes into account not only the country where the Nobel laureate lived and worked when receiving the award, but also where was the laureate born. If we look at Hungary's overall result in the Anholt Good Country Index, the country is ranked 30th among 149 countries, which is an improvement compared to the previous year. when we were 39th, albeit from 153 countries. It is less favourable that almost all European countries are ahead of Hungary, but let us focus on the good aspects of the ranking here, at the end of the study: we may see world powers such as the United States (38th), Russia (47th) or China (60th) behind Hungary.

Table following on the next page

Position	Overall ranking	Science & Technology	Culture	International Peace & Security	World Order	Planet & Climate	Prosperity & Equality	Health & Wellbeing
1	Sweden	Ukraine	Belgium	Georgia	Germany	Norway	Georgia	Germany
2	Denmark	Hungary	Netherlands	Ireland	Austria	Finland	Denmark	Norway
3	Germany	United Kingdom	Luxemburg	Mongolia	Netherlands	Switzerland	South Korea	Sweden
4	Canada	Czech Republic	Denmark	Kyrgyzstan	Australia	Sweden	Singapore	Denmark
5	Netherlands	Latvia	Sweden	Rwanda	Finland	Lithuania	Luxembourg	Netherlands
6	Finland	Austria	Austria	Uruguay	Norway	Croatia	United Arab Emirates	Switzerland
7	France	Denmark	France	Moldova	Denmark	Slovenia	Cyprus	United Kingdom
8	United Kingdom	Bosnia-Herzegovina	Slovenia	Bulgaria	Malta	Germany	Botswana	Canada
9	Spain	Netherlands	Estonia	Singapore	Sweden	Portugal	Sweden	United States of America
10	Norway	Finland	Malta	Malawi	Cyprus	Australia	Mauritius	United Arab Emirates

Table 6: The top 10 countries in the overall ranking and the 7 dimensions of the Good Country Index
(Source: The Good Country Index (2021): Results 1.4. (https://index.goodcountry.org/, retrieved: 2 April 2021))

5. COMPARING THE THREE COUNTRY BRAND RANKINGS AND THEIR RESULTS

As mentioned above, the three country brand measurement methodologies are quite different, even if it is true that Simon Anholt created two of them. The most similar characteristic of the rankings is the number of dimensions and the number of indicators associated with them. However, there is a big difference between the number of countries studied (50 – 75 – 149), not to mention the sample size – while 20,000 people are interviewed in the case of the Anholt Nation Brands Index, their number is 2,000 for The Future Brand Country Index, and public data from the UN is used for the Anholt Good Country Index instead of polling. This is shown in Table 7.

Point of comparison	Anholt Nation Brands Index	The Future Brand Country Index	Anholt Good Country Index
First year of publication	2005	2010	2014
Number of dimensions	6	6	7
Number of indicators	23	22	35
Number of countries evaluated	50	75 (based on World Bank Top 75 GDP)	149
Sample	A total of 20,000 people, but only from 20 countries, all of whom express their opinion about the 50 countries	A total of 2,000 experts and opinion leaders who travel frequently, each evaluating 7 countries that are close to them	It is not carried out through opinion polls, but on the basis of UN factual data, interpreted in relation to the countries' GDPs
Time of last data collection	Between 7 July and 30 August 2020 (the COVID pandemic had lasted for 4 months)	Between 2 and 11 September 2020 (the COVID pandemic had lasted for 6 months)	The availability of UN data is slower, data is always a few years old. (The COVID effect is not yet perceptible in this ranking.)

Table 7: A comparative analysis of the three country brand indexes
(Source: Own comparison based on the individual rankings)

Although there is a relatively large difference between each methodology, the difference is not so big in terms of their end results, especially when looking at the top10 countries. As Table 8 shows, Germany, Canada and Sweden are at the forefront of all three rankings.

Ranking	Anholt Nation Brands Index	The Future Brand Country Index	Anholt Good Country Index
1	Germany	Japan	Sweden
2	United Kingdom	Switzerland	Denmark
3	Canada	Norway	Germany
4	Japan	Germany	Canada
5	France	Canada	Hollandia
6	Italy	Denmark	Finland
7	Switzerland	Finland	France
8	Australia	Sweden	United Kingdom
9	Sweden	United Arab Emirates	Spain
10	United States of America	New Zealand	Norway

Table 8: The top 10 countries of the three country brand indexes
(Source: Own edited version based on the individual rankings)

Seven countries made it to the top 10 of two lists: Denmark, the United Kingdom, Finland, France, Japan, Norway and Switzerland. Of course, there are also countries that are only one ranked so high in one of the rankings: the United States, Australia, the Netherlands, Italy, Spain and New Zealand. In this respect, it is therefore reaffirmed that a good country brand is based on a good country.

6. "ONE THING IS IMPORTANT: TO BE GOOD NOW"

It may sound strange at first that the lyrics of Napoleon Boulevard, a Hungarian pop band, provide one of the most important pieces of advice in country branding, but the Good Country Index presented in this study proved that it is very much true. Moreover, if we examine the original version of the lyrics, we may discover another interesting connection. In fact, it is the music of the Italian film State bouni se potete ("Be good if you can"), which was released in 1984, although it was only presented in Hungary in 1989. In the film, one of the children (later an adult) is often tempted by the Devil as his patron, St. Philip Neri, tries to put him on the right track – as the saint did in reality with street children and criminals in the 16th century. In fact, the main message of St. Philip Neri is not only "Be good if you can", but also "Stay good if you can", another translation of the original Italian title, which is also suggested by the film itself. Well, this advice is much more important nowadays than ever, as we live in the period of the COVID-19 pandemic. On second thought, it is the first truly common matter since World War II, affecting our daily life across the planet. Of course, we could also mention climate change, but people do not have to wear masks or lock themselves away at home, not meeting anyone. At least not yet. This also means that the nearly eight billion people on Earth have one thing in common, which will hopefully become a memory soon: the coronavirus. This situation could even provide an opportunity for global cooperation, helping each other; but to be sincere, we can only see traces of this. Instead, politicians are primarily concerned with their own countries, focusing on their communication with their own citizens. Their main message is to protect their own country, instead of joining forces with other countries to defeat the virus together. The reintroduction or even reinforcement of border control also shows the closure of nations, with other countries marked in red, yellow or green at best.

There is also competition in vaccine development, not only between companies, but also between countries. Research takes place in several locations, but they only share information partially. Meanwhile, we also see that rich countries have concluded multiple contracts for millions or even tens of millions of vaccines, while poorer countries cannot afford them. There is even a special term for this: vaccine nationalism. True, there are examples of developed countries offering their help, but overall, the above actions tend to sharpen the differences. All this affects the solution of all other global challenges: according to Bill Gates, the pandemic returned the world back to the level where it was twenty-five years ago in terms of the eradication of deep poverty. (Business Insider 2020). However, this whole thing cannot be blamed on politicians alone. In most places, polls show that people are extremely receptive to this right now – according to them, good leaders are the ones who do the most for their own people and good countries are the ones that selfishly focus on themselves. This also means that Anholt and his team still have a lot of work to do to make the good country approach widely accepted.

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THE EMERGENCE OF INSURTECH: A BIBLIOMETRIC SURVEY

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ABSTRACT

In the last few decades technology has been dramatically reshaping the landscape of age-old financial services, institutions and industries such as payment, money landing, banking, asset management, personal finance, and financial markets. Financial technologies, or FinTech have received an immense attention of both scholars and practitioners worldwide. Contrary to the financial, insurance services have not been changing at the same pace in recent years. It seems that two portmanteaus 'fintech' and 'insurtech' have not been equally exploited terms. Hitherto, scholars have not reported on any bibliographic collections on insurance technologies and none of the studies have comprehensively analysed and listed insurtech-related articles throughout the decade-long practical development in the field. Filling the gap in the present body of knowledge, this paper aims to report on an early development of the scholarly works related to insurtech emergence and development. This paper provides the summary statistics on journals covering the topic, authors, year of publication, size, methods, and applications of insurtech elaborated. The study is based on the bibliometric analysis of 561 papers extracted from the Scopus database.
Keywords: *Bibliometric analysis, Financial technologies, Insurance, Insurance technologies, Literature review*

1. INTRODUCTION

In the last few decades technology has been dramatically reshaping the landscape of age-old financial services, institutions and industries such as payment, money landing, banking, asset management, personal finance, and financial markets (Nicoleti, Nicoleti and Weis, 2017; Mention, 2020). Financial technologies, or FinTech have received an immense attention of both scholars and practitioners worldwide. Contrary to the financial, insurance services have not been changing at the same pace in recent years. It seems that two portmanteaus 'fintech' and 'insurtech' have not been equally exploited terms (Milanovic et al, 2020). The banking sector has been mostly propounded in the extant literature most probably due to the extent of interaction with costumers, whereas sectors such as insurance were slow adopters of new technologies. A common sense is sufficient for the rationale behind the aforementioned slow adoption. First, insurance industry is large by both the asset size and profitability, on one side, and multimillion workforce on the other. The insurance industry is currently the 15th largest industry in the world (Varghese and Haresh, 2018). The gigantism slows down the process of technology transformation. Complexity of the insurance service also decelerates the progress. For instance, cyber risks have been known for years now, but it was only recently that insurance companies accepted to insure against these risks (Kaigorodova et al, 2020). The industry is pretty aged.

The emergence of the modern insurance can be traced backed to the late 17th century (Pearson, 1997). Last but not the least, the insurance industry is heavily bureaucratic by the nature. It appears to be one of the most stringently regulated industry branches in the world (Marano, 2017; Liu et al., 2019), and the regulation has been empowered for more than two centuries (Pearson, 2002). Accordingly, saturated and rigid might be the terms easily attributed to the insurance industry. Insurance is certainly not a novel topic, but modern technologies that disrupt the industry are at the forefront of both practice and academia. Practice-based overviews on insurtech are overwhelming public browsers, as practitioners are usually considered to be the trailblazers when it comes to the delineation of the use of novel technologies (Milosavljevic, Joksimovic and Milanovic, 2019). Hitherto, scholars have not reported on any bibliographic collections on insurance technologies and none of the studies have comprehensively analyzed and listed insurtech-related articles throughout the decade-long practical development in the field. Filling the lacuna in the present body of knowledge, this paper aims to report on an early development of the scholarly works related to insurtech emergence and development. Particular goals of the study are to statistically analyze all the publications from renowned scholarly databases by different criteria, such as the type of technology used, year of publication, type of documents, subject area, and country/region covered in the study. This study is motivated by the need to organize an ever-growing number of publications on insurance technologies. The authors believe that this study might be helpful to all the interested parties in this field when exploring the new frontiers in insurance technologies. Having in mind that bibliometric studies "do not deal with theories, methods and constructs as much as they do with authors, affiliations, countries, citations etc." (Paul and Criado, 2020), this study firstly draws on insurance value chain and the technology use-cases within and amidst different components of insurance value chain. Only then, we conduct bibliometric analysis following the best methodological practices (Emrouznejad and Yang, 2018). The remainder of the paper is organized in the following order. Section 2 reviews related works and dissects the novel technologies used in the insurance industry. Section 3 elaborates on the bibliometric methodology. Section 4 presents the results of the study. Final section is reserved for the concluding remarks.

2. RELATED WORKS

The rise in competition at the insurance market and consequent decline in profit margins (Borel-Mathurin et al, 2018) has positioned technological change as a paramount strategic factor for all insurance companies worldwide. Practitioners, however, are not unequivocal on whether this transformation is a piecemeal and uncoordinated by nature, or the part of the large-scale disruptive transformation process. On one side, voices are raised on the slow transformation capacities of insurers, positing that "regulation, product complexity and insurers' large balance sheets" keep digital attacks away (Catlin and Lorenz, 2017). Accordingly, the broad digital transformation in the insurance industry has come rather too late (Müller et al, 2016). On the other side, a number of industry reports are not questioning "ifs", but "hows and whens" of broad digitalization (McKinsey, 2018). Among others, the cacophony in the aforementioned practice and industry-related reports has affected scholarly contributions in the digitalization of insurance. Simple browsing through the main article collections leaves a relative paucity of evidence on insurance-wide technology changes. This is to some extent expected, as the phenomenon of insurtech is evidently multifaceted. Not only that this phenomenon covers actuarial and technological aspect, but spread across economics, strategy, marketing, regulation, implementation in various field (in both life and non-life insurance). Although scarce, concurrent research offers some evidence on the use of modern technologies in insurance business. There is a noticeable intensification of the use of digital platforms and mobile applications in creating and providing new, personalized solutions and services (Stoeckli, Dremel and Uebernickel, 2018) and innovating customer relationship management

(Bazini and Madani, 2015). In technological advances in big data and complex data analytics, insurance companies have recognized the opportunity for better revenue forecasting (Fang, Jiang and Song, 2016), innovating their business models in terms of more efficient identification and risk reduction, more accurate market segmentation and fraud prevention. The data collection and processing has been substantially changed with IoT based solution and social networks which opens an avenue for more precise and diligent setup of premiums and risk mitigation (Rumson and Hallett, 2019). These advanced sources of digital data enrich the insight into customers' behavior, allowing insurers to develop tailor-made approach to risk assessment and to personalize insurance products. The emergence of big data technology can significantly contribute to automation of insurance processes, but also rises ever-growing concerns regarding privacy and data protection (Keller, Eling and Schmeiser, 2018). Another disruption in insurance industry has been made with blockchain technology. This distributed-ledger technology has made significant changes in other industries (international payments, transportation and supply chains, and digital identification) and slowly but steadily has been infiltrating in insurance operations – such as health insurance (Zhou, Wang and Sun, 2018) or cyber-insurance (Lepoint, Ciocarlie and Eldefrawy, 2018). The most prominent advancement in blockchain use in insurance is related to "smart contracts" in the automation of procedures for resolving claims and the entire process of insurance policy administration. Following the wave of tech-based disruptive innovations in other industries, traditional insurance companies strive to integrate machine learning, deep learning, chatbots, robo-advisors and other solutions based on artificial intelligence across the whole value chain. Perhaps the most illustrative description of disruptive potential of AI-based solutions (i.e. machine learning, deep learning, chatbots and robo-advisors) in insurance industry can be found in McKinsey study "Insurance 2030 – The impact of AI on the future of insurance". The authors strongly states that artificial intelligence will "shift insurance from its current state of "detect and repair" to "predict and prevent," transforming every aspect of the industry in the process (McKinsey, 2018).

3. METHODS

Bibliometric studies are based on the application of quantitative analysis to books and other media (Hood and Wilson, 2001). These studies are an important tool in examining and structuring knowledge on a particular novel streams of research (Liang and Liu, 2018). This method is especially important today as it "can be used to understand the past and even potentially to forecast the future" of new technology use (Daim et al, 2006). The bibliometric analysis allows us to answer to the following questions: RQ1. How does insurtech evolve in terms of the academic output? RQ2. Are the cutting-edge publications in this field reserved for conferences or journals? RQ3. What discipline propels the research? Is more appropriate term "insurtech" or "techinsure"? RQ4. Which country, institution and funding association have the largest impact in the field of insurtech? For the presentation and analysis of the findings, the study follows the recommendations of Hicks et al (2015). We based our study on Elsevier's Scopus as one of the main sources for identifying scientific output (Vera-Baceta, Thelwall and Kousha, 2019). The Scopus has been selected as the primary database for bibliometric analysis in the field of computer science, management, business administration and finance (see Falagas et al., 2007). Due to relative novelty of insurtech as research field, our study examines articles, books, conference papers and reviews that have been published from 2000 to 2020. Since there are multiple ways to address the term insurtech, we consulted several publications to find proper synonyms and closely related terms. The initial research was focused to publications whose title contained the following Boolean phrases: "insurance" or "insurance technology" or "insurtech". The first search string identified over 38.000 publications. For the purposes of the sample downsizing, additional search criteria had been applied.

Therefore, search expression was refined to identify studies that investigate the use of specific modern technologies in insurance domain. Although the list of these modern technologies is certainly more comprehensive, our study singled out the following technologies: mobile technology, big data, internet of things, blockchain, cloud computing, and artificial intelligence. Out of initially identified 38.000 papers, total 561 papers remained as starting point for analysis. The whole process of identifying and selecting the sample for our study is presented in Table 1.

Description	Results
Database	Scopus
Search period	2000 - 2020
Publication type	Article, Book, Conference Paper, Review
STEP 1	
Search field	Title
Search string	"insurance" OR "insurtech" OR "insurance technology"
Search results	38.000+
STEP 2	
Search field	Title, Keywords, Abstract
Search string	*"artificial intelligence"* OR *"big data"* OR *iot* OR *"internet of things"* OR *telematics* OR *wearables* OR *blockchain* OR *"cloud computing"* OR *cloud* OR *"mobile technolog*"* OR *"mobile computing"* OR *"smartphone*"* OR *"mobile application*"* OR *apps* OR *mobile*
Search results	561

Table 1: Bibliometric analysis framework

4. RESULTS

The seeking for adequate answers to proposed research questions is explained in the following sections.

4.1. RQ1: How does insurtech evolve in terms of the academic output?

Our sample covers the period between 2000 to 2020 and includes 561 scientific papers. The distribution over these years clearly reveals the increased interest of researchers in the subject of insurance technology. Over 55% of studies were published in the last three years of the period covered in our bibliometric analysis. The peak of publishing activity was reached in 2019. However, it is still an open question will the current pandemics severely affect scholarly works on insurtech. The distribution of academic output over the years is presented in Fig. 1.

Figure following on the next page
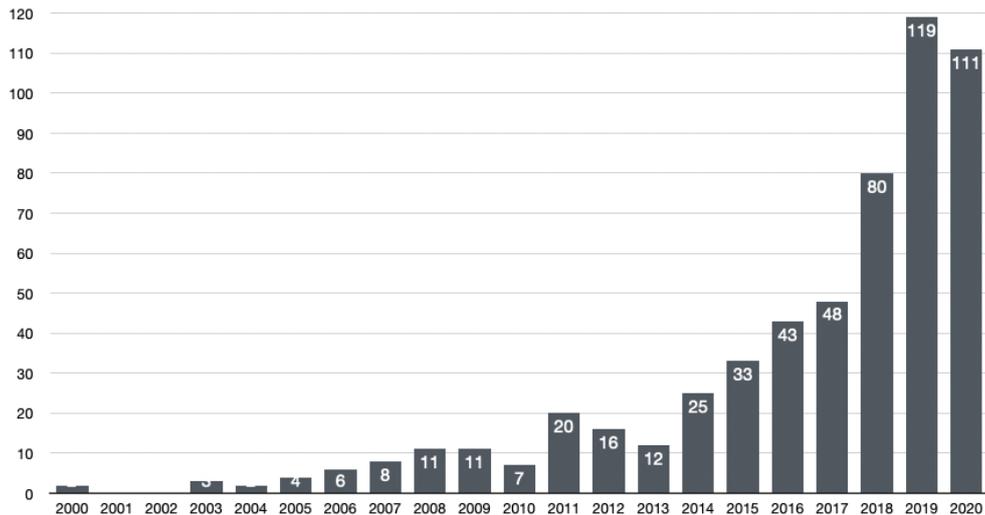
Figure 1: Distribution of insurtech publications since 2000.

4.2. RQ2: Are the cutting-edge publications in this field reserved for conferences or journals?

The dominant type of insurtech related papers from our sample comes from conference proceedings (n=50.62%). Journal articles make 42.42% of the sample. Given that majority of universities see only articles as an instrument "(Lee and Lee, 2013) in elevating a university's status as a reputable centre of knowledge production", we can argue that the share of journal articles will increase over time, as the technologies saturate. Other document types (reviews, book chapters and editorials) make approximately 7% of our sample. Other results for the document type split are given in Fig. 2.
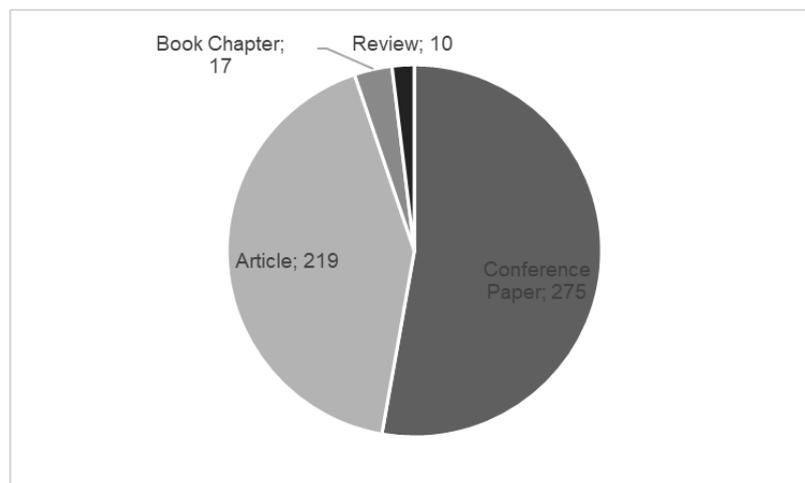
Figure 2: Insurtech publications document type split

As an amorphous field of scholarly interest, this is an expected outcome. Majority of novel technologies are firstly presented at conferences, and only after the academia accepts the influx of novel technology, they receive wider presentation audience through journals.

4.3. RQ3: What discipline propels the research?

As for the subject area, from 561 publications the total of 1.038 reports for subject area in 25 different fields were reported (Mean=41.52; SD=70.93). This makes insurtech highly multidisciplinary field of research (for the distribution per subject area see Fig. 3).
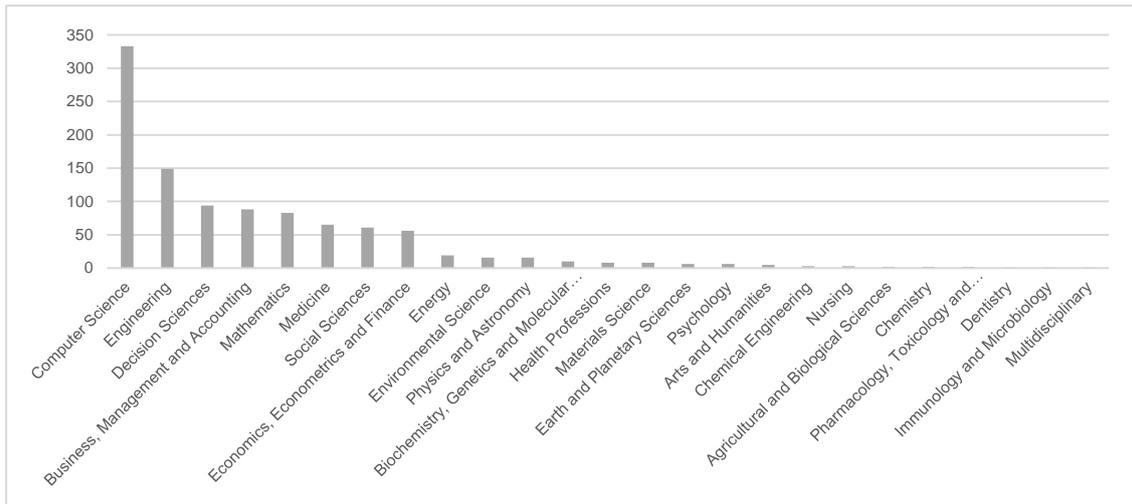
Figure 3: Insurtech publications by subject area

The dominant subject area is Computer Science reported in 333 cases, and followed by Engineering (149) and Decision Sciences (94). The first three subject areas make 55.5% of the sample. As such, the emergence of insurtech could be described as tech-, rather than business-driven field of interest.

4.4. RQ4: Which country, institution and funding association have the largest impact in the field of insurtech?

The insurtech publications are widely spread around the globe, excluding Africa and a large portion of Latin America and Central Asia. A majority of the publications comes from China (100), followed by the United States (83), Germany (46), India (44) and United Kingdom (30). The map of countries with the intensity of publications is given in Fig. 4.
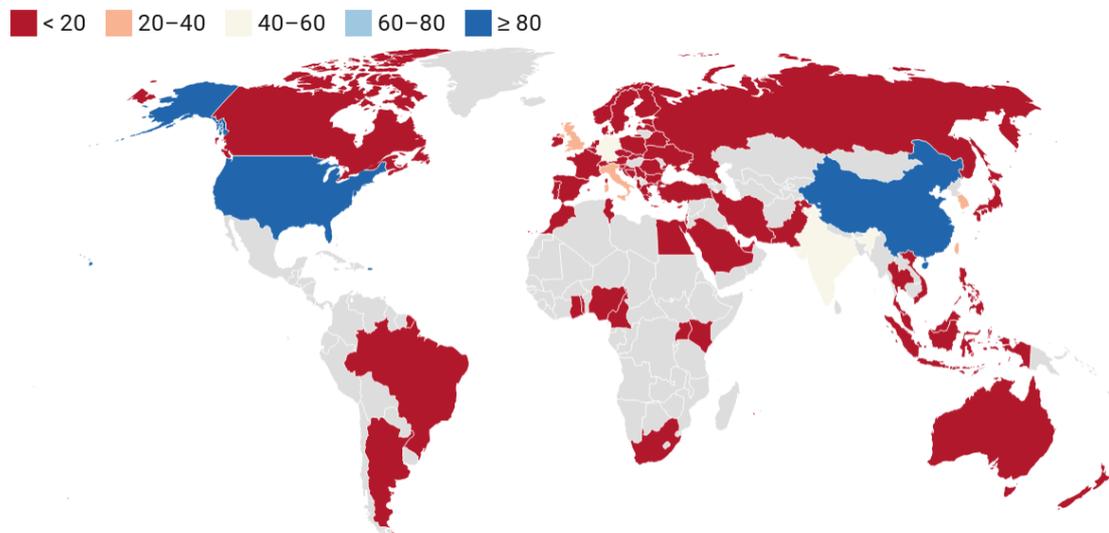
Figure 4: Map of countries/regions covered in insurtech publications

4.5. Most productive institutes and funding schemes

From the total of our sample, 379 author's affiliations were reported with 160 unique cases. This makes 2.37 affiliations per publication. We can firmly state that the research affiliations are heavily diluted and a number of institutions pretend to have lead position in this promising research field. In Table , we report on the affiliations with three plus unique appearances.

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Rank	Affiliation	Country	Unique cases
1	Nanyang Technological University	China	15
2	School of Computer Science and Engineering	Singapore	11
3	Universitas Indonesia	Indonesia	10
4	Universitat de Barcelona	Spain	8
5	The Royal Institute of Technology KTH	Netherlands	8
6	Friedrich-Alexander-Universität Erlangen-Nürnberg	Germany	6
7	University of South Africa	South Africa	5
8	Università degli Studi di Roma Tor Vergata	Italia	5
9	University of Cape Town	South Africa	4
10	Seoul National University College of Medicine	South Korea	4

Table 2: The most productive affiliations in insurtech research

Having in mind the budgetary constraints for research grants around the globe, the information on funding source for scholarly publications in general attracts considerable attention nowadays (Liu, Tang and Hu, 2020). In our sample, from a total number of publications (561), 73.62% (n=413) have reported funding organization. The list of top funding institutions (where each institution supported at least four or more publications) is presented in **Error! Reference source not found.**.

Rank	Foundation	Country	No of studies
1	National Natural Science Foundation of China	China	20
2	National Science Foundation	USA	8
3	Universitas Indonesia	Indonesia	7
4	Horizon 2020 Framework Programme	EU	7
5	European Regional Development Fund	EU	5
6	Institució Catalana de Recerca i Estudis Avançats	Spain	5
7	Ministry of Science and Technology, Taiwan	Taiwan	4
8	Natural Sciences and Engineering Research Council of Canada	Canada	4
9	European Commission	EU	3
10	Fundamental Research Funds for the Central Universities	China	3
11	Ministerio de Economía y Competitividad	Spain	3
12	National Research Foundation of Korea	S. Korea	3

Table 3: Leading funding institutions for insurtech research

Four dominant funding institutions in the field of insurtech are National Natural Science Foundation of China, National Science Foundation (USA), Universitas Indonesia and EU Framework Programme "Horizon 2020". As for the National Natural Science Foundation of China (NSFC), the result is to some extent expected as this foundation has a gigantic basic research fund (Feng, 2020). Also, the anecdotal evidence is sufficient for the China's largest funder of basic science – NSFC is even piloting an artificial intelligence tool that selects reviewers for research grants (Cyranoski, 2019). The National Science Foundation is the second largest supporter of insurtech studies which is by no means odd as this institution heavily funds future technology architectures (see Ambrosin et al, 2018). Universitas Indonesia holds the third place with funding seven studies in total. Surprisingly or not, this institution is a focal

research point of Indonesia and puts a major effort into cutting edge research (Panjaitan, Surjandari and Rosyidah, 2017).

The same number of publications was funded through EU Framework Programme "Horizon 2020". Accordingly, since its foundation, the programme profoundly stimulates research and innovation projects for integration of digital technologies in value chains across the whole economy (European Comission, 2017).

5. CONCLUSION

The realm of insurtech science has been steadily growing in the last few decades. Nonetheless, a number of interrogatives still remain unanswered. In this section, we provide a discussion for future research directions facilitated by bibliometric by study results. The most important theoretical and practical finding is that the field of insurance technology is in an infantile phase in scholarly terms, in comparison with other financial services (i.e. banking, investments, lending, payments etc.). By searching through the Scopus database, we identified 561 publications that attentively elaborate on the topic. Nevertheless, the body of knowledge is steadily growing in the last seven years. As the authors advocate for the novel technologies in insurance, there is a lack of evidence of mutual coexistence of 'traditional' and 'novel' insurance services. As the results of the bibliometric analysis indicate, research interests are focused at the fields of disruptive potentials of mobile technology, IoT, big data, artificial intelligence, blockchain and cloud computing in insurance domain. The publications analyzed in this study deals with several different research fields. Not suprisingly, the dominant subject area is computer science. As the results indicate, insurance technology, or insurtech, is currently tech-, rather than business-driven field of interest. The study has inevitable flaws deriving from research design, especially related to the sample construction, publication period covered, and selection of scholarly database. Moreover, the design of search strings and inclusion criteria may have narrowed the sample. However, a broad issue in the lucrativeness of insurance technology investment is an open question. An avenue for future studies could be a detailed cost-benefit analysis of the deployment of financial, human and other resources into the advances of technology. For instance, is blockchain as a technology merely a 'hype' or its use can materially contribute to the development of insurance?

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THE EUROPEAN ORDER FOR PAYMENT PROCEDURE

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ABSTRACT
The European Order for Payment Procedure (EOP) is based on Regulation (EC) No. 1896/2006 of the European Parliament and of the Council (hereinafter: EPO). It entered into force on 12 December 2008. This paper analyze basic principles of the Regulation. The EOP is not a compulsory proceeding for the plaintiff but an option, he can choose between this proceeding and any other proceeding provided by the law and it applies only to overdue, uncontested monetary cross-border claims. The procedure is not available in all kinds of disputes, but there are no limitations on its application to uncontested, overdue consumer complaints. There are several reasons for the regulation of the EOP on an optional basis but the most outstanding one is that in those Member States where an order for payment procedure does not exist, the claimant could be deprived of the possibility to use this kind of proceeding. A EOP is enforceable in all Member States except Denmark, and does not need to be separately declared enforceable. It must be sent to the enforcement authorities in the Member State in which it is to be enforced. The main purpose of the Regulation is to make the order for payment procedure in a cross-border context simple, effective and swift manner in another Member State through direct contact with judicial authorities of the latter. The procedure simplifies, speeds up and reduces the costs of litigation in cross-border cases concerning uncontested pecuniary claims.
Keywords: *civil and commercial matters, cross border cases, European Union, Member State, order for payment procedure*

1. INTRODUCTION

The Civil procedure Act (Official Gazette 53/91, 91/92, 112/99, 88/01, 117/03; 88/05, 02/07, 96/08, 84/08, 123/08, 57/11, 148/11, 25/13, 89/14, 70/19, hereinafter: CPA) is the main legal source regulating litigation in the Republic of Croatia. The latest modifications in the CPA are aimed at promoting the efficiency and effectiveness of the litigation procedure, ensuring an additional harmonization of the national legislation in compliance with the recommendations of the Council of Europe and building certain EU directives into the national legal system (Sikirić, 2008., p. 101 – 128.). In the Part IV of the Croatian CPA titled European Civil Procedures are located provisions about implementation of Regulations regarding: service of judicial and extrajudicial documents in civil or commercial matters (Art 507. a – 507. č); taking of evidence (Art 507. d - 507. h); order for payment procedure (Art 507. i – 507. nj) and procedure in small claims disputes (Art 507. o – 507. ž) (Šago, 2013, p. 116.). In the draft of the Regulation (EC) 1896/2006 of the European Parliament and of the Council of 12 December 2006 creating a European order for payment procedure (OJ 30.12.2006, L399/1) (hereinafter Regulation [EC] 1896/2006) the influence of the Green Paper on a European order for payment procedure and on measures to simplify and speed up small claims litigation, dated 20 December 2002 is notorious. The Green Paper was adopted after a period of consultations; thus, the experience of the payment for order procedures existing in some of the EU countries was the basis for the features and the ruling of the proceeding of the European order for payment, since most of the suggestions of the Green Paper were finally included in the Regulation. National law is applicable, on a subsidiary basis, to questions which are not regulated in the EPO Regulation.

Regulation (EC) No 1896/2006 of the European Parliament and of the Council of 12 December 2006 establishes a European procedure for orders for payment (EPO). The main purpose of the Regulation is to simplify, accelerate and reduce the costs of proceedings in the cases concerning the cross-border uncontested pecuniary claims by creating a European procedure of payment and ensuring the free circulation of the payment order in all the European Member States in terms of establishing those minimum standards to eliminate the obligations of the intermediate proceedings in the State of enforcement (Lăzărescu, Lăzărescu, Dumitra, Bărzan, 2010., p. 3.).

2. NATIONAL AND EU ORDER FOR PAYMENT PROCEDURE

Croatian provisions regarding implementation of EPO are in the Articles 507.i - 507nj CPA. Only the Commercial Court in Zagreb shall have exclusive competence to decide on applications for issuing and review the EPO and for issuing a declaration of its enforceability (Art. 507.i CPA). The Croatian CPA doesn't determine, which court will be competent for litigation in the case of an objection against the EPO and a transfer to ordinary civil proceedings. The scope of the application of the EPO is much more narrow than the scope of the application of the Croatian order for payment (Garašić, 2012., p. 17.). The EPO can be applied only in cross - border cases, but the CPA can be applied in cross - border cases and in non cross border cases (Šago, 2013., p. 123.). There are different rules on determination of jurisdiction for the European order for payment (Art. 6 EPO) and the Croatian order for payment (Garašić, 2012., p. 18.). In contrast to the EPO, the claimant in CPA procedure may not indicate to the court that he opposes a transfer to ordinary civil proceedings. Unlike the EPO procedure, Croatia has no special application forms in national order for payment procedure. In the CPA procedure there are no so many possibilities for completion and rectification of the application for issue of an order for payment as they exist in the EPO procedure. In the CPA procedure the court has no time limit for issue of the order for payment, as it exist in the EPO procedure. Croatia has no special form for an objection against the order for payment (Garašić, 2012., p. 18.). In the EOP the exequatur is abolish (Art. 19 EPO), what's not the case in the Croatian order for payment procedure. In the EOP exist the possibility for review of the order for payment (Art. 20 EPO). It's not possible in the Croatian order for payment procedure. The rules of enforcement, refusal of enforcement and stay or limitation of enforcement in the EOP (Arts 21-23) are very different from those rules in the Croatian order for payment procedure (Garašić, 2012., p. 18.). Time limits for an objection against the order for payment are different: 30 days for EPO (Art. 16(2) and 8 respectively 3 days for CPA (Art. 448 (2) CPA) (Triva, Dika, 2004, p. 812 – 818.). In EPO procedure the court of origin declare the enforceability of the order for payment ex officio, what is not the case in the CPA procedure. Also, in the EPO procedure the exequatur is abolish, what's not the case in the CPA procedure. In the EPO procedure exist the possibility for review of the order for payment (Art. 20 EPO) what's not possible in the CPA procedure (Šago, 2013., p. 123.).

3. PURPOSE AND SCOPE OF THE REGULATION

This Regulation shall apply to civil and commercial matters in cross-border cases, whatever the nature of the court or tribunal. It shall not extend to revenue, customs or administrative matters or the liability of the State for acts and omissions in the exercise of State authority ('*acta iure imperii*').

This Regulation shall not apply to:
a) rights in property arising out of a matrimonial relationship, wills and succession;
b) bankruptcy, proceedings relating to the winding-up of insolvent companies or other legal persons, judicial arrangements, compositions and analogous proceedings;
c) social security;

d) claims arising from non-contractual obligations, unless:
   1) they have been the subject of an agreement between the parties or there has been an admission of debtor
   2) they relate to liquidated debts arising from joint ownership of property.

A cross-border case is one in which at least one of the parties is domiciled or habitually resident in a Member State other than the Member State of the court seised. Domicile shall be determined in accordance with Articles 59 and 60 of Council Regulation (EC) No 44/2001 of the European Parliament and of the Council of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (OJ L 12, 16.1.2001, p. 1). 2004 - OJ L 381, 28.12.2004, p. 10). The relevant moment for determining whether there is a cross-border case shall be the time when the application for a EPO is submitted in accordance with this Regulation (Article 3.).

4. JURISDICTION

The request for the issuance of an EPO is submitted to the competent authority in the "Member State of origin", which is the Member State in which the payment order can be issued (Čuveljak, 2014, p. 2.). The most obvious rule of determination of the competence is to entrust the order for payment procedure to the court of the defendant's domicile, this rule of competence could be helpful to search assets of the defendant during the enforcement and the notification to the defendant and his defence could be easier (Garcimartín Montero, 2016, p. 108.). The jurisdiction of the EPO authority is determined by Council Regulation (EC) No 44/2001 of 22 December 2000. on jurisdiction, recognition and enforcement of decisions in civil and commercial matters (hereinafter: Brussels I Regulation). It can be pointed out that the jurisdiction of the court of the Republic of Croatia exists if the defendant has domicile in the Republic of Croatia, then if the contracted court is in the Republic of Croatia, and if the defendants are consumers. It is additionally stipulated that a company, other legal entity or associations of natural or legal persons, have their permanent residence in the place where they have their registered office, or the main administration, or the main place of business. The basic rule of international jurisdiction is that a person is sued where he or she is domiciled, regardless of their nationality. However, there are special rules that state that in a dispute related to contracts, it is important that the parties have agreed, and if there is no contract then the place of execution of the contract (purchase - place of delivery of goods, for services - place of performance of services, etc.), if the dispute arising from the activities of a branch, agency or other business unit, before a court in the place where the branch, agency or other business unit is located (Čuveljak, 2014, p. 2.).

A person domiciled in a Member State may be sued:
- if she is one of several defendants, and before a court in a place where any of the defendants is domiciled, provided that the actions are so closely linked that it is better to deal with them together to avoid the risk of irreconcilable court decisions in separate proceedings
- as a third party in proceedings for security or in any proceedings against a third party, before the court in which the original proceedings were instituted, unless the proceedings were instituted solely for the purpose of excluding that person from the jurisdiction of the court which would have jurisdiction in his case
- in the case of a counter claim arising from the same contract or factual situation as the original action, before the court in which the original proceedings are pending
- in matters relating to a contract, if the action may be linked to an action against the same defendant in matters relating to real rights in immovable property, before a court of the Member State in which the immovable property is situated (Čuveljak, 2014, p. 2.).

5. THE PROCEEDING

5.1. Application for EPO

An application for a European order for payment shall be made using standard form A as set out in Annex I.2 (Šago, 2013., p. 123.). The application shall state (Article 7.):

a) the names and addresses of the parties, and, where applicable, their representatives, and of the court to which the application is made;

b) the amount of the claim, including the principal and, where applicable, interest, contractual penalties and costs;

c) if interest on the claim is demanded, the interest rate and the period of time for which that interest is demanded unless statutory interest is automatically added to the principal under the law of the Member State of origin;

d) the cause of the action, including a description of the circumstances invoked as the basis of the claim and, where applicable, of the interest demanded;

e) a description of evidence supporting the claim;

f) the grounds for jurisdiction and

g) the cross-border nature of the case within the meaning of Article 3.

The form A of the Annexes (needed for the application) includes some predetermined contents such as sales contracts, rental agreement, loan, insurance contract, etc. it includes also the possibility to specify if the claim is based on non-payment or delivery, delivery of defective goods or services, etc. Although these items include the most frequent claims, there is always the possibility to add any other information not already included in the form (Garcimartín Montero, 2016, p. 113.). In the application, the claimant shall declare that the information provided is true to the best of his knowledge and belief and shall acknowledge that any deliberate false statement could lead to appropriate penalties under the law of the Member State of origin. In an Appendix to the application the claimant may indicate to the court that he opposes a transfer to ordinary civil proceedings within the meaning of Article 17 in the event of opposition by the defendant. This does not prevent the claimant from informing the court thereof subsequently, but in any event before the order is issued. The submission of the application is, of course, admitted in paper form, or by any other means of communication, including electronic, accepted by the Member State of origin and available to the court of origin. The application shall be signed by the claimant or, where applicable, by his representative. Where the application is submitted in electronic form in accordance with paragraph 5, it shall be signed in accordance with Article 2(2) of Directive 999/93/EC of the European Parliament and of the Council of 13 December 1999. on a Community framework for electronic signatures. Some articles of the Regulation (EC) 1896/2006 refer to the use of electronic media: art. 7 of allows the use of electronic media in the submission of the application; the same article recognises that the use of electronic signature is enabled and that this signature cannot be challenged if it is according with the EU regulation, art. 13 allows the use of electronic means for the service of the application and art. 15 regulates electronic media when they are used for the statement of opposition (Garcimartín Montero, 2016, p. 110.). The signature shall be recognised in the Member State of origin and may not be made subject to additional requirements. Such electronic signature shall not be required if and to the extent that an alternative electronic communications system exists in the courts of the Member State of origin which is available to a certain group of pre-registered authenticated users and which permits the identification of those users in a secure manner. Member States shall inform the Commission of such communications systems (Article 7. par. 6.). If a EPO is to be served in the Republic of Croatia, service shall be effected pursuant to the provisions of Croatian CPA on service ex officio (Arts 133 -150, 492b - 492c), but if a EPO is to be served in another Member State of the EU, service shall be effected pursuant to Regulation No 1393/2007

(Garašić, 2012., p. 1.). An application for a EPO and opposition against such order is made using a standard form (Crifo, 2009, p. 103-143.). The claimant in principle applies for an EPO before a competent court. There are no special rules on admissible language of the application. Parties and other participants in the proceedings shall file their complaints, appeals and other submissions with the court in the Croatian language and the Latin script. An application requires a description of the available evidence. After examination of the application the court will either issue the EPO or reject the application (McEleavy, 2008, p. 456.). CPA doesn't have a special rule who issues the EPO within the court. Judges issue court decisions. Also judicial advisors are authorized in civil proceedings to conduct proceedings and propose a decision to the judge if the value of the subject of the dispute does not exceed 100,000.00 HRK, or in commercial disputes if the value of the subject of the dispute does not exceed 500,000.00 HRK (Art. 13 CPA) (Šago, 2013., p. 124.). The court seised of an application for a European order for payment shall examine, as soon as possible and on the basis of the application form, whether the requirements set out in Articles 2, 3, 4, 6 and 7 are met and whether the claim appears to be founded. This examination may take the form of an automated procedure. If the requirements set out in Article 7 are not met and unless the claim is clearly unfounded or the application is inadmissible, the court shall give the claimant the opportunity to complete or rectify the application. The court shall use standard form B as set out in Annex II. Where the court requests the claimant to complete or rectify the application, it shall specify a time limit it deems appropriate in the circumstances. The court may at its discretion extend that time limit.

5.2. Rejection of the application

If the court finds that the request is unfounded, it will reject it using Form D (Čuveljak, 2014, p. 4.). The court will reject the request if the claim is obviously unfounded, then if the plaintiff does not return the proposal sent for correction or amendment, and if the conditions from Art. 2 (Scope), 3. (cross-border case), 4. (due monetary claim), 6. (competent court), and 7. (duly completed application). In that case, the column on the reasons for rejection is filled in on form D, and the applicant has no right to appeal. However, the rejection of the application shall not prevent the claimant from pursuing the claim through a new application for EPO or any other procedure available under the law of a Member State (Article 11.).

5.3. Issue of a European order for payment

Within 30 days from the day of submitting the request, the court should decide on it, and if it did not reject it, the EPO is issued using form E. The form is delivered to the defendant together with a copy of the claim form and the complaint form. This form contains information about the court, the parties and their representatives, information about the claim and important information for the defendant - that he can pay that amount or challenge it with an objection that must be sent within 30 days of delivery of the order to the defendant. The Report from the Commission on the application of Regulation (EC) 1896/2006 is highly critical with the long terms for the issuing of the European order for payment in some countries. It takes between 2 and 9 months to take their decision to the courts of at least 11 Member States; the Report considers absolutely necessary a reduction of this length that implies a clear infringement of the Regulation (Garcimartín Montero, 2016, p. 115.). The EPO informs the defendant that the order was issued solely on the basis of information provided by the plaintiff and which was not confirmed by the court, then that the order will become executed if no objection is lodged origin in accordance with the rules of ordinary civil proceedings, unless the plaintiff requests that the proceedings be terminated in that case. Delivery is made in accordance with national law and in a way that meets the minimum standards (recommended with a return receipt), and if it needs to be delivered in the Republic of Croatia, then delivery follows the rules of the CPA on ex officio delivery.

However, if the EPO is to be delivered in another EU Member State, then the delivery is made on the basis of Regulation (EC) No 1393/2007 of the European Parliament and of the Council of 13 November 2007 on the service in the Member States of judicial and extrajudicial documents in civil and commercial matters ("service of documents") and repealing Council Regulation (EC) No 1348/2000 with the appropriate application of the provisions of Articles 503 to 503d of the CPA (507 d. - h.). The complaint is submitted using form F, but can also be submitted without a form, provided that it does not have to be substantiated (in the Official Journal of the EU, this form has been partially mistranslated). The form itself contains information about the court, the parties and a statement of objection against EPO issued on a certain date and the signature of the defendant. In the Republic of Croatia, it was pointed out that after the complaint, further proceedings will be conducted in accordance with the provisions of the CPA regarding the complaint against the payment order (Articles 445a, 451 to 456), unless the plaintiff requested that the proceedings be terminated. If the claimant enforces the claim through the EPO procedure, nothing under national law calls into question his position in subsequent ordinary civil proceedings. Upon the objection, the court informs the plaintiff whether the defendant has lodged an objection as well as any transfer to ordinary civil proceedings. If the defendant has not lodged an objection (in the Republic of Croatia it is not allowed to seek reinstatement due to missing the deadline for lodging an objection against EPO), the court of origin (the court that issued the EPO) declares the enforceability of the European order for payment without delay delivery date. Formal enforceability requirements are governed by the law of the Member State of origin, and the court sends an enforceable European order for payment to the claimant. An EPO which has become enforceable in the Member State of origin shall be recognized and enforced in another Member State without the need for a declaration of enforceability and without any possibility of challenging the recognition. Thus, an EPO issued in one Member State is an enforcement document in all other Member States and enforcement is carried out on the rules for the enforcement of either European orders or enforcement titles in accordance with national law. For enforcement in another Member State, the claimant shall provide the competent enforcement authorities of that Member State with a copy of the European order for payment declared enforceable by the court of origin, which satisfies the necessary conditions for its authenticity and, where appropriate (Garcimartín Montero, 2016, p. 115.).

5.4. Refusal of execution

Once issued and executed, an EPO may be reviewed only before a court of the Member State which issued that EPO. In exceptional circumstances, the defendant may file a request for review of the executive EPO. This request shall be made without delay before the court of the State of origin if there has been no proper service or if the defendant has been prevented from raising an objection through no fault of his own due to force majeure or extraordinary circumstances. In addition, after the execution of the EPO, the defendant also has the right to request verification of the EPO before the competent court in the home Member State where the payment order was manifestly incorrectly issued, taking into account the issuance requirements prescribed by the Regulation or due to exceptional circumstances (Čuveljak, 2014, p. 4.). After receiving the defendant's request, the court reviews it and if it finds that the review is justified on the reasons given by the defendant, then the EPO is null and void. The court in the Republic of Croatia decides on the request for review of the EPO by a decision, against which no appeal is allowed, but the defendant is obliged to make probable the facts on which his proposal to repeal the EPO is based. If the court finds that the EPO is null and void, it will suspend the proceedings under Regulation no. 1896/2006, while further proceedings will be conducted in accordance with the provisions of the CPA. The enforcement of the EPO itself is governed by the law of the Member State of enforcement and is enforced in the same way as

domestic decisions and no security or deposit can be claimed from the plaintiff. However, if it is enforced in a country where the EPO has not been issued, the plaintiff should provide the competent authorities with a copy of the EPO declared enforceable by the court of origin and, if necessary, a translation of the EPO. It was also pointed out that the enforcement EPO issued by a court in the Republic of Croatia is an enforcement document on the basis of which enforcement can be requested in the Republic of Croatia as on the basis of an enforcement decision of a Croatian court (Čuveljak, 2014, p. 4.). If the creditor is required to attach a translation of a European order for payment, that translation should be in Croatian and certified by a person authorized to do so in one of the Member States. The competent court in the executing Member State may, at the defendant's request, refuse to execute the EPO if the payment order in question is contrary to an earlier decision or order previously issued in any executing Member State or third country, provided that the earlier decision or earlier order included the same basis for instituting proceedings between the same parties if the earlier decision or earlier order fulfills the conditions necessary for recognition in the Member State of enforcement and if the contradiction could not be used as an objection in court proceedings in the Member State of origin (Čuveljak, 2014, p. 4.). In addition, it was pointed out that enforceability, after filing the application, would also be denied if and to the extent that the defendant had paid the amount awarded in the European order for payment. In order to avoid misunderstandings, it was also pointed out that the EPO cannot be reviewed under any circumstances to the content in the Member State of enforcement. Where the defendant has lodged a request for review of the EPO, the court in the Member State of enforcement may limit the enforcement of the proceedings to protective measures or condition the enforcement under conditions of security determined by him or in exceptional circumstances, suspend the enforcement proceedings. If a review of the EPO issued in the Republic of Croatia is requested, the court deciding on the request may postpone enforcement with appropriate application of the provisions of the Enforcement Act on postponement of enforcement at the request of the debtor, and an appeal against the enforcement decision is allowed. only if those reasons arose after the delivery of that order and if they could no longer be raised in the objection. The request for denial of enforcement is decided by a decision of the municipal court as the enforcement court, and the territorial jurisdiction of the court is determined according to the rules on the territorial jurisdiction of the court in enforcement proceedings. The court decides on the suspension of enforcement and the revocation of enforcement actions with the appropriate application of the provisions on enforcement proceedings, and the court decides on the postponement or restriction of enforcement by a decision against which a special appeal is not allowed. The decision shall remain in force until the end of the proceedings initiated by the party on the request for suspension or postponement, or until a different court decision made in connection with the proposal of either party (Čuveljak, 2014, p. 5.).

5.5. Opposition to the EPO and absence of timely opposition

General rules of Croatian CPA on the form shall apply for opposition to the EPO (Triva, Dika, 2004, p. 812 – 818.). Submission given outside of trial shall be filed in writing. An application for opposition against an EPO may be submitted only in a machine readable format. If the defendant lodges a statement of opposition to the EPO within the meaning of Article 16 of Regulation 1896/2006, further procedure shall be conducted pursuant to the provisions of Croatian CPA on the procedure in case of an objection to the payment order while taking into account the provisions of Art. 17. EPO (Art. 507.l CPA). It means that the same rules that apply in the case of an objection against a CPO shall apply in the case of an objection against a EPO. There is no special rule on legal remedies against the court decision on statement of opposition that was filed against EPO. A statement of opposition against a EPO that is untimely, incomplete or not allowed shall be dismissed by a competent court for litigation.

Such a ruling issued by a court of first instance may be challenged by an appeal. If a statement of opposition against a EPO is timely, complete and allowed, and the defendant states there are some hindrance to the further course of the proceedings, the court shall first decide on this objection. If it establishes that this objection is well - founded, it shall annul the payment order by a ruling. Such a ruling may be challenged by an appeal (Art. 378(1) CPA and also a ruling on review of an EPO may be challenged by an appeal (Šago, 2013., p. 124.). The certificate of enforceability of a EPO shall be issued by Commercial court in Zagreb. In contrast to a domestic order for payment the claimant does not have to apply for it. The certificate shall be given ex officio. The certificate procedure according to Art. 18. EPO shall be followed. Regarding requirements for enforceability Art. 23 of Croatian Execution Act shall apply. A court decision instructing the fulfilment of a claim on payment or performance is enforceable if it has become legally effective and if the term for voluntary fulfilment has expired. That term runs from the date of delivery of the decision to the execution debtor, unless provided otherwise by law. In the absence of timely opposition a CPA and EPO becomes final and not only enforceable (Šago, 2013., p. 124.).

5.6. Enforcement in the Member State of enforcement

According to Croatian Execution Act (Official Gazette, no. 112/12, 25/13, 93/14, 55/16, 73/17, 131/20) any certificate of enforceability that was issued, although the conditions laid down by law for its issuance were not fulfilled shall be repealed by the court or body that issued it, and that in a ruling, further to a motion or in the line of duty (Šago, 2013., p. 125.). The procedures of the EPO should be governed by the national legislation without any prejudice to the provisions of the Regulation, particularly those relating to the minimum standards in Art. 22, Paragraph (A) and (2) and Art. 23. The regulation of art. 22 of Regulation (EC) 1896/2006 that establish that the enforcement may be refused if there is a previous order and also the *res iudicata* effect is generally accepted in the national order for payment proceedings (Garcimartín Montero, 2016, p. 119.). The defendant has one month from the date of service to submit a statement of defence, otherwise the court of origin will declare its payment order enforceable. The defendant can in exceptional circumstances apply for review of the order after the expiry of the time limit if it has been served on him without proof of receipt, and service was not effected in time for him to arrange a defence or he was prevented from objecting by reason of force majeure. Review is possible if the order was clearly wrongly issued. If such an application for review is lodged it is without prejudice to the enforceability of the order per se, but the court in the Member State of enforcement may upon application „limit enforcement to protective measures, make enforcement conditional upon provision of security, or stay enforcement. If the review is found by the court to be justified the order for payment shall be null and void (Storskrubb, 2008, p. 21.). Further procedure shall be conducted pursuant to the provisions of Croatian CPA (Art. 507lj (3) CPA). It is not permitted to apply for reinstatement under the provisions of CPA on account of failure to observe the time limit for the statement of opposition to the EPO referred to Art. 16(2) EPO (Medić Musa, 2007, p. 111 – 134.). Courts have competence with respect to enforcement of the EPO according to rules of the Croatian Execution Act that applies to enforcement of any other enforcement title documents (Uzelac, 2010, p. 221 – 229.). If the debtor has neither opposed within the time limit nor paid, the EPO will become enforceable in accordance with Article 18. A defendant who has failed to oppose in time will be able to apply for review of the EPO in the Member State of origin. According to the Article 22 the defendant may, in specific cases of irreconcilability of the EPO with an earlier decision, apply for refusal of enforcement in the Member State of enforcement. If an application for review of the EPO issued in Croatia is submitted, the court deciding on such application may suspend the enforcement and apply the provisions of Art. 61 of the Enforcement Act.

An appeal against an enforcement order due to reasons relating to a claim established in the EPO shall be admissible only if such reasons occurred after the service of the order and if it was no more possible to present them in the statement of opposition pursuant to Art. 16 EPO. A municipal court as enforcement court shall decide on applications for refusal of enforcement pursuant to the provision of Art. 22 (1) EPO in a ruling (Šago, 2013., p. 125.).

6. CONCLUSION

Efficient collection of debts without legal disputes is crucial for economic operators in the European Union, as late payments are the main reason for illiquidity that threatens the survival of businesses, especially small and medium-sized enterprises, resulting in the loss of many jobs. The main goal of European Civil Procedure is improving and facilitating judicial cooperation in civil and commercial matters between the Member States in all fields; improving the effective and practical application of Union instruments and conventions in force between two or more Member States; and promoting effective access to justice for the general public. All Regulations represents a true advancement in the integration process, have signalled the beginning of the creation of a European uniform civil procedure (Hodges, 2007., p. 96 – 13.). The goals of which are to simplify, speed up, reduce the costs of cross-border litigation and reduce language obstacles because in cross-border litigation, language differences are one of the main obstacles preventing parties from taking action and defending their rights (Stadler, 2012, p. 151 - 168.). Shortly after the EPO Regulation, another Regulation creating a European civil procedure was adopted, namely the Regulation establishing a European Small Claims procedure. These three Regulations put into practice the principle of mutual recognition of judgments in civil matters. Their main aim is to simplify and speed up the cross-border recognition and enforcement of creditors' rights in the European Union. In this respect they contribute both to building a genuine area of justice in the European Union, and to implementing the Single Market. As the EPO is a special procedure applied in almost all European countries, the issue of legal representation is regulated and it is pointed out that representation by lawyers or other legal professionals is not mandatory for both the plaintiff in connection with the request for a European order for payment and the defendant in in connection with the objection to the European order for payment. With regard to court fees, it was pointed out that the total amount of court fees for EPO and ordinary civil proceedings that follow in case of an objection to EPO in a Member State may not exceed court fees for ordinary civil proceedings not preceded by a European order for payment procedure in that Member State. Court fees include both fees and charges that must be paid to the court, the amount of which is determined by national law. With regard to other procedural issues not resolved by that Regulation, it was decided to apply national law, and Regulation (EC) No 1896/2006 does not affect the application of delivery regulations, judicial and extrajudicial documents in civil or commercial matters in the Member States.

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THE INFORMATION SOCIETY IN THE COVID-19 ERA

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ABSTRACT

The study analyses factors which significantly contribute to the development of the information society in selected EU member states (also added in the analysis: Norway, Iceland, Turkey). It covers the time before and during the COVID-19 pandemic. Its aim is to identify groups of countries bearing similarity in the phenomenon under study by means of a taxonomic method - Czekanowski's diagram. The paper presents an analysis of a particular set of diagnostic features. The variables, whose relevance and statistical accuracy were first verified, formed a basis for the classification of the selected countries. The data comes from the statistical yearbooks published by the Central Statistical Office and from the Eurostat websites (it covers the years 2020, 2019 and 2012).
Keywords: Czekanowski's diagram, Information Society, Taxonomic analysis, COVID-19

1. INTRODUCTION

In recent times, the way we live has been closely linked to modern technologies and their development as well as to Internet access. The progressing information and communications technologies, which have already established a foothold in society, are entering new areas of our life, thus contributing to further development of the information society. We have become an information society that strives for continuous access to the Internet in order to enable people and organizations to liaise and exchange information despite economic boundaries. The COVID-19 pandemic has significantly contributed to the acceleration of digitization processes and the introduction of various new technological solutions. The coronavirus pandemic and the lockdown have led to changes in the ways of working existing in many companies and institutions as they were forced to digitize their services in a short period of time. Offices, hospitals, enterprises and all kinds of institutions have significantly expanded their e-services and launched websites presenting and promoting their offerings. In the public administration, the portfolio of e-services has been extended, which enables each user to handle a variety of administrative matters. However, the rise in the number of people using e-services provided by public administrations, digital platforms, etc. is accompanied by an increase in the number of cyber attacks and cyber security breaches. Most companies and institutions have adopted online customer service and embarked on online marketing activities. It has become a common practice to access news online and read online newspapers. Due to the outbreak of COVID-19, people have turned to the internet to buy groceries. The current situation has resulted in increased usage of the Internet and higher demand for Internet access by households.Remote working, remote teaching, online meetings and training have been introduced. The pandemic and temporary lockdown restrictions have transformed our daily life, making the internet its indispensable component. Unfortunately, lack of internet access can both cause and worsen digital exclusion, which affects mainly senior citizens, people with disabilities and other vulnerable groups. Another group experiencing difficulties are schoolchildren, high school and university students as well as employees working from home. The problems include not only the lack of internet access or efficient broadband connection but also lack of a home environment that allows remote learning and remote work.The aim of the study is to analyze the development of the information society in selected countries in the context of the COVID-19 problem.

2. CZEKANOWSKI'S DIAGRAM

In Czekanowski's method, the first step involves creating a matrix of distances between objects D, which can be defined by means of any metric. The distance measures in matrix D are divided into classes of object similarity. Each class is assigned a graphic symbol and thus Czekanowski's unordered diagram is created. Next, it is necessary to reorder the diagram and arrange the graphic symbols in such a way that the symbols corresponding to the shortest distances are located along the matrix diagonal, while those which represent longer distances are further away. (Pociecha J., Podolec B., Sokołowski A., and Zając K., 1988), (Grabiński T., Wydymus A., and Zeliaś A., 1989), (Panek T., 2009), (Młodak, A., 2006).

3. EMPIRICAL ANALYSIS

The first stage of the study focused on the selected countries in the year 2020, and next in the year 2019, 2011. The set of the diagnosic variables, which was established based on the descriptive and formal analysis of these variables, included (Janiga-Ćmiel, 2017), (Janiga-Ćmiel, 2018), (Janiga-Ćmiel, 2020):

- X_1 - Percentage of individuals - Individuals used a laptop, notebook, netbook or tablet computer to access the internet away from home or work,
- X_2 - Percentage of individuals - Internet use: never,
- X_3 - Percentage of total employment - Persons employed using computers with access to World Wide Web,
- X_4 - Percentage of individuals - Internet use: Internet banking. E-banking and e-commerce,
- X_5 - Percentage - Upper secondary, post-secondary non-tertiary and tertiary education.
- X_6 - Percentage of enterprises - Enterprise recruited/tried to recruit personnel for jobs requiring ICT specialist skills

The data comes from the statistical yearbooks published by the Central Statistical Office and from the Eurostat websites (it covers the years 2020, 2019, 2012). In the first step of the analysis, the dataset was used to standardise variables and calculate taxonomic distances.

$$z_{ij} = \frac{x_{ij} - \overline{x_j}}{s_j};\qquad (1)$$

where (Panek T., 2009):

z_{ij} – standardized variable x_j for the i-th object,

x_{ij} – variable x_j for the i – th object,

$\overline{x_j}$ – arithmetic mean of the variable x_j,

S_j - standard deviation of the variable x_j.

Next, the partition boundaries for the values of taxonomic distances were specified based on the calculated empirical area of variability (the Euclidean metric). Finally, Czekanowski's unordered and ordered diagrams were constructed. All calculations were performed and the diagram created by means of MaCzek program: [http://www.antropologia.uw.edu.pl/MaCzek/maczek.html,02.06.2021]. The countries were grouped by selecting objects that show the strongest mutual similarity. The results are presented in Figure 1, Figure 2 and Figure 3.

Figure following on the next page
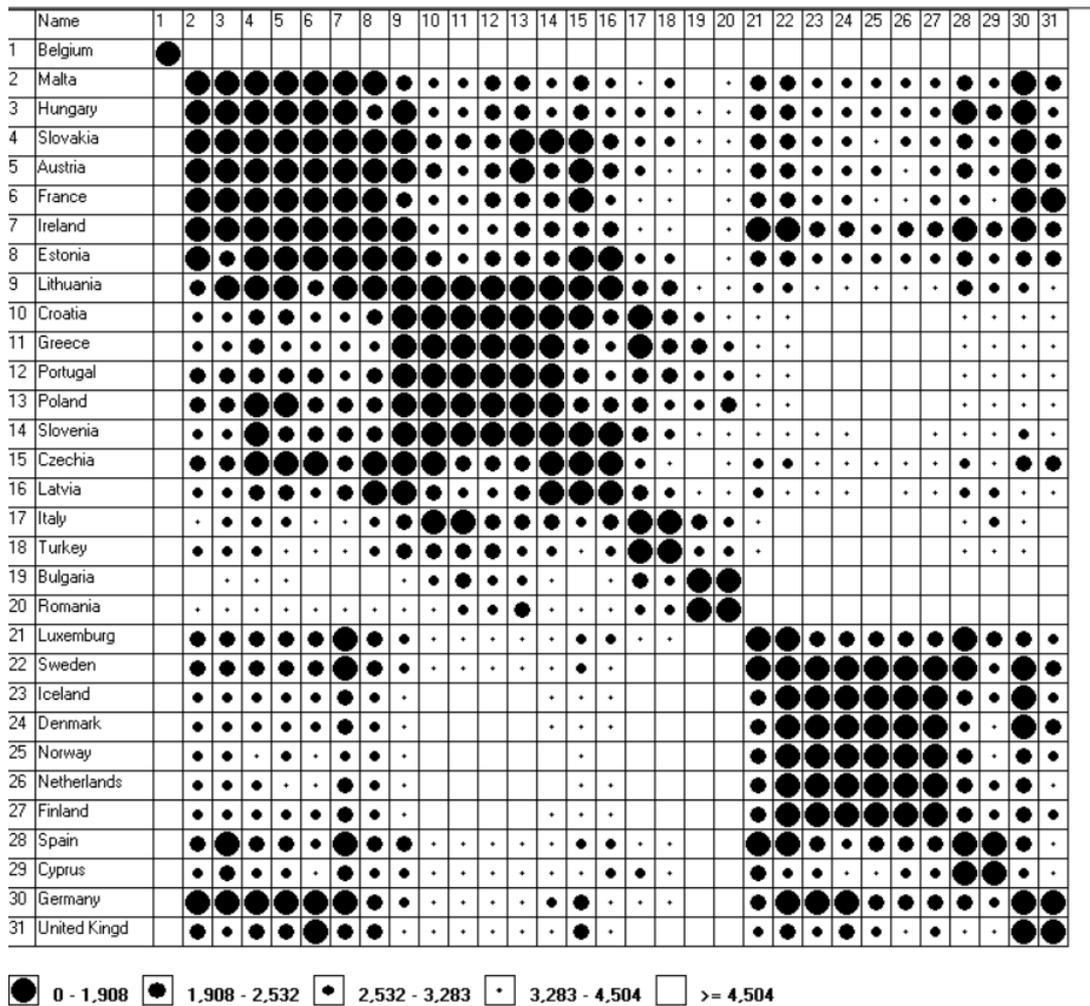
Figure 1: An orderly Czekanowski's diagram for countries characterized by a similar level of the phenomian - 2020
(Source: based on own research by means of MaCzek program)

The analysis of the data for the year 2020 by means of the method discussed above resulted in separating groups of countries characterized by a similar level of the phenomian. Eight groups emerged:

- G1: Malta, Hungary, Slovakia, Austria, France, Ireland, Estonia.
- G2: Lithuania, Croatia, Greece, Portugal, Poland, Slovenia.
- G3: Czechia, Litvia.
- G4: Italy, Turkey,
- G5: Bulgaria, Romania.
- G6: Luxemburg, Sweden, Iceland, Denmark, Norway, Netherlands, Finland.
- G7: Spain, Cypru.
- G8: Germany, United Kingdom.

The countries belonging to groups G6 and G8 were characterized by the highest values of all variables (except x_2). The countries belonging to the groups G2, G3, G4 and G5 achieved the highest values of the percentage of people who have never used the Internet. Groups G1 and G7 contain the countries with average values of the analyzed variables. The other countries do not form groups. However, it should be noted that in some cases the breakdown is not clear and some countries may be assigned to other groups.
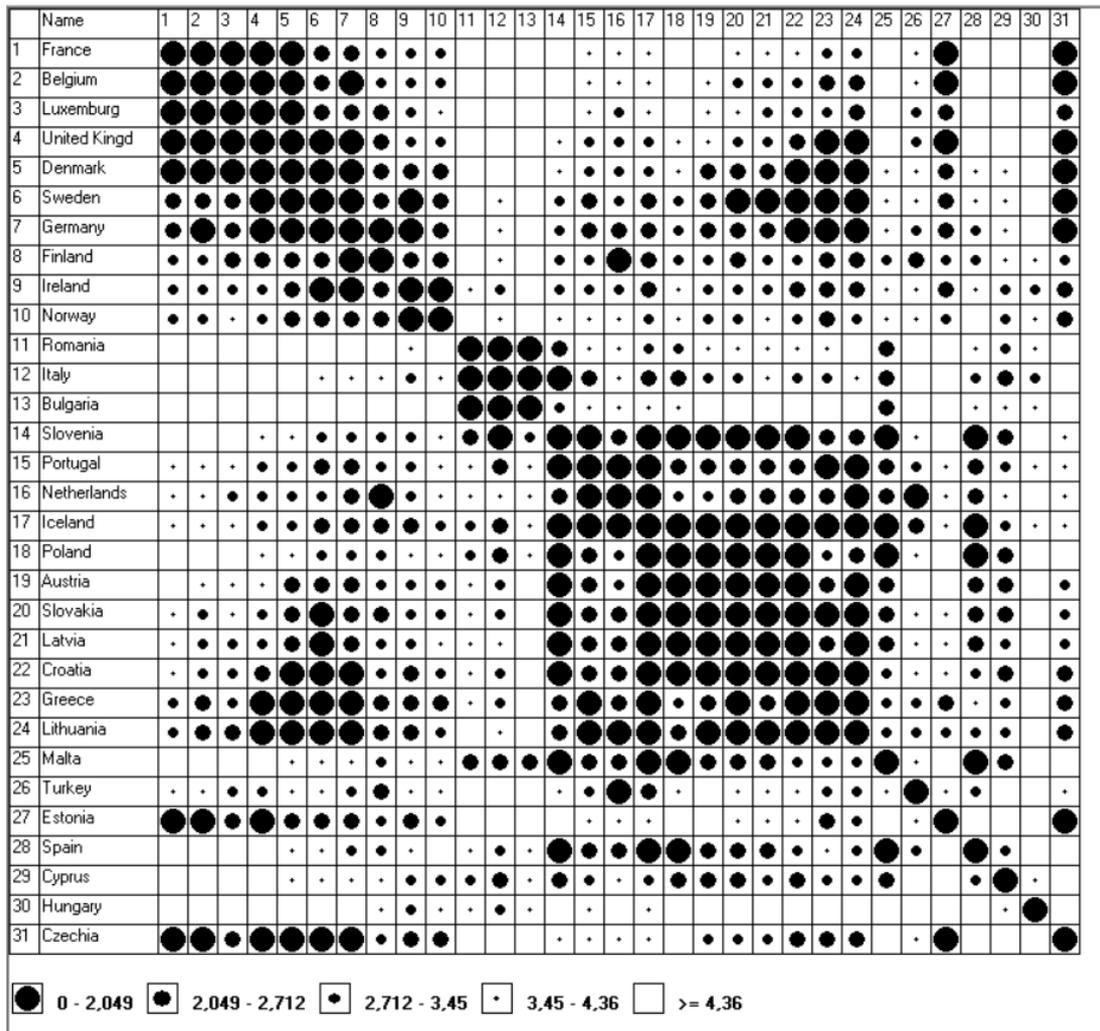
Figure 2: An orderly Czekanowski's diagram for countries characterized by a similar level of the phenomian - 2019
(Source: based on own research by means of MaCzek program)

The same analysis was conducted for another year under study, i.e. 2019. This time, the following groups were formed:

- G1: France, Belgium, Luxemburg, United Kingdom, Denmark, Sweden, Germany.
- G2: Ireland, Norway.
- G3: Romania, Italy, Bulgaria.
- G4: Slovenia, Portugal, Netherlands, Iceland.
- G5: Poland, Austria, Slovakia, Latvia, Croatia, Greece, Lithuania.

The other countries do not form any groups. The countries characterized by the highest values of the analyzed variables formed the groups: G1 and G2. The countries belonging to the group G3 are characterized by thethe highest values of the percentage of people who have never used the Internet. Groups G4 and G5 contain the countries with average values of the analyzed variables.

Figure following on the next page
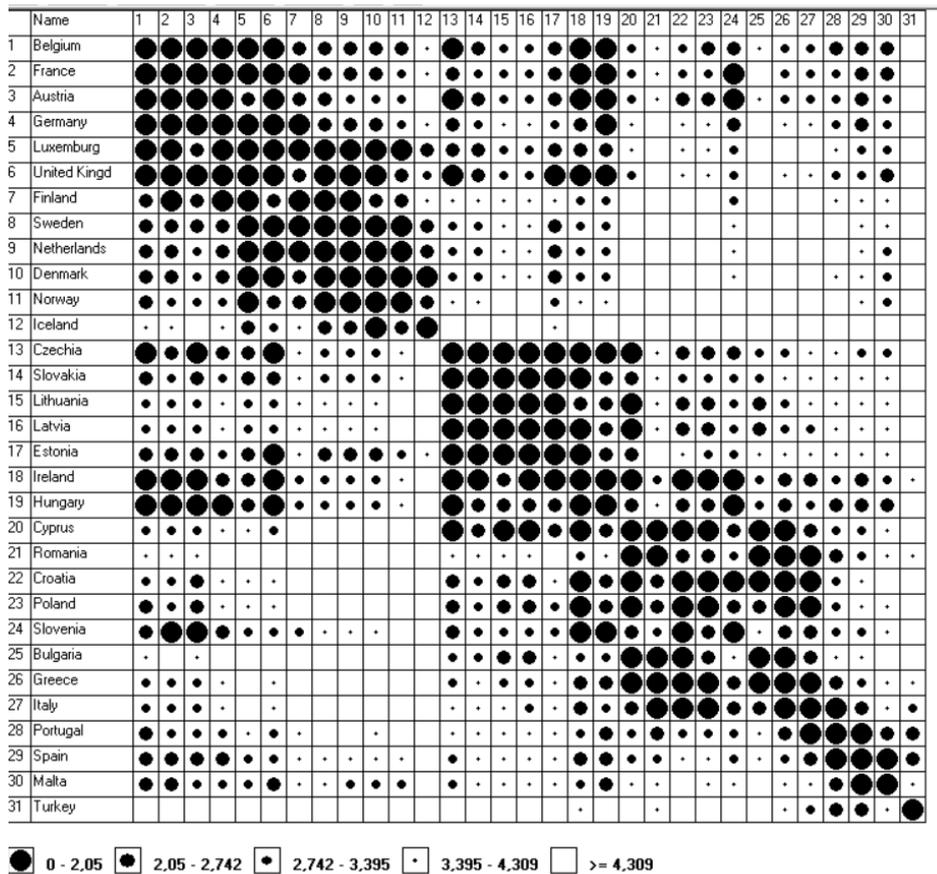
Figure 3: An orderly Czekanowski's diagram for countries characterized by a similar level of the phenomian - 2012
(Source: based on own research by means of MaCzek program)

Similarly, for the last period, i.e. the year 2012, groups emerged:
- G1: Belgium, France, Austria, Germany, Luxemburg, United Kingdom.
- G2: Finland, Sweden, Netherlands, Denmark, Norway.
- G3: Czechia, Slovakia, Lithuania, Latvia, Estonia, Ireland, Hungary, Cyprus.
- G4: Croatia, Poland, Slovenia.
- G5: Bulgaria, Grece, Italy.
- G6: Portugal, Spain, Malta.

The countries with the highest values of the variables form the G1 and G2 groups. The groups G1 and G2 are characterized by the highest values of percentage of individuals, who used a laptop, notebook, netbook or tablet computer to access the internet away from home or work.The countries belonging to the groups G3, G4, G5 and G6 achieved the highest values of the percentage of people who have never used the Internet. The countries belonging to group G4 are characterized by the highest values of the percentage - Upper secondary, post-secondary non-tertiary and tertiary education.

4.CONCLUSION
The results of the grouping indicate that the groups are made up of countries whose residents have a similar standard of living. It is especially true for the year 2020. Richer countries provide their societies with wider access to healthcare services, access to the internet, new technologies and better education; they support the development of rural areas and take measures to curb unemployment.

They can afford to allocate considerable resources, including financial resources, to combat the COVID-19 pandemic and its multiple effects, which is more difficult for poorer countries. The less economically developed countries will be the first to experience the negative consequences of the coronavirus pandemic. In addition, the pandemic has drawn our attention to a number of serious problems, e.g. inequality in the standard of living between various societies. Summing up, we can say that the development of the information society is related to the economic development.

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COMPARISON OF FINANCIAL INDICATORS AND THE TREND OF THE NUMBER OF USERS OF THE OLD AND NEW MEDIA INDUSTRY DURING THE COVID 19 PANDEMIC

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ABSTRACT

The aim of this paper is to compare the business results of corporations within the media industry. The analysis included two corporations from the "old" and two corporations from the "new" media industry. The corporations in the "old" media industry are Comcast Corporation and the New York Times, and the corporations in the "new" media industry are Netflix and Spotify. We determine the "old" media industry according to the organizational design of vertical integration. The "new" media industry uses a streaming platform model. Financial analysis includes selected items from the corporate income statement to compare the business results of corporations. By analysing the trend in the number of users, a new model of user behaviour was determined. The "old" media industry is undergoing a process of transformation and generating revenues from several different models of commodification. The "new" media industry is taking advantage of the technological advantage of this new user habit. The analysis and comparison of the results of these two models indicates the directions of development of the global media industry.

Keywords: *media industry, platform economy, streaming platform, vertical integration, zero marginal cost*

1. INTRODUCTION

The digitalization of production systems has brought changes in management models in all types of industries. The media industry was among the first to enter the processes of transformation. The content production and distribution system based on digital technologies has enabled the convergence of the system within the entire media industry. Parts of the old media industry have transformed technology and management according to the requirements of the environment. The new media industry has started business based on new technologies.

Table 1: Differences between old and new media industry

	Old media industry	New media industry
	Comcast Corp. New York Times	Netflix Spotify
Organizational design	Vertical integration	Platform economy
Monetization	Hybrid model	Subscribe
Distribution	Hybrid model	Streaming
Media industry	Transformation	New media industry
Cost model	Economies of scale; zero marginal cost	Zero marginal cost
Media model	Mass media; platform media	Platform media
Technology model	Broadcasting, "factory floor"; Internet	Internet

Source: Own illustration

The "old" media industry emerged on the foundations of production capitalism and vertical integration. She used a model of selling in "brick-and-mortar" stores and cable subscriptions. Vertically integrated corporations benefited from economies of scale, relying on mass media, mass advertising, and mass markets.

The business paradigm was based on the "factory floor" production model. The new media industry has grown on the development of technology, the digitalization of the production process, and the convergence of content production and distribution systems. It is based on platform economics and streaming content distribution (Parker et.al. 2016; Moazed, Johnson 2016). Instead of selling physical media, revenue is generated from subscribing to a streaming platform. The platform economy model implies abandoning the classic cost model and uses the "zero marginal cost" model (Rifkin 2015; Lozić 2019). Platform economics and content distribution in the streaming platform model are leaving the cable model and are based entirely on Internet technology. The basic differences between the old and new media industry are shown in Table 1. The old media industry has entered a process of transformation, which has mostly affected the models of monetization and distribution of content. Revenue from copyright, streaming and subscription replaces classic revenue. The new media industry produces new media content, but also buys copyrights from the old media industry. The transformation of the entire media industry is very dynamic and requires a very detailed analysis. This paper focuses on financial indicators to compare the business results of corporations from the old and new media industries. Corporations are sorted by gross profit due to the difference in cost formation of revenue. The old media industry is building completely new content and we can assume that it has higher cost of revenue costs than the new media industry. In addition to gross profit, operating income and net profit will be compared to analyse the business results of the old and new media industries. The analysis of selected financial items will be compared with the trend in the number of users in the selected time period. 1.

2. LITERTURE REVIEW

The transformation of the media industry has come about under the influence of two fundamental factors. On the one hand, the development of technology has created new opportunities for the production and distribution of media content, and on the other hand, the new technology has laid the foundations for a significant change in the habits of media content users. The old media industry, in the context of the research topic of this paper, was based on broadcasting and the television screen. In the centre of the living room was a coaxial cable outlet. Jenkins (2006) first warns of the excessive impact of broadcasting. The media industry developed with the production capitalism of the 20th century and with the advent of leisure. Leisure time is a realm outside working hours in which the individual can distance himself from the responsivities in real life. In this realm, the individuals attempt to provide harmony and peace in his inner world and ensure integration with society (Ismayilov, Sunal 2014). The end of the twentieth century was marked by the digitization and distribution of music content in a new form. The transformation took place in several different but related phases: gramophone records were replaced by CDs; CD audio carriers were slowly replaced by MP3 digital tracks, and after that streaming platforms took over the dominance in the distribution and consumption of music content (Simon 2019; Fuentes et al. 2019). The beginning of the 21st century marked a turning point in the use of electronic platforms for listening to music. The desktop computer has been somewhat neglected, and the focus of interest is mobile digital playback devices such as the Apple iPod, and this way of consuming music is beginning to prevail (Hesmondhalgh, Meier 2018). Rapid change in technology has occurred, which have affected the nature of leisure activities. Leisure has itself become high organized and commercialized business (Browne 364). The fact is that leisure time has become consumption-orientated and entered into the service of consumption economy is, without doubt, likely to neutralize the efforts of optimistic leisure policymaker who wish to deploy leisure time as the rehabilitation base of individual and social pathologies (Ismayilov, Sunal 2014). The beginning of the 21st century marked a turning point in the use of electronic platforms for listening to music.

The desktop computer has been somewhat neglected, and the focus of interest is mobile digital playback devices such as the Apple iPod, and this way of consuming music is beginning to prevail (Hesmondhalgh, Meier 2018). The transition to mobile digital devices and a completely new way of consuming music and other media content marked the end of the old media industries. What is meant by "new media" varies somewhat, but mainly includes the Internet, video and computer games, and mobile devices, including iPods, PDAs, and telephones (Marshall 2009: 81). Technology has become the word most associated with new media (Hendricks 2010: 5). The streaming service provides users with the possibility of creating their own music lists ("lists") or using already compiled music lists, created by music editors according to the preferences of individual user groups (Webster 2019). Building your own lists on the Spotify platform changes the way you interpret the classic value chain because in the "peer-to-peer" model of exchange, music lists are created by users themselves, not music content editors (Kask, Oberg 2019). With the development of postmodern societies, a strong habit of subscribing to steaming services instead of owning physical sound carriers has developed (Hagen 2015). The streaming platform services have made it possible to listen to music numbers that have long been neglected in various music niches (Webster 2019). In 2013, Netflix will begin broadcasting the globally popular House of Cards series, which will definitely strengthen the platform's leadership position within the streaming platform family. From the very beginning, Netflix has been placed in the context of "Spotify for movies". After the success of the series, Netflix comes out of that context and will become equal to the "older brother" (Fleischer 2020). Sun (2019) called Spotify the "celestial jukebox" that users have always been looking for. The same could be applied to Netflix for the film industry. Jenner (2014) studies the way Netflix designs its own television program and emphasizes that the broadcasting model, i.e. the managerial model, is completely different from cable and traditional television. The history of television can be divided into three basic periods: a) the "network-era"; b) "multichannel" transition; and c) the "post-network era" (Lotz 2007). The period of the network era stretches from the 1950s to the 1980s, and is known for the dominance of the three American television companies' ABC, NBS and CBS. These corporations were vertically integrated media corporations that directly influenced the global media industry. In the context of technological development, there were terrestrial televisions that broadcast radio and television programs (Lozić 2021). The post-network era is connected with the development of Internet television and the distribution of media content without any form of the "old media" industry remaining a mediator in the process. "New" media content is distributed and broadcast on digital platforms that use screens, but the distribution and monetization model is completely different from the models that were present in the network-era and multichannel-era. Pearsons (2011) points out that the post-network era period begins after the 1990s. In the context of the transition from the multichannel era to the post-network era, Braun (2013) emphasizes the importance of technology development, and the focus of the activity shifts from production to distribution. Digital technology has enabled completely new forms of distribution and consumption of media content. Generation Z and the development of technology in the form of streaming platforms began with the deconstruction of this form of technological presence in everyday life. The cancellation of the cable television subscription is symbolically called "cord-cutters", ie those who "cut" the cable. A situation that was even more dramatic for classic television corporations is marked by the term "cord-nevers", i.e. those who will never subscribe to cable television. This group primarily includes members of Generation Z (Seemiller, Grace 2019). Waldfogel (2019) from the title "all-you-can-eat" generation. As early as 2014, Jenner studied the way in which Netflix designed its own television program and emphasized that the broadcasting model, i.e. the managerial model, is completely different from cable and classic television. Along with technological development, changing user habits is another of the fundamental pillars of change in the media industry.

Hagen (2015) refers to Walter Benjamin who recognizes the three basic rituals that a book collector goes through: a) ordering - collecting books that are connected into a meaningful whole; b) possession - pure possession loses its meaning in itself as well as the owner of the collection and; c) the restoration of the old world - the strongest desire of the collector that forces him to re-collect new books. The consumption of music in the 21st century has almost completely abandoned the fundamental characteristic of this division, and that is possession. The change in the way music content is consumed and the difference in use between the old and new music industry, but also the media industry as a whole, was determined by Jean Baudrillard. It points to the difference between creating a collection of music content and using music content. Music content can be used or can be owned (Hagen 2015). Mason (2015) emphasizes the crucial importance of the changes brought by postmodern and post-industrial society to change the behaviour of media industry users

3. METHODOLOGY AND RESEARCH QUESTIONS

The survey will use financial data from Annual Reports of selected corporations. The financial analysis focuses on four basic indicators: revenue, cost of revenue, operating income and net income. The results of the financial analysis will be compared with the results of the trend analysis of the number of users. The research starts from the assumption that the new media industry has a higher gross profit than the old media industry due to lower operating costs in the streaming platform model, and that the number of users of the old media industry decreases while the number of new media industry users grows. The research is structured and focuses on the following issues:

- Q1 -What is the revenue trend of the old and new media industry before and during the Covid 19 pandemic?
- Q2 - What is the trend of gross profit and net profit in the old and new media industry
- Q3 - Is there a difference in the trend in the number of users between the old and new media industry.

The analysed financial items were processed for a period of 6 years, from 2015 to 2020. The analysis of the trend in the number of users covers the same period in order to be able to compare the results. The results of the analysis are presented in the chapter Discussion and conclusion.

4. DATA ANALYSIS

The research and analysis is divided into two parts. In the first part, selected financial items are analysed, and in the second part, the trend in the number of users is analysed. In research and analysis, corporations are ranked according to gross profit.

4.1. Selected financial item analysis

Four corporations were included in the analysis. Comcast and the New York Times belong to the old media industry, and Netflix and Spotify belong to the new one. Comcast is the largest media corporation in the world in terms of revenue and has the largest net profit from the analysed corporations. Comcast is a vertically integrated corporation that is transforming itself towards new models of content production and distribution. The New York Times is a newspaper publisher that is rapidly transforming into new content distribution models and moving to a digital distribution model with a subscription to the platform. Netflix and Spotify are part of the platform economy and generate most of the revenue from subscribing to the streaming platform. Selected financial items from the Annual Report are shown in Tables 2 to 5.

Table 2: Selected financial items - Comcast ($; millions)

	2015	2016	2017	2018	2019	2020
Revenue	74.510	80.403	85.029	94.507	108.942	103.564
Cost of revenue	22.550	24.463	25.355	29.692	34.440	33.121
Gross profit	51.960	55.940	59.674	64.815	74.502	70.443
Operating income	15.998	16.859	18.018	19.009	21.125	17.493
Net income	8.413	9.045	22.922	11.862	13.323	10.701

Source: Own illustration (Comcast Corporation Annual Report)

Table 3: Selected financial items – New York Times ($; 000)

	2015	2016	2017	2018	2019	2020
Revenues	1.579.215	1.555.342	1.675.639	1.748.598	1.812.184	1.783.639
Cost of revenue	617.812	628.104	615.406	947.884	989.029	960.222
Gross profit	961.403	927.238	1.060.233	800.714	823.155	823.417
Operating profit	184.320	112.678	176.591	190.167	175.582	176.256
Net profit	63.240	29.068	4.298	125.684	139.966	100.837

Source: Own illustration (New York Times Annual Report)

Table 4: Selected financial items – Netflix ($; 000)

	2015	2016	2017	2018	2019	2020
Revenues	6.779.511	8.830.669	11.692.713	15.794.341	20.156.447	24.996.056
Cost of revenues	4.591.476	6.029.901	8.033.000	9.967.538	12.440.213	15.276.319
Gross profit	2.188.035	2.800.768	3.659.713	5.826.803	7.716.234	9.719.737
Operating income	305.826	379.793	838.679	1.605.226	2.604.254	4.585.289
Net income	122.641	186.679	558.929	1.211.242	1.866.916	2.761.395

Source: Own illustration (Netflix Annual Report)

Table 5: Selected financial items – Spotify (Eur; millions)

	2015	2016	2017	2018	2019	2020
Revenue	1.940	2.952	4.090	5.259	6.764	7.880
Cost of revenue	1.714	2.551	3.241	3.906	5.042	5.865
Gross profit	226	401	849	1.353	1.722	2.015
Operative loss	-235	-349	-378	-43	-73	-293
Net loss	-230	-539	-1.235	-78	-186	-581

Source: Own illustration (Spotify Annual Report)

The analysis of revenues and net profit of the old and new media industry indicates the first difference between them. Comcast and NYT generated lower revenue and lower net profit in 2020 compared to the previous period. Comcast's total revenue fell 4.9% and net profit fell 19.7%. The NYT generated 1.6% less revenue in 2020 compared to the previous period and 28% lower revenue. Comcast and NYT are in the process of transformation and are generating more and more revenue from subscribing to digital content, which should directly affect the cost of revenue. Still, Comcast has a 5.4% lower gross profit in 2020 compared to the previous period. The NYT is rapidly transforming and has almost equal gross profits in the last two periods.

Table following on the next page

Table 6: Gross profit margin (2015-2020)

	2015	2016	2017	2018	2019	2020
Comcast	69,7%	69,6%	70,2%	68,6%	68,4%	68,0%
New York Times	60,9%	59,6%	63,3%	45,8%	45,4%	46,2%
Netflix	32,3%	31,7%	31,3%	36,9%	38,3%	38,9%
Spotify	11,6%	13,6%	20,8%	25,7%	25,5%	25,6%

Source: Own illustration

Netflix and Spotify achieved continuous revenue growth. Netflix revenue was up 24% in 2020 from a year earlier. Spotify revenue was up 16.5% in 2020 from the previous period. Net profit Netflix grew in 2020 by 47.9% over the previous year. Spotify had a negative net profit in all analysed periods. The results of the research clearly show that it cannot be argued that the new media industry is more financially efficient than the old media industry. Spotify's business model shows shortcomings in revenue and gross profit, which Comcast compensates for with revenue.

Table 7: Operating income margin (2015-2020)

	2015	2016	2017	2018	2019	2020
Comcast	21,5%	21,0%	21,2%	20,1%	19,4%	16,9%
New York Times	11,7%	7,2%	10,5%	10,9%	9,7%	9,9%
Netflix	4,5%	4,3%	7,2%	10,2%	12,9%	18,3%
Spotify	-	-	-	-	-	-

Source: Own illustration

The new media industry uses a platform economy model that allows it to significantly reduce the cost of producing and distributing content. The assumption is that it makes higher gross profit margins than the old media industry. The results of the research showed exactly the opposite results. The largest gross profit margin is realized by Comcast, followed by the NYT. The amount and diversification of revenue allows Comcast to maintain a high gross profit margin. The NYT is transforming into a platform economy model and has stopped the decline in gross profit margin. Netflix and Spotify are increasing gross profit margins year after year, but they are still lagging behind the old media industry. The analysis shows a fundamental trend difference. The gross profit margin of the old media industry is continuously declining, while the gross profit margin of the new media industry is continuously growing. The results of the research are shown in Table 6.

Table 8: Net profit margin (2015-2020)

	2015	2016	2017	2018	2019	2020
Comcast	11,3%	11,2%	27,0%	12,6%	12,2%	10,3%
New York Times	4,0%	1,9%	0,3%	7,2%	7,7%	5,7%
Netflix	1,8%	2,1%	4,8%	7,7%	9,3%	11,0%
Spotify	-	-	-	-	-	-

Source: Own illustration

Analysis of operating income margin results indicates changes that are happening in the media industry. Netflix has the largest operating income margin. Operating income margin Netflix is continuously growing, while Comcast has a continuous decline in this financial item. Netflix's growing operating margin growth trend explains the higher capitalization than Comcast. The operating margin analysis indicates the diversity of financial stability within all segments of the

media industry. Netflix has strong financial stability, while Spotify has negative operating income margins. The results of the research are shown in Table 7. The results of the net profit margin analysis are very similar to the results of the operating income margin analysis. The amount and order of selected financial items is the same as for operating income margin.

Table 9: Regression analysis (2015-2020)

| s; R^2>0,8	Revenue	Cost of revenue	Operating income	Net profit
Comcast	7,53%	8,81%	3,41%	-
New York Times	3,15%	11,27%	2,73%	-
Netflix	30,43%	20,71%	56,96%	69,18%
Spotify	25,10%	22,19%	-	-

Source: Own illustration

Regression analysis of the trend indicates differences in the financial performance of selected corporations. Netflix is the most successful corporation with the highest average annual growth rate (s=30.43) and the highest average growth rate of operating income (s=56.96). The average annual net profit growth is 69.18%. Comcast and NYT have an average operating income growth rate of 3.41% and 2.73%. The average net profit growth rate for Comcast and NYT cannot be determined precisely because the coefficient of determination is less than 0.8 (R^2 <0.8). The low growth rate of operating income and the oscillation of the net profit trend indicate changes that have affected the old media industry. Spotify belongs to the new media industries, but did not achieve positive operating income and net profit in the entire analysed period. The results of the analysis indicate significant differences in the financial performance of each of the analysed corporations, regardless of which category they are classified. The results of the research are shown in Table 9.

4.2. User's trend analysis

Analysis of financial items reveals the complexity of the media industry. Netflix has the largest capitalization although it has less revenue than Comcast. Research and trend analysis of the number of users additionally reveals the complexity of the business paradigm of the media industry. The analysis of the number of users is based on the total number of subscribers at the end of 2020. The largest in terms of subscribers is Spotify with 345 million subscribers. Spotify has the worst financial data in the context of gross margin to net profit margin, and also has the largest number of subscribers. The NYT has the lowest revenue, and with 4.39 million digital subscribers, is the smallest of the selected corporations. The transformation of the NYT business enabled the largest increase in the number of users. A comparison of the analysed data from Spotify and NYT indicates the complexity of the research task in the media industry. Netflix has 203.67 million subscribers and, in the last 10 years, has increased its subscriber base 10 times. Comcast has the highest revenue, and the number of users is 10 times smaller than the number of Netflix users, i.e. it has 19.85 million users. 8. One of the goals of the research is aimed at comparing the trend of the number of users with the results of the analysis of financial results. Comcast is facing a broadcast subscription cancellation and the trend regression curve has a negative direction coefficient. Spotify is the largest in terms of number of users. The average annual growth in the number of users is 25.2% with a coefficient of determination of R2 = 0.9732. Netflix is the most valuable corporation within the media industry by capitalization on the NYSE, has the highest average net profit growth rate of 69.18%, and an average annual growth in subscribers of 20.4%, with a coefficient of determination of R2 = 0.9866. Netflix and Spotify have a linear growth trend and the number of users is growing digressively (Lozić 2020).

Figure 1: Monthly subscribers trend (2015-2020)

Comcast Corp.
$y = -0.1814x^2 + 0.4314x + 22.303$
$R^2 = 0.9939$

New York Times
$y = 735.09e^{0.2946x}$
$R^2 = 0.9836$

Netflix
$y = 26.479x + 63.9$
$R^2 = 0.9866$

Spotify
$y = 50.314x + 73.714$
$R^2 = 0.9732$
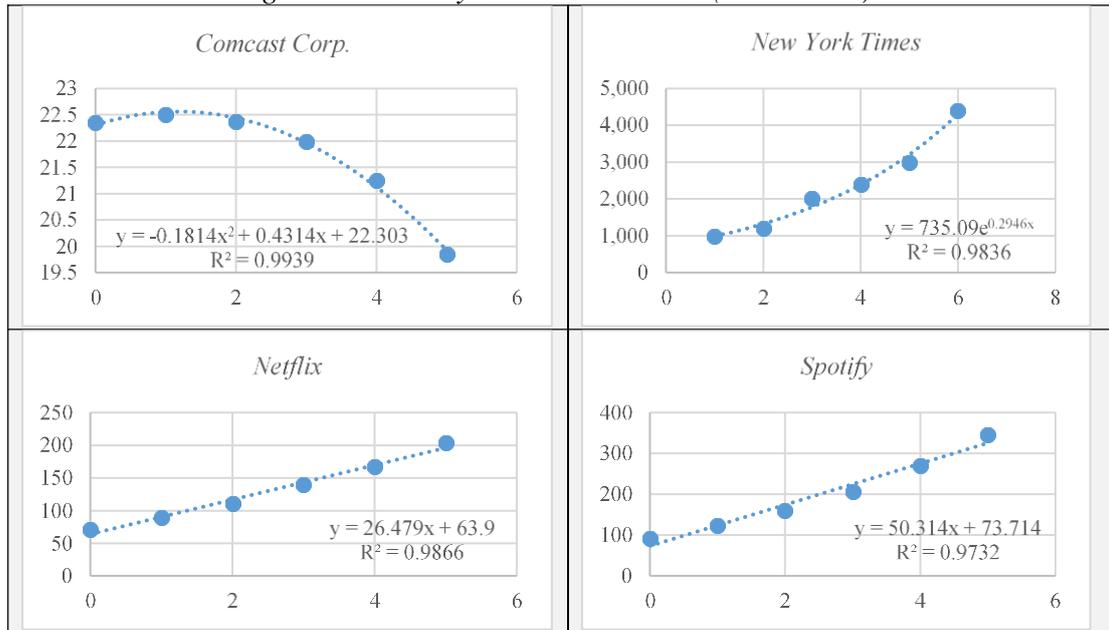
Source: Own illustration

The NYT is the lowest in terms of revenue, and with 4.39 million digital subscribers, it is also the lowest in terms of that item. However, with the transformation of the business into a platform model, the only one has an exponential growth in the number of subscribers. The annual growth in the number of subscribers is the largest and amounts to 34.3% with a coefficient of determination of $R^2 = 0.9808$. The results of the research are shown in Figure 1.

5. DISCUSSION AND CONCLUSION

The results of research and analysis of financial results and trends in the number of users clearly indicate the complexity of research trends in the media industry. The transformation of the content management and monetization model has already significantly affected all participants in the media industry, so it is not possible to talk about a precise division into entities from the old and new media industry. Comcast has the highest revenue and the largest gross profit margin, but the number of subscribers is steadily declining from year to year. In contrast, Spotify has the largest number of subscribers and the number of subscribers is continuously growing from year to year, but it has the lowest gross profit and has a negative net profit. Seven basic points were singled out from the research results:

- The revenue trend of the old and new media industries indicates one of the fundamental differences. The old media industries had reduced revenues in 2020, during the pandemic, i.e. they are less resistant to environmental crises.
- NYT is nearing the end of the transformation of the production and sales model, as indicated by unchanged gross profit at the time of the pandemic
- Spotify generates insufficient revenue and has a low gross profit that does not leave enough room for other costs. Therefore, it cannot be argued that the new media industry is more efficient in all segments than the old media industry.
- Gross profit margin of the old media industry is continuously declining, while gross profit margin of the new media industry is growing from year to year
- Netflix has the highest growth rates of operating income and net profit making it the corporation with the largest capitalization.

- Spotify has the worst financial data, and the largest number of users, which proves that technological superiority and the number of users is not enough to succeed without other management tools-
- The transformation of the NYT business made it possible to stop the decline in gross profit and the exponential growth in the number of subscribers. The NYT business model points to the development of the media industry towards a platform economy.

The seven selected points of discussion clearly indicate the directions for further research into the development of the media industry. In the context of the research questions asked, the research conducted in the paper showed the following results. In the context of the first research question, it can be concluded that at the time of the pandemic, revenues fell to corporations from the old media industry. Netflix and Spotify revenue continued to grow in the pandemic as well. In the context of another research question, the assumption that gross profit will be higher in the new media industry has not proved correct. The old media industry had a higher gross profit margin, but they decreased in the analysed period, in contrast to the gross profit margin of the new media industry, which is continuously growing. In the context of the third research question, the rule that each media subject must be analysed separately is reaffirmed. The number of Comcast users is steadily declining, but the number of NYT digital users is growing exponentially. The number of Netflix and Spotify users is growing linearly, but that growth is declining. The results of the research confirm the claims about the transformation of the media industry, and confirm the wide range of possibilities for further research.

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THE IMPACT OF COVID-19 ON CONSUMER SHOPPING BEHAVIOR: DURING AND AFTER LOCKDOWN IN MOROCCO

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ABSTRACT
This study examines the impact of Covid-19 on consumers' buying behaviors during and after lockdown. Consumers' experienced one of the most dangerous pandemics in the 21ˢᵗ century. The repercussions of this virus impact the way consumers shop. Being subject to unplanned changes will eventually shake up the lifestyle of individuals. In order to bring an answer to different questioning about the change of consumers' buying behaviors, the paper contains a literature review to explain different variables affecting consumers' behaviors in such epidemic situation, which allows deducting three hypotheses. To check them out, a survey was conducted using a quantitative research methodology. The questionnaire was carried out to answer the research problem sought. The collected data demonstrate that the experience of lockdown and health measures developed an emotion of fear among Moroccan consumers, which influenced buying behaviors and habits. Therefore, the generalization of the vaccination campaign can be an opportunity to return to old shopping habits.
Keywords: *Consumer Behavior, Buying Behavior, Covid-19, Morocco*

1. INTRODUCTION

Since December 2019, the world has witnessed new respiratory disease(Faour-Klingbeil *et al.*, 2021), which has not only a social and economic impact but also a psychological impact among citizens. Amid this Covid-19 pandemic (also called coronavirus), people have been faced many changes in terms of lifestyles, habits, and consumption due to health measures taken by authorities. The ubiquity of Covid-19, and its impact on buying habits, led us to believe that the consumer is undergoing an unexpected change in his life. This change, accompanied by uncertainty about the future, will undoubtedly have an impact. This reasearch paper aims to study the impact of Covid-19 on consumer buying behavior among in Morocco. This study deal with two main periods: the lockdown period (from March to June 2020) and the after lockdown period, which is the beginning of the post-Covid-19. Since that time, many measures were taken such as emergency state, the opening and closing of boards, the cessation and the resumption of flights, and the control of the continuity of certain business activities according to the pandemic situation. Those unexpected procedures lead to several questions concerning consumers' buying behaviors: Are health measures and lockdown a reason to influence consumers' buying behaviors? Can fear and panic developed due to the pandemic explain the change in consumers' purchase behaviors?

Will vaccination be the key to return to old buying habits? Through a survey, an answer to the previous questions will be demonstrated. This work is based on an analysis of data collected from Moroccan consumers to reject or accept the research hypotheses developed.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT
2.1. Developing new purchase behavior due to Covid-19 pandemic lockdown
On March 02nd, 2020, the first case of Corona virus was registered in Morocco. The authorities have decided to adopt large-scale drastic measures in accordance with the directives of his majesty King Mohammed VI and under his direct supervision in order to preserve the country (Hadrya, Soulaymani, and Hattimy, 2020) from the spreading of the virus. During the same month, several measures were taken, including suspension of air flights and maritime links to and from countries, the mandatory of wearing a mask for the whole country (Layelmam *et al.*, 2020), and on March 20th, 2020, the lockdown followed (Khomsi *et al.*, 2020). This last decision was new inside the society. Morocco allowed the opening of essential retailers with the respect of social distancing with a limited number of customers, hand sanitizers available for clients, and the usage of masks by clients. Moreover, except for people still working in the office, one member of each family is allowed to go out from the home to do groceries with a unique authorization paper from the government. Consumers were falling into new routines for eating, working, home-schooling, socializing, exercising, and shopping (Brunt, 2020). People behave differently when faced with threats (Szymkowiak *et al.*, 2020), such as fear. This new lifestyle conduct by emotions has emerged a panic buying behavior (Islam *et al.*, 2021) and stockpiling of food and daily supplies (Cecchetto *et al.*, 2021) since people couldn't expect or anticipate the duration of the pandemic outbreak. The measures taken to limit the spreading of the covid-19 virus has generated significant disruptions and social anxiety on consumer behavior. All consumption is time-bound and location-bound (Sheth, 2020). This change among consumers' behaviors is explained by the role of emotions in buying decisions, post-purchase attitudes. Indeed, the confinement and staying at home, people in Morocco, and many other countries, were facing new characteristic attitudes and behaviors among society. A person unconsciously is deeply into this indoors staying and shopping culture. Inside this context, consumer thoughts, feelings, and behaviors vary considerably (Stephens, 2017). Covid-19 has changed the nature of businesses around the world (Bhatti *et al.*, 2020), consumers during lockdown were limited to buying essential products, their experience has changed both in-store and online shopping. A research conducted in South Korea shows that consumers visit more neighborhood stores where they have little interaction with other consumers unlike visiting hypermarkets and large supermarkets (NielsenIQ, 2020). Consumers think more before acting, their fear increases when they think about what this crisis means to them and what it means to their family, friends, and society in general. They try to adapt to the new normal life which no future projection is clear. As well as consumers, businesses worked hard to adapt to the new market requirement. Grocery retailers have implemented new solutions such as e-commerce and deliveries (Pantano *et al.*, 2020). In Morocco, a huge growth has been known in the e-commerce field. According to Interbank Electronic Banking Center (CMI), online transactions up 43% in 2020 (MapNews, 2020), this number shows the impact of the health crisis on shopping behavior. Consumers are ready to experience a new way of purchasing with the intention of protecting themselves from the virus.

2.2. Consumer purchase behavior after the lockdown
After few months of lockdown, authorities try to maintain the spread of the virus through the sanitary state of emergency that varies from one country to another and sometimes even from one region to another. So, several countries decided to revive the economy by reopening businesses, which is also the case of Morocco.

Developing new habits of shopping behavior during lockdown has played a crucial role in the way how consumers buy after the lockdown. Studies about consumer behavior after lockdown are still limited because the situation changes continually and rapidly depending on the pandemic situation. The year 2021 is marked by the Covid-19 vaccination campaign, so as to achieve an end to isolation and social distancing, countries around the world are rushing to vaccinate the maximum possible number of citizens. Moreover, consumers are considering the way their life will be when a majority of people will be vaccinated(Cheung, Peterson, and Zaharchuk, 2021). Two different research conducted by Numerator Intelligenceand Shopkick considered that many behaviors are likely to stick in post-Covid (Numerator, 2021) and conclude that U.S consumers do not intend to change their shopping habits or renounce safety precautions (Redman, 2021). Despite that, a report by IBM concludes that U.S consumers want to see the rate of vaccination excess 70% to feel more comfortable and prepare themselves to return to their old habits before the pandemic, the pre-Covid era (Danziger, 2021). All those observations push to reflect on consumers' confusion about their behaviors and future. Indeed, this uncertainty could be explained by all those flexible and changeable events lived from late 2019 till 2021 that make it hard for consumers to know themselves and for researchers to study their buying behavior.

2.3. Hypothesis development
Based on the previous literature review, and the problem research and objectives, the following null and alternative research hypotheses were formed:

2.3.1. First hypothesis
Experiencing for the first time such new life due to a pandemic can influence the consumers' shopping behaviors. Consumers are obliged to respect all the health measures and the lockdown made by authorities.

- *HO_1: There is no dependence between experiencing a new lifestyle (lockdown and health measure) and consumers' buying habits behaviors.*
- *H1: There is a dependence between experiencing a new lifestyle (lockdown and health measure) and consumers' buying habits behaviors.*

2.3.2. Second hypothesis
Related to the previous hypothesis, experiencing an unexpected situation without having visibility into the future can develop fear and panic emotions, which can explain the consumers' purchase behaviors.

- *HO_2: There is no relationship between fear and panic and consumers' buying habits behaviors*
- *H2: There is a relationship between fear and panic and consumers' buying habits behaviors*

2.3.3. Third and last hypothesis
Authorities around the world work hard to fight the pandemic of Covid-19. Vaccination campaigns begin in many countries and Morocco too. The generalization of vaccination can be the only way to give up many measures taken to face the propagation of the virus. Consumers' can be ready to return to their old buying habits thanks to the vaccine.

- *HO_3: There is nodependence between vaccination campaign and consumers' buying habits behaviors*

- *H3: There is a dependence between vaccination campaign and consumers' buying habits behaviors*
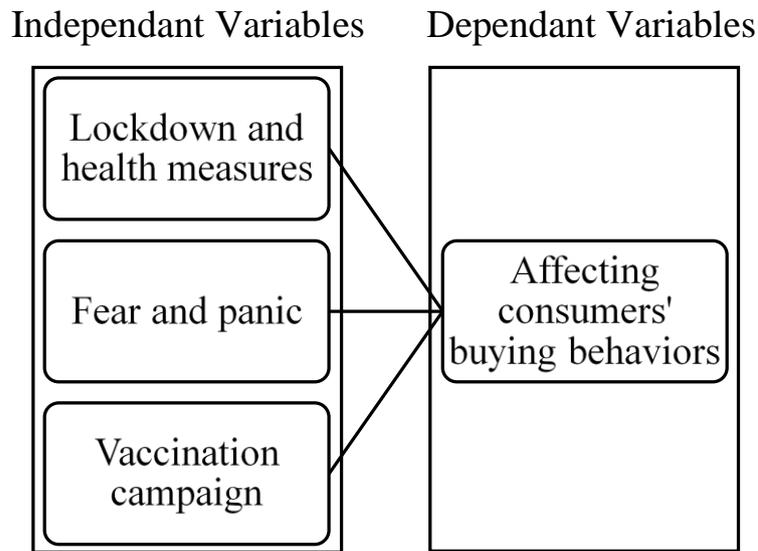
Figure 1: Research Model
(Source: Authors' own elaboration)

The previous research model explains the previous hypothesis, which is developed to be empirically tested.

3. RESEARCH METHODOLOGY AND DATA COLLECTION

To make sure to get an answer to the research problem and to verify the hypotheses, a survey was conducted to collect the necessary data from Moroccan consumers.The questionnaire design is organized into three (3) parts in a total of fifteen (15) questions. The first part examines consumers' behaviors during the lockdown, the second deals with the after lockdown period, and the last part is dedicated to sociodemographic variables to know more about the sample characteristics. The survey was conducted online using social media (mainly Facebook and WhatsApp) to collect data. The formula used to calculate the sample size is that developed by Cochran (1977).

$$N = \frac{Z^2 \text{p}(\text{p} - 1)}{e^2}$$

With:
N = Population size (36 690 000 habitants in Morocco)
Z = Sampling confidence level (95% confidence level)
p = Estimated proportion of the population that represents the characteristic (p = 0.5)
e = Margin of error chosen (5% which means e = 0.05)

Its numerical application gives a result of 384,159, which means a minimum of 385 responsesis needed. A total of 413 were collected in a week (from 29th April to 6th May 2021), the questionnaire was distributed in French and Arabic as the most spoken languages in Morocco using Google Form to make the diffusion easy through a link. Table 1 below shows the respondents' sociodemographic characteristics.

		Fréquence	%	Valid %	Cumulative %
Gender	Female	269	65,1	65,1	65,1
	Male	144	34,9	34,9	100,0
Age	*between 18 and 24 YO*	240	58,1	58,1	58,1
	between 25 and 39 YO	136	32,9	32,9	91,0
	between 40 and 60 YO	35	8,5	8,5	99,5
	more than 60 YO	2	,5	,5	100,0
Occupation	Student	205	49,6	49,6	49,6
	Civil servent or Employee	133	32,2	32,2	81,8
	Liberal profession	22	5,3	5,3	87,2
	Retraité(e)	1	,2	,2	87,4
	Looking for a job	14	3,4	3,4	90,8
	Freelancer	12	2,9	2,9	93,7
	Housekeeper	12	2,9	2,9	96,6
	Other	14	3,4	3,4	100,0
Monthly Income	*Less than 3000 DH*	223	54,0	54,0	54,0
	3001 - 6000 DH	67	16,2	16,2	70,2
	6001 - 9000 DH	43	10,4	10,4	80,6
	9001 - 12000 DH	36	8,7	8,7	89,3
	More than 12000 DH	44	10,7	10,7	100,0
Total of respondents		413	100,0	100,0	

Table 1: Sociodemographic variables of respondents
(Source: Authors' own elaboration using SPSS and EXCEL)

4. DATA ANALYSIS AND RESULTS

The software SPSS Statistics 25 is used to analyze the data collection. The reliability measured from the collected data according to the Cronbach's Alpha coefficient is 0,697, which is acceptable in exploratory research.

Cronbach's Alpha	Number of Items
0,697	12

Table 2: Reliability statistics
(Source: Authors' own elaboration using SPSS)

The main objective is to test the hypotheses of the research. In order to realize that, the statistical test used is chi-square to demonstrate if the research hypothesis will be rejected or not.

4.1. Testing H1
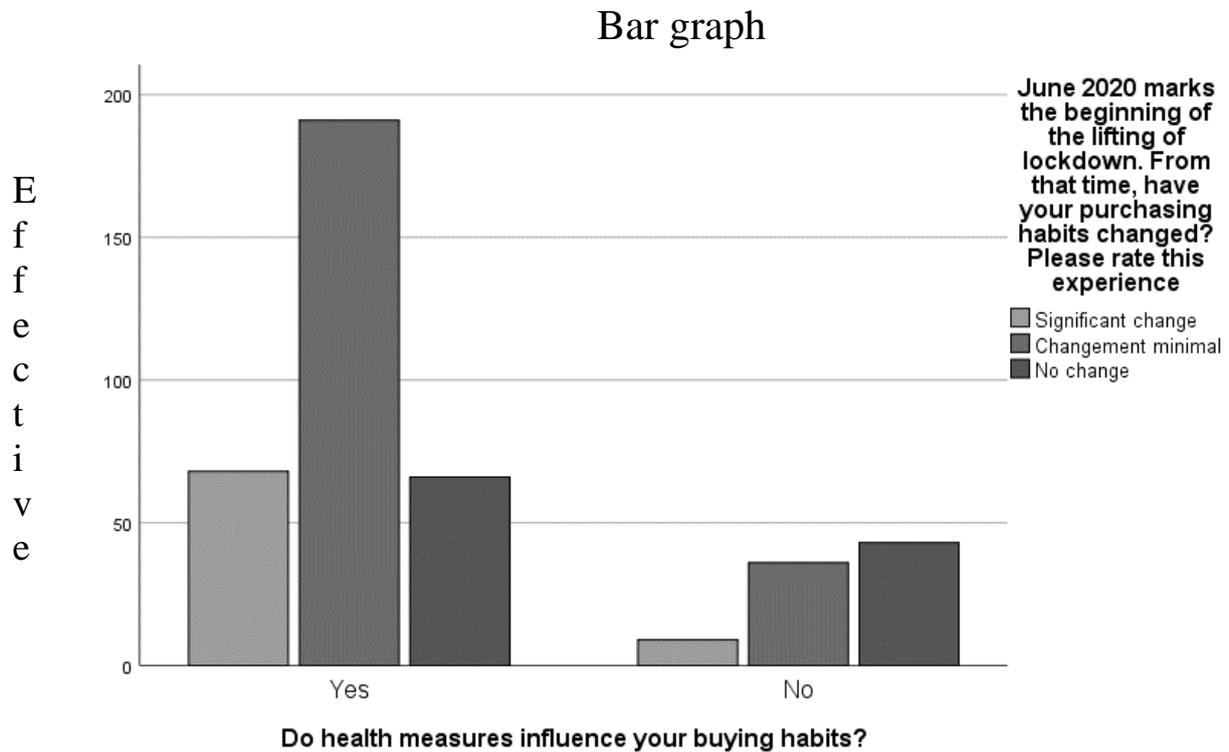
Figure 2: Cross analyze of health measures relationship and buying habits during the lockdown and after the lockdown
(Source: Authors' own elaboration using SPSS)

The bar graph below explains that the majority of respondents, 78,70%, believe in the influence of health measures on buying behavior. In this category, 58,77% think that their purchasing habits change minimally, and 20,93 % experienced a significant change than the rest (20,30%) believe that there is no change.

	Value	ddl	Asymptotic (bilateral)	significance
Pearson chi-square	$29,664^a$	2		,000
Likelihood ratio	27,565	2		,000
Linear-by-Linear association	23,952	1		,000
N of Valid cases	413			

a. 0 cells (0,0%) have expected to count less than 5. The minimum expected count is16,41.

Table 3: Chi-square test for H1
(Source: Authors' own elaboration using SPSS)

The result above demonstrates that the significance is lower than 0,05 which means that the variables studied are dependent. The health measure explains the change in consumers' buying behavior. So, H1 is accepted.

Acceptance of H1: There is a dependence between experiencing a new lifestyle (lockdown and health measure) and consumers' buying habits behaviors.

Accepting H1 means that the change of consumers' buying behaviors depend on the lockdown. There is a relationship between what consumers' lived during this period and their shopping habits.

4.2. Testing H2

		I don't know yet when I will restart this activity				
		Within few days	In few weeks	In a few months	I don't know yet when I will restart this activity	Total
If you disinfect your merchandise, why do you do it?	Because of fear of being infected	76	52	73	35	*236*
	Because it's a trend (everybody does it)	5	8	6	0	*19*
	Out of habit (It's a habit before Covid-19 appears)	16	15	15	19	*65*
	Total	*43*	*72*	*87*	*118*	*320*

Table 4: Cross-tabulation analyzing the relationship betweendisinfecting products and consumers' buying habits during the lockdown and after the lockdown
(Source: Authors' own elaboration using SPSS)

The table 4 above analyze the reason behind disinfecting merchandise after purchase and the time needed to restart doing some activities like going to beauty salon, visiting crowded spaces (souks), using public transportation (buses and grand taxi) … The result shows that 73,75% of respondents assume that they disinfect products because they areafraid of getting the virus. In this category of respondents, 32,63% restart some activities in few days and 27,12% in few months, and 21,61% still do not know when to restart some activities then 18,64% return to do some activities in few weeks.

	Value	**Ddl**	**Asymptotic (bilateral)**	**significance**
Pearson chi-square	19, 489[a]	6		,003
Likelihood ratio	27,565	6		,002
Linear-by-Linear association	1,948	1		,163
N of Valid cases	320			

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 2,55.
Table 5: Chi-square test for H2
(Source: Authors' own elaboration using SPSS)

The result above demonstrates that the significance is lower than 0,05 which means that the variables studied are dependent. The fear caused by health measure explains the change in consumers' buying behavior change. So, H2 is accepted.

Acceptance of H2: There is a relationship between fear and panic and consumers' buying habits behaviors

Accepting H2 means that the change of consumers' buying behaviors depend on the emotion of fear. There is a relationship between what consumers' felt due health measures and their purchase habits.

4.3. Testing H3
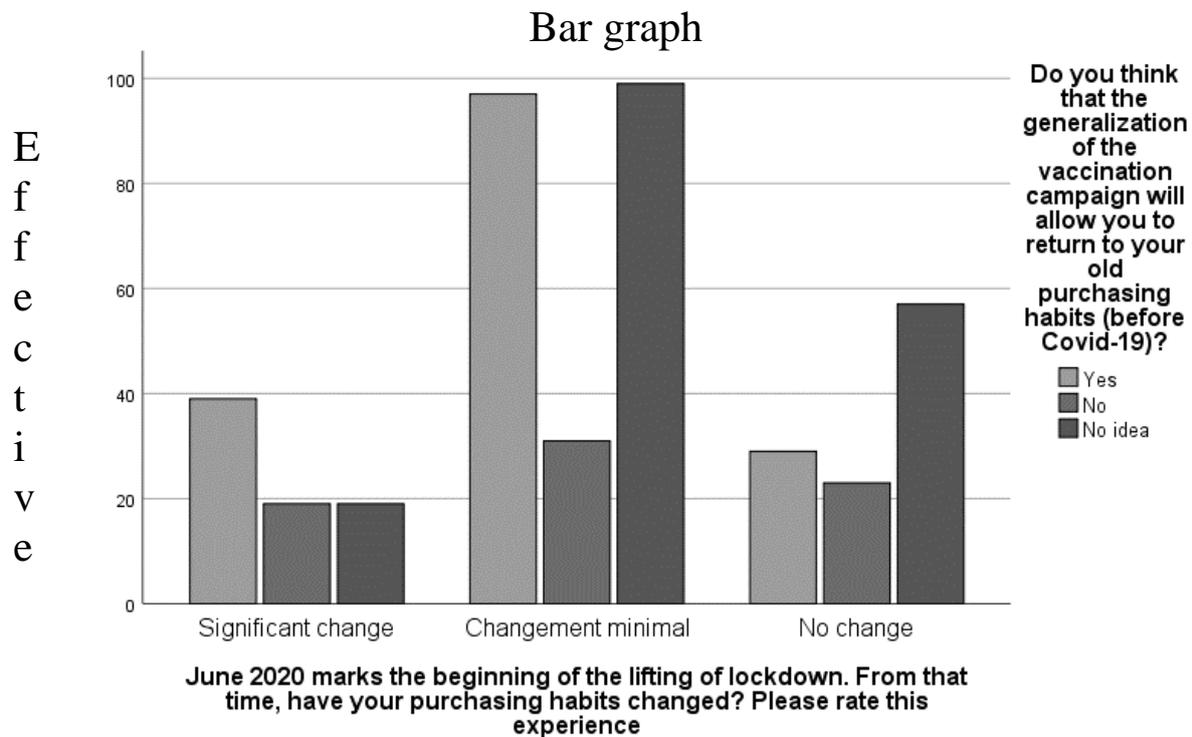
Figure 3: Cross analyzingthe relationship between the change of purchasing habits and generalizing vaccination with buying habits during the lockdown and after the lockdown (Source: Authors' own elaboration using SPSS)

The bar graph explains the relation between the generalization of the vaccination campaign and the return to old habits. This result shows that 54,96% of respondents think that their purchasing habits have changed minimally since the lifting of the lockdown, including 23,97% do not have an idea if the generalization of vaccination campaign will make things as before the appearance of corona virus. It shows that those respondents are still confused about the future. On the other hand, 23,48% are positive about the future and believe that vaccination could be the key to the return to old habits. Only 7% of respondents who feel the minimal change think that the vaccination will not change anything.

	Value	Ddl	Asymptotic significance (bilateral)
Pearson chi-square	$20,742^a$	4	,000
Likelihood ratio	21,950	4	,000
Linear-by-Linear association	14,736	1	,000
N of Valid cases	320		

a. 0 cells (0,0%) have expected to count less than 5. The minimum expected count is13,61.

Table 6: Chi-square test for H3
(Source: Authors' own elaboration using SPSS)

The result above demonstrates that the significance is lower than 0,05 which means that the variables studied are dependent. The health measure explains the change in consumers' buying behavior change. So, H3 is accepted.

Acceptance of H3: There is a dependence between vaccination campaign and consumers' buying habits behaviors

Accepting H3 means that consumers hope that vaccination will be a solution to get back to their old buying behaviors.

5. DISCUSSION, LIMITATION & FUTURE RESEARCH AVENUE

The results show that the research model used is an answer to the general question of the research. Indeed, the change of buying habits is explained by the health measures and lockdown then fear or panic. In marketing, emotions are powerful because they affect consumers' motivation and then buying behavior. This new living condition is an environmental factor caused by the propagation of corona virus. So, groups of people share common rituals and behaviors, which can explain the change in consumers' buying behaviors. The fact that the majority of respondents believe that the generalization of vaccination will allow a return to old purchasing habits can be explained by the hope of overcoming this emotion and feeling of fear and panic. This feeling can be a motivation to return to normal life and therefore to the purchasing habits of before. This research is limited. No one can deny that the research methodology has many weaknesses such as issues with sample and selection. The questionnaire was distributed on social media, and the users are not representative of the population of Morocco. Digital users are still limited in the country. The majority of respondents are part of the researchers' relational network. Additionally, the urban and rural aspects were neglected as well as the geographic aspect. From the socio-demographic variables, it obvious that the majority of respondents are students so the results of the sample cannot be judged as representative. When it comes to avenues for future researches, it is recommended to launch studies about the implication of motivation in consumers' choices and buying decisions in a post-Covid-19 era (after the generalization of the vaccination), consumers will get back their old buying habits or this period of Covid-19 will be more powerful and will change completely consumers' shopping behaviors.

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CLUSTER ANALYSIS AS A POWER-PLAY POTENTIAL FOR THE FINANCIAL MARKETS

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ABSTRACT

Under the broader geographic, economic and social scope, cluster leadership gives the best possible answer to uneven regional growth and development conditions for collaboration among different organisations. In practice, it means that cluster organisations connect multivarious industry stakeholders with different value-added component. They often investigate or replicate the scalable processes while monetising industrial knowledge. Moreover, they are reassessing network opportunities relevant to their daily business activities. Having all mentioned in mind, the authors are explaining the contribution of qualitative research strategies in management science while encouraging financial markets to find value creation initiators in the cluster life cycle. In addition to that, the authors review current cluster knowledge and expand beneficiary outcomes in the existing mixed methodology analysis. For that purpose, the authors screen industrial potentials and the financial impact of the cluster life cycle in the last twelve years from the Mendeley database. In the discussion part of the paper, the authors connect correlation in futures outcomes of mixed methodology in research to several areas of interest. These areas of interest stand for digitalisation of public administration, clean technology and renewables, sustainable transport and charging stations, data cloud capacities, buildings' energy efficiency and training support for digital skills. In the conclusion part, the authors shall summarise all valuable findings related to the potential of cluster organisations on financial markets as a part of interest and studies in science and business.

Keywords: cluster organisations, cluster life cycle, value creation, leadership, financial markets

1. BACKGROUND OF THE CLUSTER ECOSYSTEM

Industrial clusters are dynamic and complex concepts formed by the multivarious industry stakeholders with different value-added component (Rocha, 2004). Their interactions result from informative collaborations that raise interest for digitalisation of public administration, clean technology and renewables, sustainable transport, charging stations, improving data cloud capacities, improving energy efficiency and training support for digital skills. The majority of prior research in the field has applied to support the strengthening of collaboration of social cohesion and proposing new orientations in the collective learning process (Patias et al., 2016). To rectify the problem of cluster leadership in the life cycle, future directions of developing the concept of clustering (Gagnidze, 2015) is crucial in delivering a sustainable and efficient ecosystem.

While taking three lenses into account, the background of the cluster ecosystem aims to carry out a triple helix mechanism (Ivarsson, 2013). Because of that, the authors deliver only relevant information about innovation support providers by providing proactive guidelines in the sustainability sphere of cluster organisations (Demir, 2016). Also, the authors hope that outcomes from this paper will lead to stimulation of innovation activities with the adoption of goals and value for new growth opportunities (Yang & Černevičiūtė, 2017). This allows the conclusion that the intermediation mechanism in the cluster life cycle will be fluent and transparent if an appropriate financial benchmark as XBRL standard will become a trademark for economic digitalisation and transparency (Gostimir, 2015) in the triplet helix model (Ivarsson, 2013). When applying these findings to industrial clusters in Croatia, complex methods require complicated calculations of proper corporate governance. The majority of prior research has applied key roles and functions of the domestic and international cluster life cycle. Results provide a basis for authors motivation to connect correlation in future outcomes of mixed methodology research to several areas of interest. Nevertheless, authors establish stronghold position and reflections through cluster organisation opportunities with the literature review in section two. In section three, they validate how cluster organisations and sub-organisations achieve technological transfer across organisational boundaries. Section four proposes directly contributing to cluster organisations in practice. Section five refers to the conclusion, while section six lists the relevant bibliography.

2. LITERATURE REVIEW OF CLUSTER ECOSYSTEM

More than ever before, from today's perspective, the cluster life cycle is defined as a value proposition concept with a geographical, social, economic, and political dimension. A well-known issue with cluster organisation is that they don't consider the intrinsic motivation and quality of highly qualified management knowledge during the cluster life cycle. A pretty good example of this case has been given by conducted research in Spain on innovation performance of small and medium-sized enterprises by Valdez-Juárez, de Lema and Maldonado-Guzmán (2016). Their results show positively correlated efforts on innovation performance in local small and medium-sized enterprises. Broadly translated our findings comes from the fact that exact relationship as a correlation of knowledge management has been proved in mobile telecommunication companies in Jordan (Hajir, Obeidat, Al-dalahmeh, & Masa'deh, 2015), the Brazilian information technology industry (Junges, Gonçalo, Garrido, & Fiates, 2015), Iranian manufacturing factories (Ebrahimi Mehrabani, & Shajari, 2012) and Nigerian hotel industry (Lasisi & Dabiri, 2015). Despite the limitations, these findings are valuable in light of emphasised consistency from the perspective of time lag investors. Overall, results demonstrate a strong effect of clear guidance for the application of empirical studies in the research fields such as information systems (Wynn & Williams, 2012), SMEs and environment (Jeppesen, 2005), critical management studies (Junor, 2001; Fleetwood, 2005; Marobela, 2006; Rasmussen, 2011), industrial marketing (Easton, 2010), migration (Peter & Park, 2018), labour process theory/employment relations (Mearns, 2011), performance measurement (Armstrong, 2019), organisational case studies (Vincent & Wapshott, 2014), entrepreneurship (Hu, 2018), social sciences (Fletcher, 2017; Price & Martin, 2018), and socio-technical transition (Sorrell, 2018). Future research on cluster organisations might extend the explanations of constant interaction of theoretical considerations from cluster leadership as a foundation for the case study for various reasons. Many of the currently retrieved articles from Mendeley's database demonstrate the authors interest in the cluster life cycle and determination toward its success. In practice, future research could examine these cooperations in cluster model organisations to identify such endeavour outside of traditional corporate boundaries. In that way, undertaken conditions could maintain pipelines for the growth perspectives on the new markets (Ivarsson, 2013).

Based on these facts, a relatively new and complicated management challenge could offer more likelihood of long-term success of artificial intelligence in capital intensive industries (Johnson, Buehring, Cassell & Symon, 2006). In connotation of international interoperability, new cluster models create unique purpose entities and role models for the start-up's industry in the financial ecosystem. The IVC Research centre report displays these findings in Figure 1, which drives capital raising and funding opportunities as natural intermediaries for economic agents, social community, and financial markets in the example of Israel leading tech cluster formation.
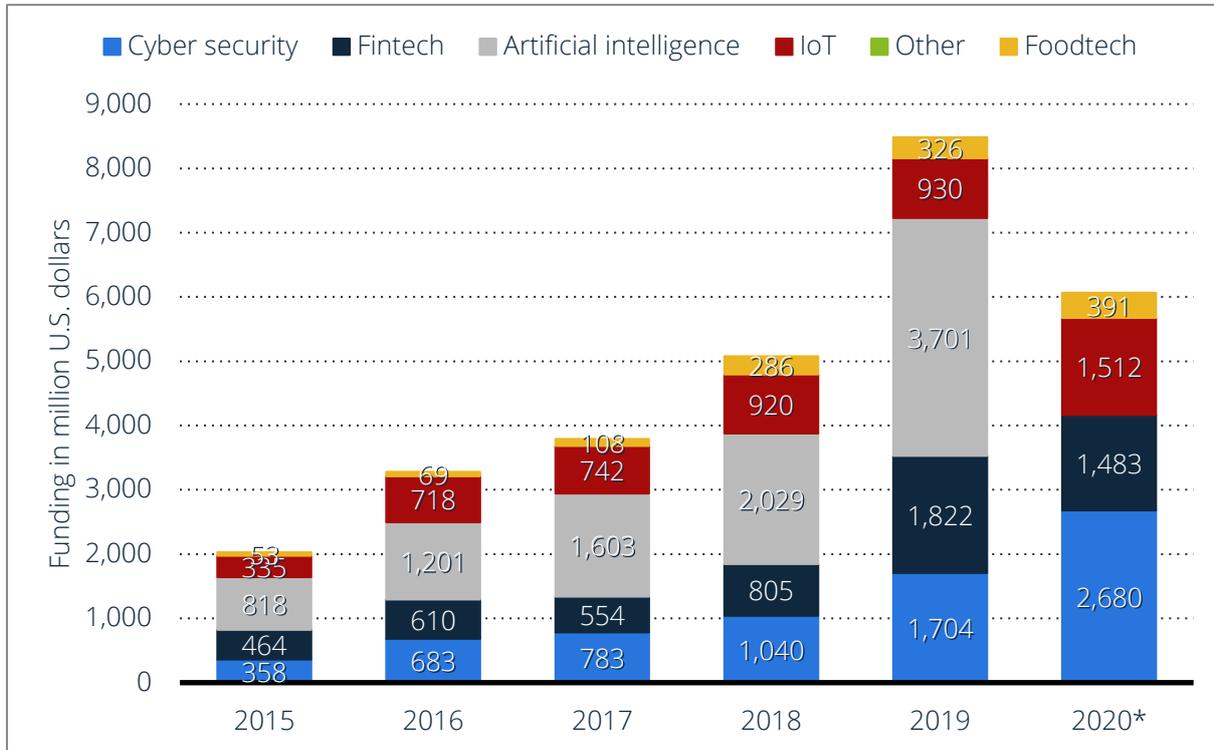

Figure 1: Capital raised and funding of leading tech clusters in Israel from 2015 to 2020 (in million US dollars)
(Source: IVC Research Center)

This data suggests that characteristics, competencies, and styles are created on collaboration trust and skillset innovation. Another promising finding from International Institute for Management Development (IMD) was that allocation of shown that the Israel tech clusters have shown progressive growth in productivity and employment of intellectual property (Turetsky, 2016). However, when pointing to Croatia, industrial clusters are mostly connected on a horizontal level, meaning that the companies don't cooperate to produce a standard product. According to the Croatian Chamber of Commerce, there are currently forty clusters. Most of them participate in joint projects or joint performance on the market with a mission to bridge financial, organisational and legal acts (Dragičević & Obadić, 2014). In that way, only top domestic cluster organisation facilitate goals and expectations among all parties. This result highlights that little is known about the predictive validity of cluster models. However, the question is how successful they are and which stage of the cluster life cycle they perform.

3. TECHNOLOGICAL TRANSFER ACROSS ORGANISATIONAL BOUNDARIES
Until recently, there were no methods for business model innovation that ensure strong networking opportunities for knowledge sharing, service development, and technology transfer. Nowadays, it is an argument that lurks short term opportunities that could be spurred by the enrichment of the cluster life cycle.

Therefore, the future orientations of developing the concept of clustering (Gagnidze, 2015) with the foremost bearers of knowledge (Ranga & Etzkowitz, 2013) will be crucial to complement the offer of quality services, the quantity of capacity while developing sustainable and efficient system. Due to the full uncertainty effect of the coronavirus pandemic, it is still unknown who and how needs to adapt organisational units across organisational boundaries. Together, the present findings confirm that the technology ecosystem should test and explore an agile, robust and well-prepared system for future outcomes. For instance, cluster organisations active in deep-tech sectors search for a business pipeline in scientific advancements and new patents. From the view of professional management of the cluster, organisations search for new outcomes in the production of advanced materials, robotics, semiconductors services, progressive vision, sensors, quantum, and next-generation healthcare. Planned comparisons revealed that growing segments in new technology and scarce resources combine know-how with emerging technologies in cluster organisations. While having this in mind, the authors present a promising external project via the Devpost platform – CommedicAI. The results from the external project confirm that Commedic(AI) stand for a pre-clinical simulator that facilitates the augmentation of skills in healthcare by using artificial intelligence to teach clinicians while interacting with data results in diagnostics and predictive medicine (Devpost, 2021). This result highlights that little is known about the practical implication on the vital suits sectors in cluster sorganisations while innovating artificial intelligence application and life sciences processes, as in Table 1.

Artificial intelligence application	Life science process	New outcomes
Preoperative planning - visual data mitigation with multi-modal inputs. Less informative diagnostics dana help us to create specific virtual reality	**Supervised learning** - accuracy, speed and privacy	Improving process of visual odometry, enhancing simultaneous localisation of visual mapping, improving surgical instruments
Intraoperative guidance - in short, period, detect environmental variance as guidance for endoscopic navigation and augmented reality	**Semi-supervised learning** - real-time precision, adaptation to precision and high resolution	Improving dynamics modelling and kinematics, deterioration toward dana management and simulations, improving Da Vinci surgical robot
Surgical robotics - developing new models and knowledge based on localisation and mapping	**Reinforcement learning** - safety, robustness and complete precision	Additional segmentation and medical devices tracking, proposition for 3D issues tracking and reconstruction, improving continuum and nanorobots

Table 1: Optical tracking simulators as CommedicAI pre-clinical simulator facilitates the augmentation of skills in healthcare by using AI to teach clinicians to interact with the data results in diagnostic and predictive medicine
(Source: Author's project from Devpost, April/May 2021.)

The dataset is reachable via repo in GitHub, and it is collected from two sources on the reliability and usability of the data sources. Tracking each category in models is supervised by ISO 13485 on the ladder of technological change across organisational boundaries. The applicability of these results represents 150 data-image through the simulator's output model. They enable the communication between artificial intelligence in the pre-clinical learning environment. Also, new model outcomes represent a practice-oriented environment from the static image of organs toward dynamic organ function. From these results, it is clear that the simulator has built an image classification model while using the Inception V3 model as a base with a couple of CNN Layers as tops. It transfers the learning process with unfrozen weights of underlining Inception layers for re-training and re-valuation. In addition, the model has shown that the GRAD-CAM heatmap demonstrates and improve model explainability of collected data

sets. When comparing these results to those of older studies, it must be pointed out that the pseudonymisation scenario could make the process more transparent and agile. As stated above, the pseudonymisation scenario in Table 2 is covered and responded to by ISO 13485 for medical devices. This scenario model applies a solution to new EU IVD regulation based on the current knowledge.

Pseudonymisation step	Pseudonymisation scenario
First	Data subjects are linked to the data controller and pseudonymisation entity
Second	Data subjects interact with data processor which provides services for data controller and pseudonymisation entity.
Third	Data subjects are selecting crucial information from data controller known as identifier and its pseudonym
Fourth	Data controller and pseudonymisation entity revaluate data and do reverse
Fifth	Data subjects are involving a trusted third party and pseudonymisation entity in the scenario model.
Sixth	Pseudonymisation secret initiates and develops new activities for data subjects.

Table 2: Pseudonoymisation scenario for data manipulation in CommedicAI
(Source: Author's project from Devpost, April/May 2021.)

Besides, this regulation will be mandatory in 2022, and it represents a quality management system explicitly used for medicals devices. In addition to the above mentioned, the result ties nicely with previous studies wherein disruptive innovation in the clinical learning approach provide incredible benefits for doctors and patients while receiving a more precise diagnosis from simulation and training, as it is in Figure 2.
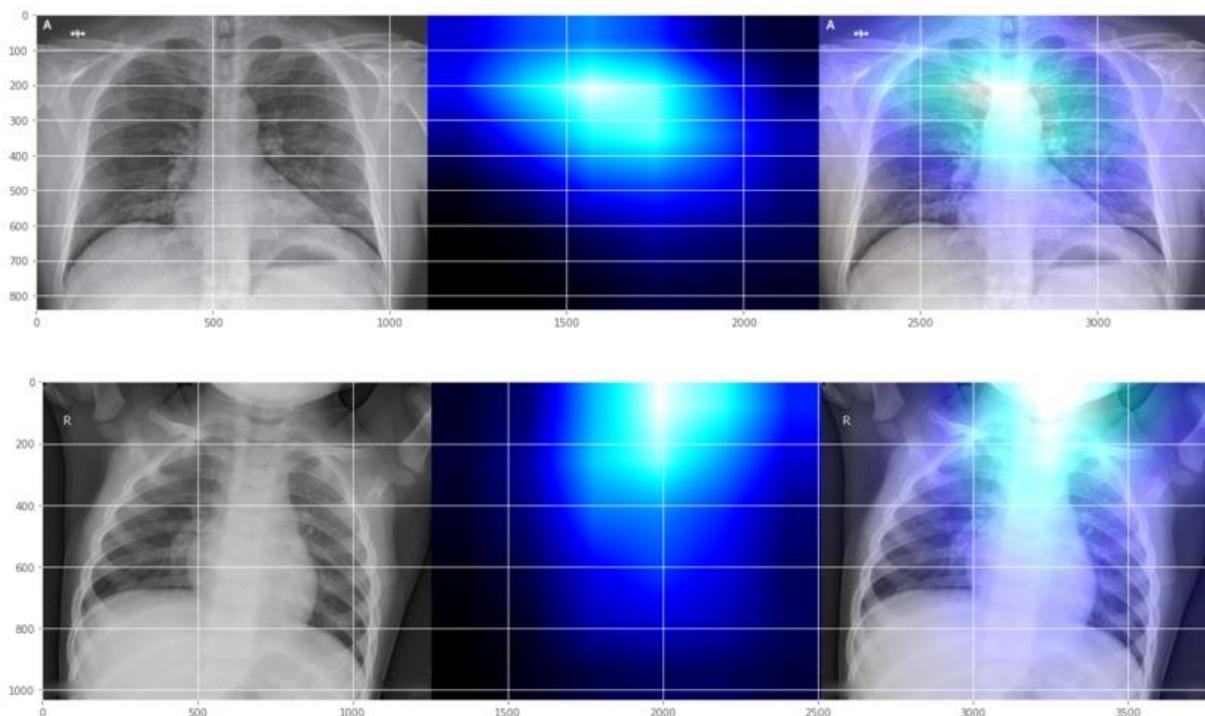
Figure 2: Highlighted infected region for Covid-19 infection and normal patient lungs
(Source: Author's project from Devpost, April/May 2021.)

Overall it helps in: surgical training and teaching, remote cooperation between multidisciplinary teams, protection in privacy data, reducing cybercrime, early detection of diagnosis based on audio and visual information and developing professional ethics in artificial intelligence. Finally, it is worth discussing these promising facts revealed by technology transfer results via technology cluster such as European Medtech hubs. In line with previous opportunities in cluster interest, this maintains significant scale cooperation as a rich supply of start-up companies within companies, research institutes, and clinics (Klein, 2015). At this stage of understanding, authors believe in an excellent supplier backbone opportunity and first-rate access to research facilities with easy access to funding. To test whether this is equivalent across different cluster organisations and life cycles, authors present a design between technology and humans to release an impressive potential and continuum passing of technology and knowledge. The main conclusion that can be drawn from the chapter delivers incredible results in process innovation in Medtech cluster organisation. At the same time, business formation in the cluster is at the pole position. Also, this may constitute the object of future studies in the sphere of financial markets and open the path in healthcare-related industries. In the next section, the authors implement cognitions that contribute to cluster organisations' in practice.

4. OPPORTUNITIES FOR CLUSTER ORGANISATIONS' IN PRACTICE

The innovation process in cluster organisations creates a positive spillover effect when stakeholders collaborate and co-localise in spatial proximity. In that case, the outcome is greater than the sum of development, diffusion, and innovation as individual parts. However, as far as the authors know, no previous research has investigated a pre-clinical simulator that facilitates the augmentation of skills in healthcare by using artificial intelligence (Dossierplus et al., 2019). A further novel finding is that factors that create knowledge inputs to the innovation process must be structured in compilation, storage and use of business data. That's the reason why the labour force used innovation in research and development activities in demands side factors (Ivarsson, 2013). Opportunities for cluster organisations attract strong innovation dynamics that foster investor and venture capital-friendly environments with a substantial influx of international markets. On these insights, authors are proactively searching for the financing of innovation processes that facilitate both commercialisation and academic knowledge. One of the best options as a regulatory standard is XML-based applications, as XBRL could help define, control, and examine data manipulation at a drastically reduced level (Gostimir, 2015). Furthermore, the XBRL standard as a trademark will encourage organisations to swap their corporate, economic, financial, tax and accounting data as a global standard (Bergeron, 2003). Thus, it will help the financial sector meet great expectations in financial discipline. Beyond that, it will affect different cluster stakeholders and organisations on the international level. The speed at which data is prepared and compiled for XBRL will also help to professionalise reporting standards and procedures while searching for venture capital investors. In that case, venture capital investors could support developing programmes on the financial markets (Dossierplus et al., 2019) relevant to innovation processes (Patias et al., 2016), such as digital health, cybersecurity, fintech, legal advice and commercial information technology transfer (Yang & Černevičiūtė, 2017). In conclusion, the authors summarise the relevancy of commercial aspects in the cluster life cycle and academia presence in cluster organisations.

5. CONCLUSION

Private and public initiatives determine the success of cluster organisations. The main factors that generate both poles' initiatives are linked to the quality of capital markets, commercial aspect of infrastructure, education system and research and development capacities. Like in the case of Israel, military service imposes a significant impact on entrepreneurial mindset and

diversity of solutions in the technological sector. Based on their experience, the high degree of presence on international markets helps interested parties to develop a creative environment where the innovation system will bridge all systematic risks and challenges in the cluster ecosystem. In the final step, all stakeholders must be involved in the innovation process. With that mission and vision, they deliver more credible results, extending the cluster life cycle in which they operate.

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DIGITAL CAMPAIGN AS AN INFORMATION AND COMMUNICATION TOOL FOR TOURIST PROMOTION DURING THE CORONA CRISIS – THE MEDIA CAMPAIGN „MEĐIMURJE GIVES MORE" AS AN EXAMPLE

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ABSTRACT

During the crisis caused by the COVID 19 virus, tourism as the fastest growing industry had the biggest losses. With a proactive approach, on the first day of easing measures on June 15th, 2020. Međimurje County, a territorial-political regional unit in Croatia, its tourist board, launched a media campaign to reduce losses in tourism. Exploring the example of the promotional campaign of the Tourist Board of Međimurje County "Međimurje gives more", the paper discusses digital campaign as a tool for promoting destinations in times of crisis caused by the COVID 19 virus. The paper analyses a media campaign that was primarily aimed to potential domestic tourists. The achievements of the digital campaign were also analyzed using the case study method. Hypothesis H1 was set as follows: a well-designed and well-run digital campaign can contribute to an increase in the number of arrivals and overnight stays regardless of the crisis caused by the COVID 19 virus. The primary aim of this paper is to research whether, regardless of the corona crisis, a digital campaign can affect the positive results in tourism.
Keywords: digital campaign, tourism, Međimurje, COVID 19, information and communication technologies (ICT)

1. INTRODUCTION

Until the outbreak of the COVID 19 crisis, tourism[1] was the fastest growing industry and the sector whose successful advertising was most influenced by the development of information and communication technologies. The Internet, its wide application in the personal, social and business life of people, has also set new standards, but also made advertising easier and cheaper when it comes to tourist media campaigns. "If the consumer / tourist has not visited the destination, then the role of the media is important because personal experience is an important criterion influencing the choice of destination image, and without personal experience images are formed from different types of media and advertising (Molina & Esteban, 2006: 1039; Biel, 1997). At the beginning of 2020, the whole world was trapped by the crisis caused by the COVID-19 virus and for the first time in history was completely closed, which consequently meant great losses in the economy, but also a great deal of uncertainty when it comes to economic recovery. No one could have predicted the end of the crisis.

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[1] UNWTO (2014) defines tourism as "a social, cultural and economic phenomenon that involves the movement of people to countries or places outside their usual environment for personal or business / professional purposes".

The tourism sector was most affected due to the partial and / or suspension of travelling. New information and communication technologies (ICT) found their first application more than sixty years ago through the development of distribution systems in tourism. Interdependence is evident since the trends, increasing competition, innovative requirements that the tourism sector has require precisely ICT solutions to meet all the requirements of the individual and the market as a whole. This is especially pronounced today, at a time of global corona crisis that has hit the tourism sector the hardest. "For Passenger 2020, IPK's World Travel Monitor® found a global drop in international travel of 70 percent. Trends across continents vary: In Asia, which was hit first by the pandemic, outbound passengers fell the most, by almost 80 percent, while outbound Europeans recorded the least losses with minus 66 percent. Latin American outbound travel fell 70 percent from the world average. North America recorded a minus of 69 percent. The corona virus has led to changes in travel. The segments most affected by the global decline in outbound travel are private travel (minus 71 percent). Business travel recorded minus 67 percent. In the holiday market, cruises and city trips suffered above-average losses (minus 75 percent), while beach vacations and outdoor vacations (minus 53 percent) overcame the crisis much better. As expected, the pandemic particularly hit air travel, where there was a 74 percent drop in overseas travel. By comparison, international car travel (minus 58 percent) went much better. The decline in accommodation is above average in the hotel industry (minus 73 percent), while other types of accommodation - including private - are less affected"(Turizmoteka / ITB Berlin). Everyone, from large and well-known destinations to the smallest ones, had to look for new ways, think about transforming the tourist offer into a new more inclusive and sustainable model, and at the same time, more importantly and demanding in these new, in every sense uncertain condition, design a promotional campaign. Which will attract tourists to decide to travel at all and to choose their destination? Due to the crisis, there is little or no money for promotional activities, and cheaper information and communication channels are being sought, primarily social media. Popular tourist destinations use social media as a promotional tool for interactive marketing purposes. There has been an increase in visitors using online social media as one form of new challenge in all industries (Schmallegger and Carson, 2008). Međimurje is the first destination in the Republic of Croatia which at early beginning of the corona crisis developed promotional campaign and adapted to new circumstances regardless of the tremendous results that Međimurje tourism recorded the last ten years, as evidenced by the continuous increase in the number of arrivals and overnight stays as well as many prizes at the Croatian and international level.[2] The campaign "Međimurje gives more" was designed primarily aimed at domestic potential tourists, which instead of the usual method in crisis situations - lowering prices, offers an additional bonus in the form of coupons.[3] Promotional activities were the responsibility of the Međimurje County Tourist Board in local and national media. For the purposes of this paper, the digital campaign from June 15 to September 15, 2020 were analyzed. The costs of production and distribution of promotional materials, web design and advertising were borne by the Tourist Board of Međimurje County with the co-financing of Toplice Sveti Martin. This is an excellent example of a strategic partnership, which includes co branding and co marketing activities, and in the tourism, represents a modern way of creating new values and identification, interconnecting values and reputation. The Tourist Board of Međimurje County is one of the most successful and most awarded tourist boards, and

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[2] Međimurje is the only destination in Europe winner of three European Destination of Excellence awards (2007, 2016,2019, Golden Flower of Europe with a silver sign 2010, The Swiss Tourism Award 2016, Golden INTERSTAS 2017, Best Continental Tourism Destination 2019 (source TZMŽ)

[3] The bonus is designed in such a way that each guest receives from the accommodation, catering or other tourist commercial service provider, for every consumption of HRK 250 coupon. The partner with whom the service was provided is handed a coupon upon realization of the service, i.e. upon arrival at the accommodation facility, and with catering services after payment of the bill. With the coupon received from the partner, the guest can visit one of the public tourist facilities / sites free of charge or use one of the tourist services donated by public or commercial partners in the project.

Toplice sv. Martin is a leader in wellness tourism, which indirectly gives a potential tourist a guarantee of reliability and quality of destination and service. The digital campaign, which is the subject of the research, started with a press conference at which the settings of the campaign itself, messages, slogan and visuals were presented. Hypothesis H1 has been set: a well-designed and well-run digital campaign can contribute to an increase in the number of arrivals and overnight stays regardless of the crisis caused by the COVID 19 virus. The main goal of this paper is to research whether, regardless of the corona crisis, the digital campaign can affect the positive results in tourism.

2. METHODOLOGY

For the analysis, the data of the e Visitor system on the number of arrivals and overnight stays and the data of the Tourist Board of Međimurje County were used as primary data, as well as secondary data of the book, scientific and professional articles and Internet sources. By descriptive methods of synthesis and analysis, comparisons, the collected data were systematized and compared. The paper uses descriptive and developmental research, and the data are quantitatively and qualitatively analyzed with the help of Microsoft Office Excel, and are presented in tables and graphs. The case study method was also used in the paper. According to Yin, "a case study is an empirical study that studies a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and the context are not obvious" (Yin, 2007: 24). The case study was applied to the analysis of the media campaign "Međimurje gives more" to answer the research question - whether, regardless of the popularity of social networks in modern advertising, traditional advertising channels should be neglected, such as the media campaign on television.

3. SETTINGS OF THE CAMPAIGN "MEĐIMURJE GIVES MORE"

The very thoughtful approach of the Tourist Board of Međimurje County to the design of the campaign itself, but also to the media planning of the campaign with regard to the circumstances and limited resources, is evident. Aware that only "the Internet enables one-on-one-on-one and one-on-one communication" (Siomkos and Tsiamis, 2004: 206) the campaign is based on e-promotion. In times of crisis and complete lock-down, almost all communication took place in the virtual world, since there is a social need for a person to communicate and communicate with others. Also, in terms of communication, all the advantages of modern information and communication technology have come to the fore.

Table 1: Media plan TV

Media	Market	Contain	Format (TV adv./radio adv./reportage...)	Duration of TV or radio spot	No. publication/broadcasting	Reach (1+, 3+)	Scheduling	GRP	TRP	Start date	The end date	Duration days
RTL	HR	GEN	spot	7 sec	120	1+59%,3+33% / estimated	50% Prime Time	223	254	15.6.	3.7.	15
RTL	HR	GEN	spot	7 sec	60	1+30%,3+30% / estimated	50% Prime Time	133	150	17.8.	24.8.	8
N1	HR	GEN	spot	7 sec	120	1+30%,3+30% / estimated		133	150	15.6.	21.6.	7
VAŠ KANAL	SI	GEN	reportage	600 sec	5	1+30%,3+30% / estimated	Prime Time 19.00-23.00	133	150	15.8.	15.9.	5

Source: Međimurje County Tourist Board

Traditionally, TV advertising is the most expensive way of advertising, due to the price of renting media space, but also making videos that need to be broadcast. Since the target market is the Republic of Croatia and the Republic of Slovenia, television was an indispensable medium.

Table 2: Media plan billboards / mega boards

Media	Market	Contain	Format (billboard, city light, digital city light…)	Size	Number of positions	Location	Start date	The end date	Duration days
MULTIMEDIA	SI	general	MEGABOARD	8x6 m	1	LENDAVA	15.6.2020.	15.8.2020.	90
MULTIMEDIA	HR	general	BILLBOARD	4x3 m	1	GORIČAN	15.6.2020.	15.8.2020.	90

Source: Međimurje County Tourist Board

One billboard and one mega board were at the entrance to the Republic of Croatia, at the border crossings Goričan and Lendava with the aim of promotion on the Slovenian market and primarily with the aim of further promotion of the destination.

Table 3: Facebook Media Plan

Media	Market	Contain	Campaign goal	Format (photo, slideshow, carousel, video, website card, story…)	Adv.no.	Reach	Impression no.	CPM	Start date	The end date	Duration days
FB	HR	general	turnover	carousel	1	94.032	196.670	6,6736	15.6.	21.6.	7
FB	HR	general	turnover	video	1	129.184	331.491	5,9956	3.7.	12.7.	10
FB	HR	general	turnover	carousel	1	93.550	199.800	6,5315	17.8.	26.8.	10

Source: Međimurje County Tourist Board

The Face book campaign was conducted at intervals of seven and ten days and was aimed primarily at younger potential domestic tourists.

Table 4: On line advertising media plan

Media	Market	Format	Format size	Category (desktop, tablet, mobile)	Adv.per user	Advertisement position	Impression no.	Start date	The end date
Google Ads	HR	Banner	Standard banners	desktop, tablet, mobile	1/3	RON	2.560.000/12.800 prediction	July	August
Google Ads	SI	Banner	Standard banners	desktop, tablet, mobile	1/3	RON	1.536.000/7.680 prediction	July	August
Adria Media	SI	Native	n/a	desktop, tablet, mobile	n/a	front page, column	n/a	July	August
Nova TV - dnevnik.hr	HR	PR text	n/0	desktop, tablet, mobile	n/a	front page, column	n/a	July	July
Nova TV - punkufer.hr	HR	PR text	n/1	desktop, tablet, mobile	n/a	front page, column	n/a	August	August

Source: Međimurje County Tourist Board

On-line advertising was conducted in the territory of the Republic of Croatia and the Republic of Slovenia, and given the planned reach, it is clear how important modern information and communication technologies are in tourist offer advertising. The Tourist Board of Međimurje County started the campaign on June 15, 2020 with a press conference at which the tourist campaign "Međimurje gives more" was presented, i.e. its settings, slogan and visuals. "Promotional texts, such as tourism texts, are an example of variability (represented by promoted destinations) pre-systematized by the tourism industry and, within this framework, as pre-packaged displays, are transformed into objects of tourism consumption" (Francesconi 2007: 6).

Photo 1: Tourist Board

Source: Međimurje County Tourist Board

The use of persuasive elements in the promotional campaign is evident, which is an important factor given the situation caused by the COVID 19 virus, as it was necessary to find a way to "convince" a potential tourist to decide to travel and choose a destination for their trip. According to Katz, "attitudes can be broken down into three parts: the emotional component, the cognitive component, and the behavioral component. Although each position consists of these three components, they are not equally represented, and individual positions are more often based on one primary component. Accordingly, persuasion can be directed at one of the components of the attitude, assuming that by changing one component there will be a shift in the other component" (Katz, 1960: 163). Also, analyzing the visual itself and the message sent (Međimurje gives more), it is clear that the visual and verbal components are connected, which is extremely important when it comes to tourist promotion. The visual of the campaign itself is a kind of culmination of "story telling" - a story about Međimurje that the Međimurje County Tourist Board has been telling very successfully since 2013. The websites of the Međimurje County Tourist Board and the "Međimurje Gives More" campaign are connected, which are very clear, simple navigation, informative, "one stop shop" for potential tourists and a well-designed tool for running and monitoring the campaign. In conclusion, the way, time, messages and visuals of the campaign "Međimurje gives more" are a good example of how to effectively increase the effectiveness of the promotional campaign by aligning digital content with the expectations of potential tourists as well as an example of raising the level of digital campaign management. Međimurje provides more "as a central place of user inspiration in the travel decision-making phase, positioning the website as an informative guide for users who have decided to travel or are already in the destination, positioning the website as a central place to transfer the experience of satisfaction with the destination. Also, the content of both websites arouses feelings, attracts visitors through the so-called. Storytelling telling stories about rest, recreation, escape, health…. through visually appealing elements.

4. RESULTS

The campaign "Međimurje gives more" resulted in 63 online publications / news in all national and local media. The news was also transmitted on the websites of the Ministry of Tourism and Sports and the Croatian National Tourist Board. All announcements were extremely positive and praiseworthy. The best results were achieved with the Face book campaign. There were 528,161 views, 223,216 unique views and 8,256 unique clicks. Web campaign from 15th June – 15th July recorded a total of 11 203 visits, 10 951 unique visits, 23 075 page views, and visits are recorded from 45 countries (from Croatia 10,494, Germany 187, Slovenia 96, Austria 81, USA 8) with the duration of the visit, on average between 0.30 - 4.30 min. One mega board and one billboard were at the border crossings at the entrance to Croatia from the direction of Slovenia and Hungary (Lendava and Goričan). There was also a TV campaign on N1 and RTL television, a 7-second video, and according to data obtained from the Međimurje County Tourist Board; the reach was more than a million viewers. In conclusion, the campaign aroused great interest and resulted in positive comments from the profession and the citizens themselves. It remains to be seen whether the digital campaign conducted from 16 June to 15 September 2020 also resulted in positive tourism results in the number of tourist arrivals and overnight stays. The data of the Tourist Board of Međimurje County and the e Visitor system for 2019 and 2020 were compared.

Table 5: Arrivals of domestic and foreign guests in 2019 and 2020.

TOURISTS	2019	2020	%2019	% 2020
Domestic	8.715	9.567	32,71	52,04
Foreign	18.085	8.805	67,29	47,96
Total	26.800	18.327	100,00	100,00

Source: Međimurje County Tourist Board/eVisitor

Table 6: Tourists stays in days

Duration of tourist stay (days)	2019	2020
Domestic	2,40	2,44
Foreign	3,03	3,30

Source: Međimurje County Tourist Board/eVisitor

Since the campaign was aimed at potential domestic tourists, the data show how the goal of the campaign was achieved. There was a higher number of arrivals, overnight stays and lengths of stay of domestic tourists compared to 2019, and it is possible to confirm hypothesis H1: a well-designed and well-run digital campaign can contribute to an increase in arrivals and overnight stays. There was also a decline in the number of arrivals of foreign tourists, which was expected given the limited / suspended travel in the countries of the European Union, but on the other hand, their stay in the destination was extended. Međimurje, as a destination, but also as a tourist brand, has been continuously developing in the last ten years and is continuously recording better tourist results. The COVID 19 crisis, with all the negativities it brought, showed all the advantages of digital communication at all levels, and on the example of the researched campaign "Međimurje gives more" and all the potential it offers in tourism promotion. The strategy of using the digital campaign as the primary promotional tool in Međimurje has resulted in an increase in the number of tourists despite the corona crisis, but at the same time given the large reach of the digital campaign in and outside the country.

5. CONCLUSION

After the end of the crisis, tourism will surely become the fastest growing branch of the economy again. We live, work, function in the era of the Internet and digital information and communication technologies, and it is to be expected that tourist promotion will use them more and more, as they offer a range of modern technical possibilities for message placement – from text, audio-video message formats, everything to advanced forms of presentation such as virtual reality, 3D technology or even holograms. Social and digital media are indispensable in modern tourism promotion and, as this research has shown, significantly affect business and the tourism sector in general, because the development of information and communication technologies for most tourists have become a key tool for finding a suitable holiday destination. The very concept of tourism is related to entertainment, relaxation, positive memories… Symbolic or intangible components of the external nature of the product are associated with emotional values and feelings as a key attribute of the brand (Aaker in Balakrishnan et al., 2011). Promotional campaigns, which with modern technological solutions can be even more successfully approached by a potential tourist and certainly help in his decision to choose a destination. On the other hand, when it comes to choosing a destination, scientists claim that one of the success factors in digital advertising is "data quality, ease of use, responsiveness, security / privacy, visual appearance, trust, interactivity, personalization and fulfillment" (Chen and Wells, 1999 : 28). Also, from the side of service providers, thanks to modern information and communication technologies, it is possible to share information, monitor tourist satisfaction with the aim of improving the service and strengthen the brand, image and ultimately the popularity of the destination. Given the continuous development, strategic thinking, it is to be expected that Međimurje County, as an already well-known continental tourist destination, will become a leader in e-branding in the next period with the help of modern digital information and communication tools. The destination is recognizable, has an effective communication strategy and promotion at the domestic and international level, and it is not questionable whether it will only use all the potentials of digital advertising in the future.

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COVID-19 TAX MEASURES FOR SUPPORTING BUSINESSES AND INDIVIDUALS IN THE EUROPEAN UNION MEMBER STATES

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ABSTRACT
Since the beginning of 2020 and the appearance of the coronavirus in the European Union member states, and especially since the spring of 2020, when all countries have in some way locked their economies, when in most activities normal business operations were completely or to a large extent hindered, and when it became obvious that such a so-called lockdown will have unforeseeable negative consequences for the economy, countries around the world and also the European Union member states have begun to introduce various reliefs and incentives within the framework of economic and fiscal policy. Such government interventions in the economy and society are among the most significant in modern history. Intervention measures also included various tax measures mainly in the areas of personal income tax (PIT), corporate income tax (CIT), value added tax (VAT) and social security contributions (SSC). The primary objective of such intervention measures was to assist employers and employees during the Covid - 19 pandemic and to try to minimize the negative impact of the Covid - 19 pandemic on GDP. The aim of this paper is to present, analyze and compare the tax measures that have been implemented and are still in place in the European Union member states in the context of supporting businesses and individuals and minimizing the negative impact of the Covid - 19 pandemic. The results of the research show that all European Union member states have adopted at least one tax measure as a result of the Covid - 19 pandemic.
Keywords: Covid-19, European Union, governmental interventions, tax measures

1. INTRODUCTION
The Covid- 19 pandemic is an unprecedented economic and health crisis affecting the operations of all businesses (from micro-enterprises to multinationals), as well as the self-employed and the livelihoods of workers. Against this backdrop, all businesses are compelled to take immediate action to minimize the economic impact of the pandemic and protect the future functioning of the global economy. The impact of the Covid- 19 pandemic has led to a sharp decline in economic activity in all countries of the world. As a result, all countries have begun to approve and implement various incentives within economic and fiscal policies, including urgent tax measures to support the pandemic economy. The role of tax policy in mitigating the negative effects of the Covid-19 crisis and the lockdown of the economy has proved to be more than significant. Also, given the fact that the pandemic is still ongoing and most economies are still more or less locked in, the overall impact of the various tax measures will only become apparent once the economies begin to recover. Indeed, the periods of this crisis, and hence the role of tax policy in sustaining economies, can be divided into three groups. The first period is characterized by the aforementioned lockdown of economies, in which the primary objective of tax measures is to mitigate the effects of the crisis by granting additional budgetary resources to firms and households in order to avoid a complete collapse of the economies. In the second period, which comes after the lockdown period, firms and households will need similar measures and subsidies, but on a smaller scale, as most of them will continue to work. In the long run, there will be a third period in which tax policy will return to its basic objective of raising revenue. Thus, the main goal of the research is to provide an overview of various tax measures that the member states of European Union have introduced to help and

minimize the impact of the Covid- 19 pandemic on economic activity. The results of this research show that all European Union member states have started reforming their tax systems to a greater or lesser extent in order to introduce and approve tax incentives and reliefs to combat the negative impact of the pandemic on economic activity. The remainder of the paper is organized as follows: Section 2 provides an overview of different forms of tax instruments that can be used in response to the Covid- 19 crises and their potential impact on economies, Section 3 presents an analysis and comparison of specific tax measures to mitigate the negative effects of a pandemic. Section 4 concludes

2. TAX POLICY IN RESPONSE TO THE COVID-19 CRISIS

Considering that the Covid-19 pandemic started only a year ago and its impact on economies cannot yet be accurately assessed, there is not yet too much academic research on the subject. However, the following is an overview of some recent studies. Devereux et al. (2020) have analyzed, first, direct adjustments of taxes granted to firms and, second, the granting of various forms of subsidies to firms. They have analyzed two groups of measures. One is the measures that target behavioral changes of firms and workers and the other is the measures that provide a lump sum cash subsidy. The entire study is based on an analysis of the three stages that all economies go through during the Covid- 19 pandemic. According to the authors, the first phase was characterised by great constraints on both individuals and businesses, i.e. either the complete closure of businesses or great restrictions on activities due to reduced supply and demand. The second phase was characterised by great uncertainty related to future economic conditions and restrictions on movement. Also as a result of the first phase, where many businesses had a large drop in sales and some even had zero sales, the availability of both internal and external sources of financing is very limited. Also, despite significant government intervention in all countries, it is certain that many companies will not survive the first phase. The third phase will be characterised by much weaker public finances than they were before the pandemic. In the context of justifying significant government intervention during the pandemic, the paper of Guerrieri et al. (2020) stands out. They set up a model in which the shock in the supply of one sector has a negative impact on other sectors, and it is this model that advocates the use of fiscal policy instruments to stabilize income and employment. The main objective of all the measures taken by the states during the pandemic is to preserve jobs, not only in the sectors directly affected and whose supply is cut off, but also in other companies indirectly affected by this crisis. Guerrieri et al. (2020) list some fiscal policies that can be useful to promote the reactivation of economies, such as reducing the cost of reemployment of workers (reducing the SSC paid by employers). In their paper, Utz et al. (2020) analyze the macro-financial impact of the Covid- 19 pandemic and provide concrete suggestions for various macroeconomic policies to mitigate the negative impact of the pandemic in the short, medium and long run. The macro-financial impacts are also systematized as a function of the stages (similar to the work of Devereux et al. (2020)) that all economies face under the impact of a pandemic and lockdown of the economy. In the context of this article, it is important to highlight some of the conclusions in the area of fiscal policy by Utz et al. (2020). They point out that the slowdown in economies due to the Covid- 19 pandemic will lead to a significant decline in tax revenues and increased public spending as countries use automatic stabilization measures and various other fiscal policies to mitigate the negative effects of the pandemic. The authors expect the rate of decline in government revenues to be higher than the rate of decline in GDP, mainly due to (Utz et al., 2020: 21):

1) the tendency of some tax bases to fall faster than GDP during an economic downturn (profits, capital gains, excise taxes, and imports tend to fall faster than GDP during a recession);
2) a decline in commodity prices and related revenues;

3) possible discretionary changes in tax policy in response to the crisis, such as lowering tax rates or expanding rising tax allowances.

The authors also highlight the problem of fiscal sustainability of public finances in the medium and long run, which is a consequence of the approval of various incentives and reliefs such as tax deferral. Moreover, in the long run, it will be necessary to determine the transition and the right time to move from expansionary monetary and fiscal policies to fiscal consolidation in order to avoid further stalling of economic activity. The process of fiscal consolidation will lead to problems in sharing the burden of consolidation.

3. OVERVIEW OF THE TAX MEASURES IN THE EUROPEAN UNION MEMBER STATES

In their paper, Devereux et al. (2020) identify three possible groups of measures that occur at different stages of a pandemic as a form of government intervention to minimize the negative impact on national economies.

- Group 1: Employment subsidies, suggesting that a reduction in SSC paid by employers is more effective than a reduction in SSC paid by employees. The second form of intervention should be in the direction of reducing investment costs by providing higher tax reliefs.
- Group 2: Measures related to strengthening cash flow, such as measures to defer tax payments (VAT and CIT); measures to accelerate refunds of prepaid taxes from previous periods or to postpone the deadline for filing tax returns
- Group 3: Fiscal measures that directly target the health care system.

In their paper, Utz et al. (2020) provide a detailed list of fiscal, monetary, and financial sector policies that economic and monetary policymakers can use or have already used in the context of addressing the negative impact of the Covid- 19 pandemic on national economies. The measures are classified into different groups, such as expenditure-side measures, business support measures, monetary policy and liquidity measures, banking sector measures, financial market measures, payment systems and insolvency measures, and revenue-side measures. Only the latter measures are considered below in terms of their relevance in the context of this paper.

Table following on the next page

Revenue measures to protect businesses	Revenue measures to protect individuals
Measures within Corporate income tax (CIT): - Accelerated asset depreciation - Extend loss carry- forward for losses incurred during the crisis - Broaden tax deductibility of business expenses - Introduce tax credits i.e. the possibility of a direct reduction in the tax liability - Deferral of tax filing - Deferral of tax and/or interest payments - Tax rate reduction - Tax amnesty / incentives - Lower advance payment - Suspend debt collection activities - Suspend audit activities	Measures within Personal income tax (PIT): - Deferral of tax filing - Deferral of tax payments and/or interest payments - Tax rate reduction - Tax amnesty / incentives - Broaden tax deductibility (e.g., for contributions to health care) - Introduce tax credits
Measures within Personal income tax (PIT) for self-employed: - Deferral of tax filing - Tax rate reduction - Lower advance payment	Measures within payroll taxes and social security contributions: - Deferral of tax filing - Deferral of tax payments and/or interest payments - Tax rate reduction - Tax amnesty / incentives - Introduce tax credits
Measures within Value added tax (VAT): - Deferral of tax filing - Accelerating refunds	Measures within property taxes: - Deferral of tax filing - Deferral of tax payments and/or interest and payments - Tax rate reduction - Tax amnesty / incentives - Introduce tax credits
Revenue measures to promote availability of medical items	
Lower tax rates for medical items (import duties, VAT and other indirect taxes)	

Table 1: Covid-19 revenue measures
(Source: Adapted by author from: Utz, Robert; Feyen, Erik; Vazquez Ahued, Francisco; Nie, Owen; Moon, Jisung. 2020. Macro-Financial Implications of the COVID-19 Pandemic. World Bank, Washington, DC. © World Bank.
https://openknowledge.worldbank.org/handle/10986/33955 License: CC BY 3.0 IGO., p. 7.)

The OECD (2020) published a list of measures at the very beginning of the first lockdown period in March 2020 to limit the harmful effects on the productivity of the economy and to protect the most vulnerable groups. Possible measures include:

- Allowing higher amounts of welfare and income support to be paid temporarily to individuals and workers;
- Writing-off debt or deferring SSC payments for both employers and the self-employed;
- Granting tax relief to workers in health care and other sectors involved in emergency operations;
- Allowing deferral of payment of VAT, customs or excise duties on imports of goods;

- Expediting the refund of overpayments VAT and simplifying procedures for requesting VAT relief from bad debts;
- Allow for the adjustment of required prepayments for the next tax period based on the expected decline in business activity in the future;
- Defer, reduce, or even write off taxes not directly related to the current business cycle, such as periodic property taxes;
- Changing the rules for loss carryforwards.

The next part of the paper gives an overview of all tax measures introduced in the member countries from the beginning of the pandemic until today from European Union. The data for all countries were taken from the "IBFD's Tax Research Platform" and from the "OECD Tax policy responses to COVID -19".

3.1. Extended deadlines for tax filling/tax payments
This part of the paper will provide an overview of the measure related to the extension of deadlines for the submission of tax returns or the extension of deadlines for the payment of tax liabilities. Such a measure has been introduced in fifteen European Union member states.

- **Croatia**
  CIT payers in Croatia are normally required to make monthly advance tax payments based on the previous year's tax return. With the occurrence of a pandemic and interruption of business activity, Croatia has approved a deferral of advance payments for 3 months and granted the possibility of further extension of this measure in the event that the taxpayer's income decreases by 20% or more. In addition, the deadline for submitting CIT returns has been extended by 2 months, i.e. until 30 June 2020.

- **Cyprus**
  Cyprus has decided to postpone the deadline for filing PIT returns. The difference is that this measure applies to all income tax payers.

- **Denmark**
  Due to the Covid- 19 pandemic, Denmark has decided to postpone the deadline for filing CIT returns. Also, since Denmark receives an advance payment on March 20 from CIT based on expected profits this year, Denmark has created the possibility of reducing the amount of tax due in March if the spread of the coronavirus affects the economy.

- **France**
  Tax relief may be granted on a case-by-case basis to companies experiencing financial difficulties due to the Covid- 19 pandemic. Businesses may also apply for an extension of the monthly payment period in respect of advance payments of CIT and SSC. No interest or penalties will be due for late payments.

- **Ireland**
  All taxpayers who pay their tax on a self-assessment basis are otherwise required to electronically file an income tax return and a capital gains tax return for the previous year by the end of October of the current year. Due to the Covid- 19 pandemic, the payment and filing deadlines have been extended to 10 December.

- **Hungary**
  Postponement of the deadline for submitting annual tax returns (CIT, small business tax, local business tax, etc.) from May to September.

- **Latvia**
  Latvia is special in that it has granted deferral of advance tax payments to individuals, under PIT. Such a measure applies to individuals who earn business income and otherwise have to make advance payments every three months PIT.

- **Lithuania**
  Deferral of CIT payments without interest.

- **Luxembourg**
  Businesses and self-employed persons, if faced with a liquidity problem due to the Covid-19 pandemic, could apply for a write-off of CIT advance payments for the first two quarters and request a four-month extension of the deadline for payment of CIT, utility taxes and net wealth tax, without interest on late payments. The authorities also allowed an extension of time for filing CIT and PIT tax return forms.

- **Netherlands**
  The Netherlands has granted entrepreneurs who are subject to either CIT or PIT and who normally pay tax on the basis of provisional assessments and who expect that their taxable income will be reduced due to the impact of the Covid- 19 pandemic on their business, the possibility to apply for a lower assessment of the tax liability. In addition, a deferral of taxes as well as pre-pandemic tax liabilities has been granted. For all tax debts incurred at the time of the pandemic, taxpayers will be granted an extended debt repayment period (36 months instead of 12 months), provided that debt repayment begins no later than July 1, 2021.

- **Portugal**
  Portugal, like all the previously mentioned countries, has created the possibility to defer the payment of CIT and for the payment of PIT it is possible to pay in 3 or 6 monthly installments.

- **Romania**
  As one of the responses to the Covid- 19 pandemic, Romania granted its taxpayers who had outstanding tax debts as of 31 March 2020 an exemption from interest and penalties on these debts. The only condition was that they settle their principal tax debts and submit an application by March 31, 2021. In addition, taxpayers who normally pay CIT quarterly were allowed to calculate the quarterly tax debt in 2020 using the current quarter adjusted by the consumer price index (instead of calculating it based on the previous year's income tax debt).

- **Slovak Republic**
  Tax returns can be automatically completed 3 months later (until 30.6.2020), with no penalties for late filing.

- **Slovenia**
  The Republic of Slovenia has not allowed the extension of deadlines for filing a tax return at the time of the first lockdown period.

However, Slovenia does allow CIT payers to defer payment of their tax debt for a maximum of 24 months or pay in 24 installments due to the Covid- 19 pandemic. In addition, CIT payers were exempt from paying taxes during the first lockdown period.

- **Spain**
  Due to the Covid- 19 pandemic, the Spanish government has allowed entrepreneurs to use the direct method of calculating tax liability instead of the objective method otherwise applicable when calculating advance payments of CIT. Also, from 2021 onwards, the use of the objective method is again allowed, but the days falling within the period of the pandemic-related state of emergency cannot be taken into account as working days by the entrepreneur. In addition, Spain grants a 6-month CIT deferral, but does not charge interest for the first 3 months. The measures apply to taxpayers whose turnover does not exceed EUR 6 million and the maximum amount of tax whose payment can be deferred is EUR 30,000.

3.2. Social security contributions

Considering the fact that in most European Union member states SSC represent a significant part of the tax wedge, i.e. labor costs, and as such have a major impact on the labor market and employment rates in the countries, reducing or delaying payments during a pandemic is one of the most important measures related to preserving jobs.

- **Belgium**
  Self-employed workers affected by the Covid- 19 pandemic were granted a one-year deferral of SSC, and this measure was extended for the period of the first two quarters of 2021. In addition, employers were able to apply for a deferral of SSC, which they are obliged to do.

- **Estonia**
  As one of the temporary measures to mitigate the negative effects of the Covid- 19 pandemic, Estonia created the possibility for employees not to pay 2% of their monthly income in the period between 1 July 2020 and 31 August 2021 (except for people born between 1942 and 1960). This 2% of income represents contributions to the mandatory pension scheme fund.

- **Greece**
  The Greek government has approved a deferral of SSC for employers and self-employed persons that had to be paid during the first lockdown period (spring 2020) for the end of April 2021.

- **Hungary**
  Sectors that were severely affected by the pandemic (e.g., tourism, restaurants, entertainment, sports, cultural services, transportation, agriculture) will be exempt from paying SSC, payroll tax, and small business tax (a simplified tax for SMEs levied on payroll and cash flow profit). Employees' SSC will be reduced to the level of the basic health insurance contribution payable. In addition, the SSC and the employers' payroll tax are not levied on companies in the aviation industry.

- **Luxembourg**
  As a temporary tax measure due to the Covid- 19 pandemic from the beginning of April 2020, employers in Luxembourg will not be charged interest and penalties for late payment of SSC and this measure will also apply to debts existing on 14 March 2020.

- **Sweden**
  In order to mitigate the negative financial impact of the Covid- 19 pandemic, SSCs were reduced in 2020 for both employers and employees and self-employed persons such that they were only required to pay pension insurance contributions at a rate of 10.21% and were not required to pay all other contributions (health insurance, unemployment insurance and other labor market measures, family pension insurance, parental insurance, work injury insurance and general payroll tax). The reduction in the payment of contributions was limited to an income level of SEK 100,000 for the year 2020. If income exceeds SEK 100,000, the usual SSC will be paid above this SEK 100,000.

3.3. Value added tax
This section provides an overview of countries that have changed rules and VAT rates due to the Covid- 19 pandemic. Most states have lowered rates or implemented a zero VAT rate on products (and services) directly related to health care and medical equipment procurement. In addition, some countries have reduced the VAT tax burden in sectors most affected by the pandemic, such as tourism, hospitality and air transport.

- **Belgium**
  Due to the Covid- 19 pandemic, a reduced VAT rate of 6% applied from 4 May 2020 to 31 March 2021 on internal stocks, intra-Union acquisitions and imports of face masks and hydroalcoholic gels into Belgium. In addition, from 8 June 2020 to 31 December 2020, a reduced VAT rate of 6% applied to restaurants and catering services, excluding beer and other alcoholic products. This measure has not been extended. In addition, due to the pandemic, donations of medical supplies to hospitals and donations of computers to certain organizations and institutions (including schools and universities) are exempt from VAT. This measure has not been renewed.

- **Bulgaria**
  Due to the pandemic, as a temporary measure for the period until 31 December 2021, the range of products and services subject to the reduced tax rate of 9% has been extended. These are:
  - Sales of books other than publications wholly or mainly for promotional purposes;
  - Supplies of restaurants and catering services consisting in the supply of prepared or unprepared food, wine and beer, but not spirits
  - Baby food or infant food and baby diapers and similar products;
  - use of sports facilities;
  - general tourist services, including travel arrangements for tour operators and travel agencies with occasional bus service.

  From 1 January 2021, the zero VAT rate will also apply to the supply of Covid-19 vaccines and directly related services, and the supply of in vitro diagnostic medical devices for the diagnosis of Covid-19 and directly related services.

- **Cyprus**
  Due to the impact of the pandemic, the application of the reduced VAT rate of 5% was extended to hotel accommodation, catering, and local transport (taxi etc.). These taxation arrangements were in force from 1 July 2020 to 10 January 2021. In addition, under the VAT system, the tax authorities allowed certain categories of taxpayers to defer payment of VAT until 10 November 2020.

- **Finland**
  Under the Covid-19 pandemic measures, supplies of goods used for the investigation, treatment or prevention of Covid-19 are taxed at the zero rate, provided that these goods are supplied to public health institutions, public social welfare institutions and other organizations approved by the customs authorities. This zero rate of VAT will apply until April 30, 2021.

- **France**
  Reduce the rate VAT to 5.5% on protective masks and personal hygiene products until December 31, 2021.

- **Germany**
  Unlike other countries that focused on reducing VAT rates mainly on medical devices and the most affected sectors, Germany reduced the standard VAT rate from 19% to 16% between 1 July 2020 and 31 December 2020. In addition, the reduced VAT rate was reduced from 7% to 5% during this period, while the application of the 5% rate for the supply of food will be extended until 30 June 2021.

- **Greece**
  The Greek government has authorised a reduction in the VAT rate from 24% to 6% for products needed to protect against the coronavirus and prevent its transmission (hygiene masks and gloves, antiseptic solutions, soap and other personal hygiene products and ethyl alcohol, etc.). This measure will be in effect until April 31, 2021. In addition, a VAT rate of 0% will apply for the period from December 23, 2020 to December 31, 2022 for Covid-19 infectious vaccines and diagnostic equipment. The VAT rate on passenger transportation, coffee and restaurant services has been reduced from 24% to 13% for the period June 1, 2020 through April 30, 2021, and to 6% for movie tickets. In addition, VAT on sports tickets was temporarily reduced to 13% for the period from September 1, 2020 to June 30, 2021. Due to the pandemic, the exemption VAT with the right to deduct VAT was approved for the production of antiseptic items that companies carry out on behalf of the Ministry of Health. The exemption is valid until 31 April 2021. The supply of goods and services to the Greek state in the form of donations (e.g. hospital equipment) required in response to a pandemic are also exempt from VAT.

- **Lithuania**
  Exemption from import duties and VAT exemption on imports of goods needed to combat the effects of Covid-19.

- **Malta**
  As part of the measures to combat the Covid-19 pandemic, supplies of Covid-19 in vitro diagnostic devices, as well as specific services closely related to such devices, are classified as medical supplies subject to a reduced VAT rate of 5% until 31 December 2022.

In addition, supplies of services closely related to Covid-19 vaccines are considered exempt with credit until December 31, 2022.

- **Netherlands**
  In the Netherlands, a 0% tax rate will temporarily apply to all face masks from May 25, 2020 to December 31, 2020 VAT. In addition, to mitigate the economic impact of the pandemic, certain VAT exemptions are mandated until 31 December 2020, such as the supply of medical equipment to caregivers and medical staff and the free supply of medical equipment to these facilities.

- **Portugal**
  VAT exemption for donations in kind to the State and non-profit organizations to be distributed to health institutions or persons in need.

- **Slovenia**
  Until 30 April 2021, medical equipment used to combat the Covid- 19 pandemic is exempt from VAT on importation.

- **Spain**
  Due to the Covid- 19 pandemic, domestic stocks, intra-community stocks and imports of disposable surgical masks will be subject to a super reduced VAT rate of 4% between 19 November 2020 and 31 December 2021, unless the purchaser is a public body, a private charity or a clinic or hospital. The zero VAT rate applies between 23 April 2020 and 30 April 2021 to the supply, importation and procurement of medical equipment within the community for the treatment of Covid- 19 patients supplied to public, charitable or social institutions and healthcare facilities.

3.4. CIT incentives and allowances

Only two European Union member states have so far granted CIT incentives and relief while the coronavirus pandemic continues. In any case, it can be expected that in the future more and more countries will approach the approval and introduction of such measures in order to revive investment.

- **Italy**
  Italy has introduced a number of new tax reliefs and incentives for entrepreneurs in an effort to revive the economy and mitigate the impact of the Covid 19 pandemic on affected businesses. The relief was introduced in the form of a tax credit:
  - Tax credit equal to 65% of the costs incurred to renovate and improve the accessibility of hotels and other lodging establishments;
  - Tax credit of 30% to 60% of the costs will be granted to businesses operating in the tourism sector and having costs incurred in renting property to carry on their business until 30 April 2021, depending on their income in 2019;
  - Tax credit equal to 20% of the cash contribution in equity, up to a maximum of EUR 2 million, in the case of non-associated resident companies with consolidated revenues of the Group between EUR 5 million and EUR 50 million, which suffered a decrease in revenues of at least 33% in March and April 2020.

- **Romania**
  Reduction of CIT, if taxpayers have paid their first quarterly tax by 25 April 2020 (5% reduction on quarterly tax for large corporations and 10% for SMEs).

3.5. Business and professional income

Denmark and the Netherlands are countries that granted incentives to business and professional income taxpayers after the Covid- 19 pandemic.

- **Denmark**

  Denmark provides compensation for self-employed individuals who have a reduction in income due to a pandemic, and the condition for receiving the benefit is at least a 30% reduction in income. The business must have no more than 25 full-time employees and must have had an average turnover of at least DKK 10,000 per month in the previous period. In addition, a self-employed person who owns a business must have a share of at least 25% in the business and work in the business. The business owner's personal income must not exceed DKK 800,000 in the calendar year 2020. The benefit is a maximum of 90% (100% if the self-employed person was affected by the blocking period) of the expected loss of income compared to the average income in the previous financial years. However, the benefit may not exceed DKK 23,000 per month. The benefit must be refunded if the actual loss of income in 2020 is less than 30% or if the business owner's personal income in 2020 exceeds DKK 800,000.

- **Netherlands**

  Self-employed taxpayers are entitled to use a fixed personal allowance depending on the number of hours the business owner has spent on his business. However, due to the Covid 19 pandemic, entrepreneurs may not be able to meet this criterion. To ensure that the self-employed could use these allowances during the pandemic, the tax administration assumed that entrepreneurs worked the same number of hours as they did in the year before the pandemic. In addition, entrepreneurs and companies that had a loss of at least €4,000 (due to the Covid 19 pandemic) for the period from 16 March 2020 to 15 June 2020 were entitled to a one-off non-taxable payment of €4,000.

3.6. PIT allowances and taxation of employment income

One of the measures is also a change in some parts of PIT, especially in the coverage of standard and non-standard reliefs. Several European Union member states have changed the rules of taxation of personal income, i.e. treated some payments as non-taxable due to the Covid- 19 crisis, increased the non-taxable (personal) deductions and changed the rules of tax treatment of non-standard reliefs, mainly related to travel or work expenses incurred as a result of working at home.

- **Austria**

  In Austria, it is interesting to note that due to the Covid- 19 pandemic and during the period when the vast majority of taxpayers (employees) worked from home, it was determined that such a situation would not change the rules related to the deduction of travel expenses, i.e. that travel expenses remain tax deductible expenses.

- **Bulgaria**

  In Bulgaria, due to the Covid- 19 pandemic, personal deductions for dependent minor children were increased as follows:
  - from BGN 200 to BGN 4,500 for a minor child;
  - from BGN 400 to BGN 9,000 for two minor children;
  - from BGN 600 to BGN 13,500 for three or more minor children;
  - from BGN 2,000 to BGN 9,000 for one minor child with recognized special health needs.

- **Germany**
  In the German tax system, overtime pay is taxable at PIT. However, if employees received bonuses and awards in cash or in kind up to an amount of EUR 1,500 during the Covid - 19 pandemic in the period from 1 March 2020 to 31 December 2020, these types of awards are exempt from taxation, provided that these payments are granted as a reward for special efforts during the pandemic. For children residing in Germany, a monthly child benefit of EUR 204 is generally paid for the first and second child and EUR 210 for the third child. For the fourth and each additional child, the amount is EUR 235. To mitigate the economic impact of the Covid- 19 pandemic, a one-off child bonus of EUR 300 per child is granted. In addition, single parents have the option of increasing their personal allowance by EUR 1,908 per year per child, but in order to mitigate the negative impact of the pandemic, the deduction amount has been increased to EUR 2,100 for 2020 and 2021.

- **Ireland**
  Employees who work at home full or part time can claim tax relief on any additional costs incurred as a result of working at home, including electricity, heating and internet costs. This applies to two basic situations:
  - the employer pays the employee an allowance of EUR 3.20 per day: this allowance is exempt from all taxes;
  - the employer does not pay any remuneration to the employee: the employee can then claim all costs incurred during the home work for tax purposes, i.e. he can claim 10% of the electricity costs and 30% of the internet costs.

  It should also be noted that due to the pandemic, the Irish government has increased the amount of relief for the purchase or construction of the first property and the increased relief is valid until 31 December 2021.

- **Slovenia**
  Payments made under the Covid- 19 pandemic measures to pensioners with low pensions, the unemployed and other vulnerable groups are fully exempt from tax. In addition, until 30 June 2021, the cost of Covid- 19 tests for an employee paid by the employer does not constitute taxable income of the employee.

3.7. Tax treatment of losses

Despite the fact that many countries' tax systems allow the carryback or carryforward of net operating losses as one of the incentive measures within the CIT under normal circumstances, only two European Union member states have revised these measures due to the Covid- 19 pandemic.

- **Czech Republic**
  Loss carry forward is not allowed in the Czech Republic. However, in response to the Covid- 19 pandemic, taxpayers who record a tax loss in 2020 may claim a loss carryback and reduce their tax base for 2019 and 2018. This provision will apply to tax years ending on or after June 30, 2020.

- **Germany**
  Generally, in Germany losses up to EUR 1 million (double in case of joint assessment) may be carried back to the previous year. In order to mitigate the economic impact of the Covid 19 pandemic, the maximum amount of losses that can be carried forward for the 2020 and 2021 tax years has been increased to EUR 5 million (double if jointly assessed).

From all this, it can be concluded that all member states of European Union have approached the adoption and implementation of various tax measures in order to mitigate the negative impact of the crisis resulting from the Covid- 19 pandemic. The implementation of the measures was particularly visible during the first lockdown period (spring 2020), although many measures have been extended and continue to this day. It should also be noted that in addition to the measures within the tax system, all European Union member states have introduced various other measures, such as cash transfers for households, wage subsidies to employers or employees, subsidies for the self-employed, extended or prolonged eligibility for unemployment benefits or for sickness benefits. However, the analysis of these non-tax measures is not the subject of this paper.

4. CONCLUSION

The Covid -19 crisis measures taken in the first phase of the pandemic certainly helped to a large extent in preserving jobs and consumption levels. However, given all the constraints in the economies and the significant decline in government revenues on the one hand due to the freezes and a significant increase in government expenditure on the other due to increased health care costs, the payment of various subsidies and grants to companies and individuals, it is obvious that all countries will have to deal with the consequences of this crisis for a very long time. In the third (recovery) phase, a good and quick adjustment of fiscal and monetary policies will be crucial, especially in the context of the partial or total removal of existing measures to combat the negative effects of the pandemic. This crisis will lead to even greater disparities in the level of development between countries, and special support will be needed for countries that already had lower economic growth rates, higher public debt and weaker health systems before the pandemic. Accordingly, international coordination and assistance will be needed, as well as European Union financial support for the less developed member states. In the third phase, it will be necessary to weigh and define which sectors are most affected by the crisis and which still need the most fiscal support. Moreover, tax revenues are likely to continue to fall in the coming years and it will be necessary to provide sufficient and long-term financial incentives to stimulate investment and private consumption. In addition, fiscal consolidation will have to be implemented, in which the adjustment of public revenues and the tax structure will play a key role. It also cannot be ruled out that countries will seek to develop and levy new forms of taxes and contributions

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THEORETICAL AND PRACTICAL ASPECTS OF THE FORMATION OF COMPETITIVE PRICING STRATEGIES IN AZERBAIJANI ENTERPRISES

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ABSTRACT

Azerbaijan cannot increase the share of ready products, especially food exports. The country has a raw material-oriented export model. Despite negotiations on the sale of non-renewable resources, the export of hydrocarbons remains the main source of foreign trade and leads to an increase in imports. At the same time, under the conditions of a limited domestic market, more and more enterprises are forced to shift to foreign economic activity. Records show that most Azerbaijani enterprises are not ready to actively compete. As a result, the industry is in such a difficult situation that there have been no serious innovations to strengthen the competitive position of enterprises. However, the way out of the difficult economic situation can only be to create competitive production focused on the needs of consumers. In this sense, competitiveness is an important condition for the well-being of local businesses. The problem of assessing and managing the competitiveness of Azerbaijani enterprises is the general decline in production, the high level of safety of competitive enterprises, the elimination of financial costs, and the problem of bankruptcy proceedings for many enterprises. In this context, it is necessary to increase the ability of the enterprise to analyze all the factors of competitiveness, on the other hand, to increase it to assess the competitiveness of the enterprise at a very high level, without which it is impossible to develop a future development strategy. In this regard, the formation of a competitive management system is the most important condition for the sustainable existence of enterprises. From this point of view, we believe that there is a need to analyze and research these systems and strategies in order to determine the level of implementation of competitive pricing strategies in the food sector of Azerbaijan. The research will reveal the competitive pricing strategies of companies operating in the food sector, the effectiveness of research in these areas, the problems encountered in implementing the strategies, and what is being done to prevent these problems. The current research reveals the behavior of companies operating in the food sector of Azerbaijan in the current competitive environment, the level of operations in practice in connection with new competitive pricing strategies, and what problems they face during research in this field.
Keywords: enterprise, competition, pricing strategy, food sector

1. INTRODUCTION

The competitiveness of the Azerbaijani economy is directly related to the development of the non-oil sector and some successful economic reforms in this direction are yielding results in achieving long-term and sustainable development, creating a competitive economy based on oil and gas revenues. As a result of the socio-economic processes intensification and sustainable development in the non-oil sector in recent years, the non-oil industry achieved an annual growth rate of 3.5 percent in 2019 [1, p.11]. However, the future development of the processing industry in the country depends to a large extent on raising the level of price competitiveness in the domestic market. In the market of goods and services, competition is one of the main requirements for self-regulation of prices and tariffs in accordance with supply and demand, as well as achieving a balance between the volume of demand and price. Because in a market environment where free competition is provided, raising the price of goods or services by any market entity forces consumers to look for other options.

Offering a homogeneous product at a lower price by alternative competing market entities forces this market entity to sell at a low price by adjusting prices to market demand. As a result of competition, the common price of similar products is formed and the market mechanism of price formation is activated. From this point of view and from the point of view of the measures outlined in the Strategic Roadmap, this article also considers the price mechanism of ensuring competitiveness in the field of food production and explores avenues to improve it.

2. ECONOMIC IMPORTANCE AND PRIMARY CONDITIONS FOR RAISING THE COMPETITIVENESS OF AZERBAIJANI ENTERPRISES

The adopted reforms model and the features of macroeconomic policy in Azerbaijan define completely new proportions of the real, trade, intermediary and financial sectors of the economy. Today, fierce competition for public resources and revenues between market sectors is leading to a reduction in production capital from financial capital and capital inflows to trade services. Liberalization of prices and foreign trade in the real cash sector, harmonization of domestic and world prices, and the separation of domestic producers from the raw material base in the context of tight monetary policy have created more favorable competitive positions in the raw materials sector. The internal macroeconomic conditions in which Azerbaijani producers, and especially the food industry, operate, undermine the position of local enterprises in the country's domestic markets due to strong pressure from foreign exporters on foreign markets. The basis for building a competitive economy is the widespread application of innovations and our country's participation in the international division of labor. Azerbaijan is actively involved in the development of a competitive economy. The government of the republic is based on the competitiveness of the market economy by deepening reforms and implementing sustainable measures to form a socially oriented society. The successful future of the Azerbaijani economy is reflected in the innovative development of industry and its integration into the world economy. The Republic is active in multilateral international cooperation projects and carries out an effective innovation policy in the national economy. President of the Republic of Azerbaijan Ilham Aliyev considers these areas a priority in his final reports on socio-economic development in 2017-2019. The competitiveness of our economy must be based on efficient technologies that reduce energy costs. Azerbaijan must develop in accordance with global trends, choose everything new and progressive in the world. Azerbaijan must take an active part in multilateral international projects that ensure integration into the global economy, including based on our favorable economic geographical position and available natural resources. Important institutional agencies have been established to develop competitiveness. Adopted laws and normative acts, government decisions have created a legal basis for the development of competitiveness. They allowed to create a legal guarantee for the activities of investors. The procedure for establishing a joint venture, registering participants in foreign economic activities and licensing exported products has been significantly simplified. All this has had a positive effect on some improvements in the structure of exports and imports. However, the Republic is unable to increase the share of finished products, primarily food exports. A raw material-oriented export model has been created in Azerbaijan. Despite negotiations on the sale of non-renewable resources, the export of hydrocarbons remains the main source of foreign trade and leads to an increase in imports. At the same time, in the conditions of a limited domestic market, more and more enterprises are forced to move to foreign economic activity. Records show that the majority of Azerbaijani enterprises are not ready to actively compete. As a result, industrial enterprises are in such a difficult situation that there have been no serious innovations to strengthen their competitive position. However, the way out of the difficult economic situation can only be to create competitive production focused on the needs of consumers. In this sense, competitiveness is an important condition for the well-being of local businesses.

There is a need to improve national security for exporters and import-substituting production methods to ensure food security. One of the priorities of the country's foreign policy is the development of comprehensive relations with the member countries of the World Trade Organization.

3. EVALUATION OF OPERATIONS RELATED TO MARKETING ACTIVITIES AND COMPETITIVE PRICE STRATEGIES OF COMPANIES ON DIFFERENT ADAPTATIONS

The current research identified the marketing activities of companies operating in the food sector of Azerbaijan in three adaptations, their behavior in the current competitive environment, the level of operations in practice in connection with new competitive pricing strategies and the problems encountered during research in this field.

3.1. The First adaptation

According to the *first adaptation,* the launch of the company in a certain year brought new quality and new flavor to the local production, confectionery and food industry, and gained great prestige in various local and Central Asian, Russian and Georgian industries. The company pursues a development policy in accordance with the requirements of international standards to strengthen the dynamics of development and expand exports. Research shows that in the first years of production, the company was more sales-oriented, and the gradual increase in production and competition has introduced the concept of quality. In order to increase the quality and inform the consumer about the quality products produced, the company's marketing activities have become more valuable and a marketing department has been established here. Currently, the company is working on commercial marketing, creating sectors such as sales forecasting and analysis, market and consumer research. As for the competitive position of the company, today the company is facing intense competition. To compete, the company uses its own methods and strategies, conducts annual market research, and signes contracts with foreign companies to make its results more accurate and clear. Besides, the company evaluates the market more objectively with the information of sales representatives. In the face of strong competition, the company's sales representatives gain information about the sales of competitors in the market and often learn customers' opinions about the products in the market through surveys, observations and interviews. The company sees other brands that sell by weight in the market as competitors because it sells in the branch of chocolate candies sold by weight, while Roshen and Mars consider national brands to be the biggest competitors. The prices of the company's competitors are very flexible, because most of them are national companies and have many loyal customers, which are the most important values that affect the competitive position of the company. Annual analytical surveys provide specific findings about competitors, and these results are used to evaluate the company in a way that gives it an advantage over the competition. As for the company's pricing strategies, according to research, the most important 4P marketing component in the company's marketing activities is price. When determining the price of a product, the company tries to achieve it at the point of reaching the price. The company sets the price of the product in accordance with the cost-oriented pricing approach. When a company sells its product at a set price, conducts monitoring activities too. The price of goods in the market is always monitored, analyzed and sales ability is assessed. When problems are encountered, solutions are developed and presented to management after the causes are investigated. When setting the price, the company aims to determine the optimal price and sell in the real market. When a company implements a pricing strategy, it prioritizes the company's values and mission.

3.2. The second adaptation

In the second adaptation, the company has built a large retail network equipped with modern technology in a short time, delivering its products to the market and consumers in the manufacturing sector and the products of the companies it shares. The company has been cooperating with various companies around the world since its establishment. Over the years, it has treated every company it worked for with respect and has shown great skill in delivering products. For this reason, over the years, the company has been awarded various certificates and diplomas by the companies it operates due to its high quality and skillful business. The company has opened a branch in Georgia. In addition to research existing new markets for businesses, the branch conducts market research, prepares a package of proposals and makes presentations for enterprises operating in the Azerbaijani market on an order basis. The company carries out its marketing activities with employees of the marketing department and sales representatives outside the company. Offshore sales representatives provide the company with information about the market, the actions of competitors in the market and market leader give information about products. Which product is sold for how much, at what price, to which consumer? What are the reasons? At what prices do competitors sell in the market? What are the reasons why consumers prefer competitive products? The company's marketing department is doing everything to increase sales. At the end of each year, marketing plans and strategies for the next year are prepared and presented to management. When it comes to the company's competitive position, according to research, the company faces intense competition. It offers food products to the Azerbaijani market, and therefore competition is inevitable as it faces competing companies in the market. The company also puts forward competitor search in marketing research. The company's competitors are local and foreign food companies. Today, in the food sector, consumers' preference for local foods changes by type of food. These conditions sometimes give the company advantages and sometimes disadvantages in competitionThe company implements and analyzes consumer campaigns, advertisements, promotional efforts, strategies and policies to compete with competitors. The company tries to get all kinds of information about its competitors. The company is aware of information and updates on competing products, price indices and sales figures, mainly through sales representatives and supervisors working outside the company. The company competes with its competitors in the current competitive environment and develops marketing activities in this direction in order to compete. When it comes to the company's pricing strategies, research shows that the price of manufactured products is the most important factor for sales at any level. When determining the price of the product it produces, the company first takes into account the cost of the product, then the prices of competitors and then the required price. In determining the price, the company also takes into account consumer expectations, income and the point of loss in the real market. When setting the price, the company's marketing team, after conducting the necessary research, prepares a package of proposals based on the results of this research and submits it to the general management, production management, and the final manager of the company approves the price. The optimal price for the company is a figure derived from the cost of the product, the prices of competing products and the required average price. When determining a pricing strategy, a company first analyzes its competitors, defines its strategic goals and implements short and medium-term strategies to achieve those goals. The company always monitors and checks its existing strategies. Successful strategies and a well-defined price are the desired results for a company.

3.3. The third adaptation

In the third adaptation, the company is a leader among enterprises engaged in wholesale and retail sale of dairy products and today has developed sales channels in all regions of Azerbaijan. The main goal of the company's marketing policy is to expand the sales market, distribution

network and keep the product at the maximum level for the consumer. As for the company's marketing activities, according to research, it is involved in a wide range of marketing activities. As a marketing activity, a company conducts market, consumer, competitor, and product research, defines marketing plans and goals, collects and uses the necessary information, and makes important marketing decisions. To make marketing decisions, the company always conducts internal and external assessments, business, key market, competitor, sales analysis. As for the competitive position of the company, it should be noted that the company is facing intense competition in the market. In order to compete with competitors, the company always conducts competitor analysis and tries to get all kinds of conclusions about competitors. Sometimes the company does guerrilla marketing for it. The company always monitors competitors' sales, price indices and marketing activities. Marketing decisions take into account the behavior of competitors. As for the company's pricing strategies, research shows that the company follows a financially oriented pricing approach when determining the price of a product, but in some cases the company also uses psychological pricing methods. When setting a price, a company takes into account some important factors related to the market, consumers, competitors and company values. Pricing figures are approved by the economic planning department, not the marketing department. The marketing department prepares proposals only on the basis of researchWhen determining the company's pricing strategies, the company's goals and values, subjective and objective reasons come to the forefront. Existing strategies are medium-term and they are presented for evaluation at the end of each year. Thus, today the presence of many companies in the food sector of Azerbaijan creates fierce competition. Every company engaged in production and sales in the food sector implements intensive marketing activities, competition and pricing strategies in order not to lag behind and keep up with their competitorsThere is strong competition due to changing technology, new customers, new inventions, changing consumers, sustainability of food products, elasticity of demand. Companies are in fierce competition with each other. The analysis of the marketing system in the food sector of Azerbaijan and how the companies operating in this sector apply operations related to competitive pricing strategies, the contribution of this research to the company, what problems it faces, what solutions are being sought during this period. Adaptations 2 and 3 of the research was defined that companies conducted moderate marketing activities, that companies made more sales-oriented marketing efforts, applied competitor analysis, competitor sales figures, and made strategic and political decisions to keep up with their competitors. was identified. Adaptation 2 and 3 companies apply competition and pricing strategies to continue the existing competition with Adaptation 1 and to analyze the strategic decisions made as a result of these strategies before and after implementation. The success of the adopted decisions and the applied strategies is measuredIn order to gain a competitive advantage, the company constantly conducts market research and constantly takes into account the products, services, campaigns and promotions of its competitors. The results of the search show that the companies in Adaptations 2 and 3 are aware of the competition with Adaptation 1 and apply competition and pricing strategies to comply with it. However, it may arise weaknesses, shortcomings and failures in these strategies. That is, for companies to compete effectively with competitors;

- it should be applied the right pricing strategies,
- when applying these strategies, the demand for the product they market should be taken into account.
- demand forecasts need to be clarified.
- sufficient research should be done on the product,
- product-based 4P should be applied,
- indexed prices for the product should be determined by the prices of competitors,
- customer representatives should be given the type of product they can adequately handle.

4. RESULTS OF THE EFFECT OF THE PRICE FACTOR ON ENSURING COMPETITIVENESS IN THE FOOD INDUSTRY OF AZERBAIJAN

As a result of improving the competitive environment in the country, creating a favorable environment for individual entrepreneurs, meat production (including chiken) increased by 1.8 times, butter production by 1.8 times, vegetable oil production by 1.4 times, cheese and cottage cheese production 1.6 times, margarine production 5.4 times, confectionery production 1.6 times, iodized salt production 28.7 times, egg production 2.7 times, pasta production 5.3 times, canned fruit and vegetable production increased 7.6 times, grape wine and beer production increased 1.9 and 3.8 times, respectively and soft drinks production increased 4.2 times in 2019 compared to 2003 [2]. The rapid growth dynamics of most food products during 2003-2019, characterized by the overall competitiveness of the production of these products, indicates the possibility of increasing the relevant production according to the needs of the domestic market, as well as export markets. At the same time, in order to meet the consumer demand in the domestic market, as well as the demand for raw materials in the processing industry, the import volume of some products was significantly higher than the volume of domestic production of these products. Thanks to targeted measures taken to strengthen the country's food security, the level of self-sufficiency in basic foodstuffs has increased in recent years. Thus, in 2019, the level of self-sufficiency in some food products will increase to 86.1 percent for beef, 97.6 percent for mutton, 74.6 percent for chicken, 101.8 percent for eggs, 86.3 percent for milk and dairy products, 87.8 percent for potatoes, 100.8 percent for melons, 123.1 percent for fruits and berries, 112 percent for vegetables, 126.7 percent for fruit and vegetable juices, 111.4 percent for salt, 75 percent for sugar, 33.6 percent for vegetable oils, 98.2 percent for margarine, 69.5 percent for butter - (Table).

Table 1: With the main types of industrially processed food products level of self-sufficiency, percent

	2010	2014	2015	2016	2017	2018	2019
Refined rice	13,0	8,3	9,6	10,1	23,8	19,4	18,5
Flour (all types)	95,1	94,8	95,1	96,1	96,0	95,9	95,6
Groats (all types)	11,3	18,2	17,9	17,6	29,0	26,2	24,7
Pasta	72,7	58,0	53,2	51,0	48,0	28,7	24,7
Vegetable oil	74,3	67,0	60,5	36,9	37,1	34,3	33,6
Margarine	108,2	99,3	292,2	105,7	101,5	98,8	98,2
Fruit and vegetable juices	140,3	112,4	114,1	110,0	149,4	117,9	126,7
Canned fruits and vegetables	91,8	91,4	87,6	92,9	92,5	90,4	90,4
Butter	50,0	51,9	69,2	75,6	71,0	71,3	69,5
All types of cheeses	85,7	80,4	84,2	88,3	89,8	87,9	87,7
Sugar	155,6	170,6	192,9	114.4	60,6	81,7	75,0
Tea	63,2	50,7	40,2	44,9	47,7	44,6	43,7
Salt	25,4	77,5	76,9	100,3	105,8	103,1	111,4

Source: Food balances of Azerbaijan. 2016. Baku, 2016, p. 76; Food balances of Azerbaijan. 2020. Baku, 2020, p. 77.

According to the ConEC of the Republic of Azerbaijan, in recent years there has been a certain increase in the volume of food production in the country, but there has been a decrease in fields of particular importance. Compared to some other sectors of the production sector in the country, we are witnessing a smaller decline.

The conditions that determine the decline in production include:
- shrinking consumer demand;
- shortage of current assets;
- limited opportunities of attracting credit resources;
- disappearance of price competitive advantages for individual food products.

The main problem in the dairy industry of Azerbaijan is that, in addition to the small number of dairy processing enterprises in the country, the volume of production of natural milk raw materials needed to meet industrial needs is insufficient. Therefore, it is necessary for the republic to import a large amount of dairy products. Therefore, the need to expand the scope and strengthen the activities of existing processing enterprises in the country, as well as to increase the production capacity of natural dairy raw materials, serves to realize opportunities to increase the production of quality and marketable dairy products. Statistics also show that we do not observe the necessary dynamics in the production of dairy products in 2016-2019. In some regions of the country, the profitability of dairy products at most dairy plants has significantly decreased at the level of 2-5%, and there is no necessary material and technical base for processing. Overall, 70% of the existing equipment in this area is obsolete (with a service time of more than 10 years). Besides, it is impossible to upgrade equipment, especially for small enterprises, so prices continue to rise. It is clear from the statistics and market analysis that further growth in the level of food self-sufficiency in some products is relevant, both in terms of current and future demand. Analysis of the country's net trade balance shows that there are vast opportunities to increase exports of sugar and sugar products, as well as products such as sunflower oil. Other fields in the Strategic Road Map where there are important potential opportunities in our country are: making acohol from grape wine, production of hippophae oil, cold-pressed walnut oil, glycyrrhiza, saffron and etc. made from wild fruits and berries, procution of margarine, tobacco, fruit juice, milk and milk prodcuts, meat and meat products and sericulture [3, p. 61]. Besides, the issue of strengthening, deepening of the goods and services production along the value chain, as a result, leads to an increase additional value. This is confirmed by the calculations made for some main goods produced in the country. As shown in the Strategic Roadmap, by developing tomato production according to the value chain, ketchup production creates about 4 times more value added than open field production. Production of chips from potato products is about 13 times more than open area production, canning in the area of cucumber production creates 5 times more value added [3, p. 64]. It is clear that the added value created by deepening the production of goods along the value chain can increase several times. That is why it is more expedient to approach the organization of agro-food production through the prism of three-dimensional space, which includes the trinity of region-product-value chain. The above-mentioned products are mainly considered to be more competitive in the country's agricultural sector, and they may have great potential for export to other markets in the region. The sixth goal of the Strategic Road Map identifies mechanisms for the implementation of these products in domestic markets and the organization of exports. In the coming years, it is also planned to conduct in-depth analyzes and develop separate programs, plans or strategies for priority product ranges to stimulate production in the value chain, taking into account changes in the social, economic and geopolitical environment at the global and regional levels. The development of the AIC covers the main fields of the modern industrialization program. The state pays great attention to solving the problems of AIC industrialization. Among the tasks of sector industrialization, which helps to increase the export potential of Azerbaijan's agricultural products, are the application of innovative technologies due to in-depth research and employment of human resources. The state supports the use of water-saving technologies, processing, selection and development of cooperation.

The Strategic Roadmap provides for the achievement of sufficiently enough high exports of priority products, including fresh fruits, hazelnuts and all kinds of vegetables, from 65 sectors and sub-sectors of the AIC, it is planned to ensure the export of sugar and sugar products, gherkins, tomatoes, fresh fruit (diospyros, apple, peach, pomegranate, cherry), sunflower oil and seeds, green tea leaves. Besides, it is also important to support areas such as the production of alcohol made from grape wine, production of margarine, fruit juice, hazelnuts, productions made from wild fruits and berries (hippophae oil, glycyrrhiza, saffron, cold-pressed walnut oil, etc.), production of grapes, tobacco, cotton, meat and meat products, milk and dairy production and sericulture. At the same time, in the near future to increase the volume of production in sericulture, including sericulture processing, by at least 1,000 times, to increase the production of meat and dairy products by 25 percent and i.a. It is intended to achieve such goals. There are about 650 enterprises in the agro-industrial complex, which employ about 24,000 people. In the near future, it is necessary to concern the main tasks of the agro-industrial complex include further increasing the role of "Agroleasing" OJSC in expanding the range and production of agricultural and agro-industrial products, the gradual expansion of the activities of the newly established organizations - "ABAD" public legal person and "Supply and delivery of food products" OJSC. [4, p. 30]. In recent years, agro-parks have been established in the relevant economic zones of the country to form the AIC's infrastructure and logistics base that meet modern standards. The main areas of activity in these parks are the organization of production of agricultural products on the basis of advanced technologies, as well as the most efficient implementation of the processes of transportation, storage and sale of finished products. The creation of logistics centers in accordance with international standards has begun in agricultural parks. Shamkir Agropark, which occupies an area of 543 hectares, has various infrastructure facilities, intensive economic entities, processing plants, factories, logistics centers, as well as various centers such as sales centers, refrigerated storages. At the current stage of economic development, the following are among the main strategic objectives of the AIC:

- to achieve the production of agro-food products in accordance with modern international standards;
- to meet the needs of the country for high quality food and food products;
- to ensure the export of products with export potential to international markets;
- to expand the export of highly competitive agro-industrial products "Made in Azerbaijan" and i.e.

5. CONCLUSION

1) Companies build their marketing strategies on more product complexes. Therefore, intensified product strategies should be identified and market research should be conducted in a more professional manner. Companies need to identify real competition and develop pricing for the target market in order to maintain their success and ensure effective competition.

2) The added value created by deepening the production of goods in the value chain increases several times. Therefore, it is advisable to approach the organization of agricultural production through the prism of a three-dimensional space, which covers the components of the regional-by-product chain. There are also comparative advantages in the production of tobacco and sericulture, and as a result, the production of these products has increased.

3) Along with some dairy processing enterprises in Azerbaijan, a large amount of dairy products is imported to our country due to insufficient production of natural milk raw materials for industrial needs. Along with expanding the volume and strengthening the activities of dairy processing enterprises in the country, it will be possible to increase the production of high quality and marketable dairy products by increasing the production capacity for the production of natural milk raw materials.

4) Mainly processed and canned meat products are exported from our republic. Considering that the existing processing enterprises in our country meet the necessary requirements in terms of innovative technologies and labor productivity, it is possible to achieve a sufficient increase in the production of meat products by expanding their coverage and strengthening their activities.

5) The share of processed products in the structure of agricultural products imported to our country is higher. Therefore, in our opinion, by establishing processing enterprises for agricultural products in our country, it is possible to reduce dependence on imports of many products, especially tobacco, flour and dairy products, and to eliminate the trade deficit.

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