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EXISTING PROBLEMS IN MOTIVATING CIVIL SERVANTS

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ABSTRACT

The purpose of the article is to identify existing problems in the motivation of civil servants. The article discusses the difference between the motivation of civil servants and private sector workers. The effectiveness of motivation in public administration is also assessed. The objective of the article is to determine the features of various approaches in providing motivation, opportunities and freedoms in the decision-making process on the regulation of motivation. The tasks also consist in determining, on the basis of statistical data, a correlation between the incomes of public servants and their expenses, to find out how the goals, costs, quality of public administration and incomes of public servants are related; evaluate the effectiveness of the employee and satisfaction with motivation. The reforms in the model of public administration in Azerbaijan are considered, the legislative framework for the regulation of income, including premiums, is analyzed. Particular attention was paid to optimizing the work with staff in the civil service and improving the mechanisms of motivation in recent years. The article uses methods of comparative analysis, logical generalization and synthesis. The author analyzed practical methods of motivation. A comparative analysis of the salaries of civil servants and private sector workers was carried out. The author considers the relationship between the quality of civil servants and their income. As a result of the study, recommendations on motivation were developed to increase the efficiency of public servants.

Keywords: *Motivation, Civil Servants, Motivation Management, Premium Performance, Salary*

1. INTRODUCTION

Over the past 20 years, in the theory and methods of human resource management have occurred radical changes. From the strategy of submission and control, modern management is moving to the strategy of “attraction” and partnership. These changes are closely related to the new scientific stage of labor organization based on social and technical principles (Gauzner N.D. (1989), p.125). To increase the motivation of modern workers, have been successfully applied various systems of employee participation in profit and the creation of working property. Experience shows that the use of such a system for two years leads to an increase in productivity by an average of 10-15% (Samygin S. I. (2001), p.386). This result is achieved due to a closer “attachment” of employees to the results of the enterprise, creating a sense of participation and involvement on the part of the owner in the employees. Evaluation using econometric methods in the United States showed that enterprises that use the profit sharing method have increased productivity by 32% compared with companies that do not use this method. And in enterprises where employees are involved in the decision-making process, labor productivity has increased by 46%. In particular, high results were obtained by the participation of workers in the process of determining the amount of wages (International Journal of

Industrial Organization, March 1998, p.146). In different countries, the participation of workers in profits is regulated by the government. In the USA and Great Britain, as a rule, there is little government intervention in the affairs of the enterprise and there is a form of control over participation in profits. In the Scandinavian countries, France and Germany, there is a form of state regulation of the financial participation of employees. Unfortunately, the heads of private enterprises, who still have not fully understood the relationship inherent in a market economy, precisely because of the inability to correctly determine their income, consider all the company's net profit to be their income. As a result, due to the fact that the costs of investments and the development of the labor collective necessary for the continued development of the enterprise are not taken into account, very often the enterprise is unable to withstand the difficult market conditions. It is worth noting that profit sharing, which provides employees with additional income, actually differs from incentive pay systems and, in essence, acts as an additional preferential form. If incentive pay systems are directly related to the production results of individual workers (or individual groups of workers), then the payments received by employees under profit sharing schemes are related to the profit of the entire enterprise. The latter, however, depends not only on the efforts of workers, but also on other features, such as: organization of activity and the effectiveness of enterprise management, quality of equipment, etc. Compared with the principles of revenue and sales in the private sector, staff incentives in the public sector are based on slightly different principles. Since the functions in the public and private sectors are different, the goals set are different too. Therefore, in the public sector, in addition to economy, rationality, and cost reduction, other functions, actions, and goals are also set as indicators of productivity, such as time taken to complete work, quantitative indicators of work performed, etc. In state-owned enterprises, profit sharing is also done according to a different principle. That is, a relatively small portion of the profits can be paid to employees as wages. And for this, are often considered necessary permissions and instructions from higher government bodies. However, the participation of employees in profits is one of the means of managing the personnel of the enterprise, aimed at improving the efficiency of the enterprise. In the period of changing technical capabilities and management requirements, it is especially important to improve the system of remuneration of civil servants and create an incentive system based on the results of their activities. The purpose of this article is to study problems in the field of motivation and, especially, the remuneration of public servants. The article posed the following tasks:

- 1) To study theoretical and practical approaches to participation in profits and to note the existing differences between the private and public sectors (public service system);
- 2) To study the system of remuneration of civil servants and the system of their encouragement, based on the results of their activities in foreign countries;
- 3) To analyze the real situation in this area in the Republic of Azerbaijan;
- 4) To put forward proposals based on the experience of foreign countries and the domestic realities of the country.

In the course of the study, we based only on information that is allowed for use. In order to establish the competitiveness of wages and motivation in public service positions, we tried to conduct a comparative analysis of the average wage in the country and the nominal average wage of public service employees, as well as wages in similar positions in the private sector and in the civil service.

2. THEORETICAL AND PRACTICAL APPROACHES TO THE PARTICIPATION OF EMPLOYEES IN PROFITS: DIFFERENCES IN APPLICATION IN THE PRIVATE SECTOR AND IN THE PUBLIC SERVICE

2.1. Theoretical views on profit sharing

The approach of working personnel to work is considered one of the main factors affecting the increase or decrease in the income of the enterprise. Therefore, the determination of the participation of personnel in the sharing of enterprise income is of particular importance. To identify the problem of income sharing, there are two interrelated approaches: functional and personal (Maslov E.M. (2000), p.276). The functional division of income is associated with ways to divide the income of an enterprise into wages, rents, interest and profits. In addition, the division of total income is carried out according to the function performed by the party receiving the income. The economic function of separation is expressed in the impact on the national economy through requirements, interests and incentives. The social function of separation is aimed at satisfying social needs and social development. The first schemes for employee participation in profits were identified in the middle of the 19th century, later they were fixed in many countries at the legislative level. These systems have long been considered by owners as a factor of increasing interest in the success of the enterprise and a way to maintain social stability within the enterprise. However, in practice, the application of the profit sharing system is significantly limited and is more theoretical. And only in the 80s of the 20th century, the participation of the company's employees in profits became one of the main ways to keep the company afloat in the conditions of fierce competition. As a result of this, the system of participation in profits is expanding, the level of its application is growing significantly, and its qualitatively new forms are emerging (Belova V. (1998), p.133). The definition of "Profit Sharing" was first given at an international event at the University of Oxford: "payments according to agreed schemes, determined in advance in a free manner - the invariable share of the majority of employees in profits according to the decision of the employer" (Weitzman M.L.(1984), p.17). When using this scheme, labor income is divided into two parts - fixed and variable. The first part - the basic salary - is determined in the framework of the employment contract (as the base). The second part is appointed on the basis of a special agreement between the administration and the employee. Some economists note that the transition to the "profit sharing" economy creates a mechanism for stimulating labor, which, in turn, causes a decrease in inflation and stabilization of interests. (Weitzman M.L.(1984),p.94). For example, Japanese professor Tadao Kagono noted that "motivation and the involvement of workers and employees in their production results is the basis of Japanese management" (Monthly Labour Review, August 1998, p.36.). World practice knows many profit sharing schemes. However, despite this many, they can all be represented in the form of 3 main groups:

1. Participation directly only in profit;
2. Profit sharing through the acquisition of shares;
3. Profit sharing under any form of partnership.

In the last two types, unlike private sector workers, public servants working in state bodies cannot participate. The remuneration system is determined on the basis of three groups (Genkin B.M., Nikitina I.A.(2013), p.424-425):

1. The remuneration corresponds to the indicators of the overfulfilled and fulfilled for the most part of work plan. In this case, the main quantitative indicators are taken into account, and incentives are appointed on their basis. For example, if the number of work performed exceeds the number of work stipulated by the plan, a reward (premium) is assigned.
2. The remuneration is assigned according to the personal qualities and professionalism of the employee himself, his attitude to work.

In this case, the incentive takes into account the responsibility of the employee, a professional approach to work, discipline, ethical behavior, etc.

3. The remuneration is not systematic, but is associated with certain achievements, creative activity. It can be issued according to the results of both collective and individual work. In this case, various proposals can be taken into account regarding the increase in rationality of labor, increase in indicators of economy and quality, etc. It is carried out mainly at the end of the year or after the application of the proposed innovation.

However, in general, the rules of remuneration (both in the private sector and in the public service system) should reflect the following:

- Indicators and conditions of remuneration of personnel of various categories;
- Remuneration Amounts;
- Circle of remunerated workers;
- Frequency of remuneration.

2.2. Problems in the remuneration of managers and executives (and/or civil servants)

When considering the market side of revenue generation, an important role is played by the market conjuncture, the market level of salaries of specialists, ordinary workers, top managers, as well as information about the government's wage policy in this sector. According to the traditional microeconomic approach, an analysis of the market level of income is carried out. However, in reality, real wage levels can be very different from market ones. This can be seen most acutely at the salaries of top managers. Therefore, the legal market for the application of labor and managerial potential (labor market) acts as a source of information on the market level of income. In modern conditions, the use of the potential of managerial personnel - a special segment - should turn into a special object of analysis. In conditions of market volatility, the real income of top managers exceeds the market level for paying for their services. Such incomes in many developed countries, in particular, in the USA are called "rational level of remuneration" (Milgrom P., Roberta J.(1999), p.360-365). Since this level is formed not on the market, but inside the enterprise, it reflects the individual abilities and services of individual employees, and also affects the formation of approximate ideas about the level of income of the enterprise. And finally, the incomes of employees are not only influenced by market factors, but also the company's policy in the field of remuneration. The latter, today, occupies an indispensable place in the formation and increase of enterprise income. Today, when forming the salaries of top managers among the rest of the enterprise's personnel, an internal salary policy is applied, consisting of certain incentive measures, taking into account the influence of top managers on the income and net profit of the enterprise. It is worth noting that in both cases, taking into account both market and organizational factors, as well as their relationship, it is possible to promote the right wage policy. In other words, when analyzing the revenue generation system, one must take into account the relationship between use rights and property rights; that is, it is necessary to take into account the factor of reaching for employees and management personnel along with their potential, the cost of commodity, food, material and energy resources. At the same time, one of the main factors affecting the formation of the income of workers and managerial personnel is their ownership of information about the income of the enterprise. The fact that the management group owns this information, and the owners of the enterprise share various trade secrets with them, plays one of the leading roles in generating income for managers, most often top managers, and in that their income differs from the income of other working personnel. On the other hand, when assigning wages to a leading employee, it is necessary to take into account the severity of labor, its intensity and duration (10-12 working hours per day instead of 8), often a 6-day working week and the fact that sometimes even days off have to be devoted to work.

Therefore, the wages of the manager, and his income, in general, should be higher than the wages of his employees, and this superiority should increase mainly depending on the results of the work of the labor collective, or be appointed in the form of bonuses. Judging by the studies (based on social surveys conducted at medium, large and small enterprises existing in the country and data from foreign literature), the income of a senior employee exceeds the average income of the enterprise by 2-5 times, and low income - by 10-15 times. However, these ratios do not apply to income derived from inventions, proposals related to rationality, or new organizational or proprietary ideas. Although the income received precisely from all these areas is greater. Now it's quite difficult to evaluate creative activity and reflect it in wages. Payment according to the position (full-time unit in the structure) is determined on the basis of participation in the process of achieving the goals set by the state body. That is, for employees of the support department or the auxiliary department, this will affect wages. However, when concluding an employment contract in state institutions, wages and social benefits are determined by law, and only remuneration issues can be the subject of discussions. For one work, payment can be ordered depending on the functions of the employee who performed it, and is assigned as interest. But the problem is that some employees perform work more than their functions or that not all functions are fully reflected in the work instructions.

2.3. International experience

The frequency (periodicity) of remuneration can be for months, quarters, six months and at the end of the year. Many countries often prefer to give bonuses at the end of the year. Prizes awarded at the end of the year are usually collective. The monthly remuneration system is gradually being abandoned. Given the processes of inflation in the country, the remuneration of individual personnel can be carried out in quarters. At the same time, when rewarding for creative work, it is necessary to take into account its specificity and determine in advance the risk element. Perhaps it will take more time to do any creative work than planned, and this should be taken into account when rewarding. A prize for creative work may be issued based on its outcome. For a number of regulatory acts adopted in Russia (Levashov V.I. (2000), p.132,138). from the 1995-1997-ies, the salaries of federal posts of public servants consist of the following parts: salaries in the current position, allowance for the professional category, allowances for special working conditions in the public service (severity, risk, etc.), allowances for work experience, bonuses based on the results of the work performed and various material support payments (material assistance). Premiums for the professional category are determined in the amount of 25-30% of the salary, premiums for special working conditions in the public service - up to 20% monthly, allowances for seniority - from 10% for experience from 1 to 5 years, from 15% for experience from 5 to 15 years and 30% with experience of 15 years and above. The size of the premiums is determined by the results of the work performed and are unlimited by the maximum limit. The annual estimate of the salary costs of one public servant is 14.5 salaries for the position. Indexing is carried out in a period of time intended for public sector employees. The part intended for remuneration on the basis of the off-tariff principle may be assigned in the payroll, after which the calculation will be made at the rate indicated below. For example, if the volume of premiums in the wage fund is 30%, then the actual wage is multiplied by a coefficient of 0.7, if 40% - then by a factor of 0.6 (relative to the 1st professional category). In most countries of the European Union, remuneration is carried out in the following order: 25% of the funds earmarked for bonuses are for senior employees, 65% are for mid-level employees, 10% are for workers in low positions (Great Britain). Such (Government of the United Kingdom (2008)) differentiation implies 25% of the total bonus fund for management personnel, 65% for representatives of mid-level personnel who have achieved certain achievements, 10% for employees performing simple work. In the Netherlands, a bonus is awarded once a year in the amount of 25% of the annual salary of each

state unit, taking into account the categories¹. In most countries, there are limits on the remuneration of various work groups. For example, in Brazil there are restrictions on the number of employees receiving the highest bonus. In Italy, the entire bonus fund is divided into three parts: 25% for workers holding high and low positions, 50% for mid-level employees. The number of employees in the first and second groups, as well as the percentage, can vary. For example, 15% to 35%, that is, 15% for the upper group, 35% for the lower. However, 50% of the bonus fund for the middle group should remain unchanged². In the USA (Edward E. Lawler III, George S. Benson, and Michael McDermott (2012)), the difference in wages between regions and the center reaches 50%. In Sweden, taking into account future goals, wages are assigned privately and differentially. Linking the work with the goal leads to the fact that when assigning a bonus, the amount of remuneration for each employee for achieving the goals of the institution is 10-20%, and for achieving their work goals - 80%. That is, at the end of the year, 10-20% of the bonus fund will be distributed among specific individuals who participated in achieving the goals of the enterprise (with an employee's annual salary of 25,000 euros and a bonus for achieving common goals at the end of the year of 10%, the annual income will be 27500 euros), the remaining 80% will be distributed among employees of the managerial, middle and low categories for achieving their job goals. For this reason, individual and collective rewards vary. Many countries have a compensation system. This can mainly be attributed to replacement workers. That is, when one employee replaces another, he must receive compensation. For example, 50% of the salary of the employee whom he replaces. At the moment, only a wage difference is paid for the replacement (if there is such a difference), although the amount of work during the replacement period becomes larger, and the Labor Code of the Republic of Azerbaijan assigns 50% of the wage of the employee whom it replaces as a payment to the replacement employee. In the UK (United Kingdom Government (2011)), a different policy is being implemented. A new assessment system is applied here, and employees of the highest category are distinguished for a certain competency. This is the case in the remuneration and salary systems of civil servants of the three groups. Civil servants of the highest category - 25% of the premium, the middle category - 65%, and the low category - 10%. In addition, for each additional year of employment in the civil service, implied various allowances. But for poorly performed work are made deductions from wages (about 10% from salary). As a result, if the annual salary is 1000 (monetary units), with a premium for good work of 10% it will be 1100 (monetary units), and with a deduction for bad work of 10% - 900 (monetary units). This approach increases the dependence of wage increases on the results of work, and the employee, at least, is trying to maintain wages at the same level. In Canada, since 2005, wages have consisted of two parts: salary and bonus. The difference from remuneration systems in other countries is that when appointing a bonus, risks (dangers) are also taken into account. Prizes can be assigned monthly at a rate of 20% of the salary and consist of two parts: 40% - for the fulfillment of the duties of the body and 60% - for the good performance of their work. As you can see, remuneration combines two goals - the job goal and the goal of the body. Awarding varies for employees. Currently, the following types of remuneration are applied to employees in Canada: 12% (maximum remuneration limit) - to employees of the highest category for achieving the goals of the body, 18% - for achieving individual official goals and 9% - as holiday bonuses (total 39%).

¹ Information provided by governments in response to a request for information issued by the OECD Public Governance and Territorial Development Directorate to national delegates to the Public Employment and Management Network in June 2012.

² Information provided by Information provided by the Treasury Board of Canada Secretariat in response to a request for information issued by the OECD Public Governance and Territorial Development Directorate to national delegates to the Public Employment and Management Network in June 2012.

At a total of 15%, in the lowest category, the maximum amount of premiums is 4.8%, 7.2% and 3%, respectively³. Often, the basic part of wages is left unchanged, and the rest changes depending on market conditions. According to experts, if the targeted remuneration is 20% of the salary, and the bonus for actual work is 10-30%, then incentives will appear (in the total amount of 50% of the salary). At the same time, the bonus of a manager at the end of the year may amount to 100% of his monthly salary, and the bonus of employees of the lowest category - 75-80%. For more than 20 years, Sweden has been trying to build a wage system based on a decentralized wage program. The United States, according to its experience, proposes the use of bonuses based on the results of achieving goals, identifying the target group. Thus, having studied the wage systems of civil servants in various countries, we saw that the most common method is remuneration based on the results of work.

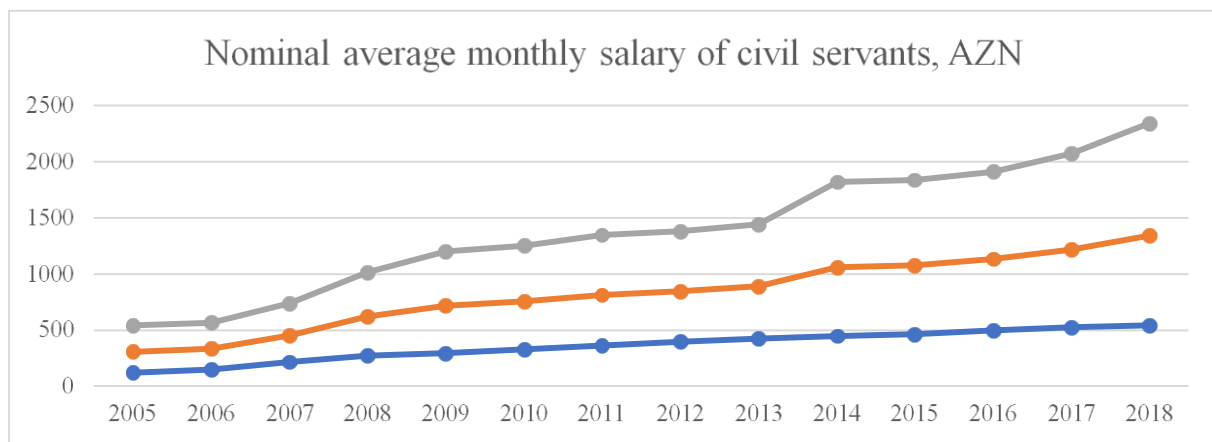
3. ANALYSIS OF THE SITUATION OF REMUNERATION AND BONUSES FOR PUBLIC SERVANTS IN AZERBAIJAN

In different countries, wage categories are applied differently. Very often, to determine the size of wages and the base salary, the situation in the labor market for similar positions is compared, taking into account the non-state sector. For example, the categories of average wages in the labor market are compared and the smallest base salary is assigned in accordance with this. In this case, the lowest and highest wages for one position in different areas (in the public and private sectors) are taken into account. The Japanese National Human Resources Department conducts surveys every year, as a result of which it changes the bonus system so that wages in the public and private sectors are the same⁴. In the Republic of Azerbaijan, salaries of civil servants are indicated in Addition No. 2 to Order No. 1268 of the President of the Republic of Azerbaijan on the “Monthly Official Salaries of State Servants of the Republic of Azerbaijan” dated by June 18, 2019. It is worth noting that the salaries of public servants are regularly reviewed and in recent years a number of progressive steps have been taken in this direction. For example, the minimum monthly salary of a civil servant in an administrative position from 175 manats in 2008 increased to 410 manats by 2018, and in auxiliary posts from 120 manats to 300. One of the main tasks in the spotlight is the competitiveness of the salaries of public servants in the country with the private sector. An analysis of the 2005-2018s showed us that, as a result of the increase, the nominal average salary of civil servants in senior administrative positions by 2018 exceeded the nominal average monthly salary in the country by 1.8 times. At the same time, in 2018, the nominal average monthly salary of civil servants in executive administrative positions increased 4.2 times compared to 2005 (Figure 1).

Figure following on the next page

³ Information provided by the Treasury Board of the Canadian Secretariat in response to a request from the OECD Public Administration and the Territorial Development Authority to national delegates in the Public Employment and Management Network in June 2012.

⁴ Remuneration of Japanese National Public Employees 9 September 2011 Expert Meeting on Compensation of Public Employees <http://www.oecd.org/gov/pem/48668483.pdf>

Figure 1: Nominal average monthly salary of civil servants, AZN

Nominal average monthly salary of civil servants in senior administrative positions (manat).

Nominal average monthly salary of civil servants (manat)

Nominal average monthly salary in the country (manat)

Source: stat.gov.az

This increase applies only to the base part (salary) of wages. It should be noted that in the civil service, wages consist of the base salary, allowances (for seniority, category, official authority, etc.) and bonuses (according to the law, civil servants may pay bonuses of up to three salaries per year). In addition, are provided social payments in the amount of one salary during the year. At the same time, additional material incentives are applied in various state bodies in accordance with the results of activities (for example, Decree No. 1 / 1-04 of the Board of the State Agency for the Provision of Services to Citizens and Social Innovations under the President of the Republic of Azerbaijan dated by March 10, 2016 on confirmation of the "Rules for the use of funds received to the public account of the Board of the State Agency for the Provision of Services to Citizens and Social Innovations under the President of the Republic of Azerbaijan" was adopted a number of special remuneration provisions). However, there are not many such bodies, and this leads to the fact of a massive transfer of civil servants to bodies providing high incentives. From the point of view of the stability of the system, should be found ways and opportunities for stimulation in all state bodies. On the other hand, to ensure competitiveness of wages in the public service should be carried out a more detailed analysis. In order to see the difference in wages for similar positions in the private and public sectors, we pay attention to the data in table 1. It shows that the level of wages in the public service is lower than in the private sector. But this information reflects only the basic salary of civil servants. If we add to this figure allowances for seniority, category and authority, we get the monthly salary of a civil servant, which as a result will be more than this figure by about 20-30%.

Table following on the next page

Table 1: Comparison of the base salary for similar positions in the public and private sectors (position as of January 2020)

In the private sector		In the public service ⁵	
Position	Salary (in manats)	Position	Salary (in manats)
Manager ⁶	2000 - 2500	By 4-th classification - Heads of auxiliary departments and support departments under committees and ministries of the Republic of Azerbaijan	1290-1470
Chief Accountant ⁷	1600 - 1800	By the 5-th classification - chief advisers to the departments of committees and ministries of the Republic of Azerbaijan	895
		By the 6-th classification - Sector managers, Chief accountants	820
Lawyer ⁸	900 - 1000	By the 6-th classification - Advisers to the Azerbaijan State Court of Grave Crimes, administrative and commercial courts, military courts	730

However, in spite of the existence in the labor market of private sector enterprises offering wages higher and lower than those indicated in the table, it is necessary to improve the motivation system in the public sector in order to keep young talented specialists in the public service. At the moment, the public service in the wage system takes into account the sequence of categories, and the coefficient between posts is not applied. You can significantly increase incentives through wages by applying this coefficient. At the moment, only a wage difference is paid for the replacement (if there is such a difference), although the amount of work during the replacement period becomes larger, and the Labor Code of the Republic of Azerbaijan assigns 50% of the wage of the employee whom it replaces as a payment to the replacement employee. It is necessary to improve this area. It is possible to build a reward system by applying a remuneration mechanism that reflects the impact of performance appraisal on wages. For this, individual bonuses are required. For the implementation of individual remuneration, it is necessary to build a system of distribution of funds, indicating their exact source. Which, in turn, requires the creation of an Individual Bonus Fund. It is advisable for government bodies to create an incentive system based on the results of the activities of 3 groups of employees: in managerial, administrative and support positions. At the same time, in a 5-point performance evaluation system, when you receive 2-3 points, the bonus is not paid, the norm is based on 4 points, and bonuses are paid when you receive 4-5 points. For our part, taking into account international experience, we can offer the following model. To carry out individual remuneration, you can use an additional bonus in the amount of one salary as an individual, in addition to the already existing three types of collective awards (4 types of bonuses in total: 1 bonus – for holidays - does not take into account the results of activities and is given to the whole team, 2 bonuses - collective, for the results of the work done, and the 4th - individual). On the basis of this bonus, intended for each employee, at the beginning of the year an Individual Bonus Fund is created.

⁵ Based on Addition No. 2 to Order No. 1268 of the President of the Republic of Azerbaijan on the “Monthly Official Salaries of State Servants of the Republic of Azerbaijan” dated by June 18, 2019

⁶ RabitaBank OJSC, Digital products manager, <https://www.vakansiya.az/az/job/rəqəmsal-məhsullar-üzrə-menecer-9049> (As of 19.02.2020)

⁷ Beta Azerbaijan, <https://www.is-elanlari.net/2020/bas-muhasib-axtarilir-14707/> (As of 19.02.2020)

⁸ Avirtel LLC, <https://www.is-elanlari.net/2020/huquqsunas-axtarilir-14548/> (As of 19.02.2020)

This fund can be distributed among three groups in the ratio: 10-25% for employees in managerial positions, 50-80% for employees in administrative posts and 10-25% for employees in support posts. The table below shows 4 distribution options.

Table 2: distribution options

Individual Bonus Fund	For executives	For employees in administrative positions	For support staff
Amount in %	Amount allocated in the Individual Bonus Fund for remuneration, in %		
100	10	80	10
100	15	70	15
100	20	60	20
100	25	50	25

4. CONCLUSION

It is quite obvious that today, in order to stimulate efficiency and productivity, it is necessary not only to change the wage system itself, but also to change the approach to it as a whole. The new approach combines ideas about the division of responsibility, compliance, employee participation in the profits of the organization, the desire of employees to increase the efficiency of their own and the organization as a whole. Most enterprises in terms of profit use a variety of remuneration systems, depending on the size of the profit. However, bonuses should not be taken into account only at the end of the year. In Azerbaijan, payments made by managers from profit occasionally in the future do not imply any obligations. Undoubtedly, the remuneration of civil servants was the right step taken in a timely manner, however, as it can be seen, this does not solve the main problem - building a close relationship between work efficiency and wages, stimulating a constant increase in productivity, and ensuring a creative approach on the part of workers in achieving common goals. At the same time, it is rather difficult to improve the wage system in the public service in the republic. Especially because government bodies do not have sufficient remuneration and financial incentive resources due to limited funding from the budget and the inability to provide paid services, since they are strategically important. As an alternative, one can propose reconsidering the issues of a radical change in the wage system based on the appropriate use of payment systems, as well as the basic principles of the approach to the problem of paying people in accordance with their work. To solve these problems, incentives issued individually when participating in profits (for example, for creativity, etc.) are very suitable. In this connection:

- 1) It is necessary to ensure a close relationship between wages, productivity and rationality. Only in this case, the employee will have a strong enough incentive to rationalize his activities, and it will become possible to stabilize labor costs.
- 2) The proportion of variable and stable payouts should vary depending on productivity and profit. Each employee should be able to receive a higher salary, depending on the rationality of their work.
- 3) The wage system should be created so that within the organization it contributes to team building and stimulation of cooperation, rather than breaking the connection between workers and conflicts.

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ON REGULATION DIRECTIONS OF EXPORT IN AGROBUSINESS SYSTEM

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ABSTRACT

The purpose of the research is to develop proposals for the definition of export regulation in the agribusiness system, taking into account the peculiarities of the national economy in the modern economic environment. Export regulation by the state in the agribusiness system contributes to the creation of a favorable business environment. In modern economic conditions, the problem of improving the export regulation system in agribusiness is of particular importance. The idea of structuring trade in agribusiness is based on the idea that alternative explanations have been made in the XIX-XX centuries, as well as some international economists have argued that the importance of random components, along with scale savings in the structure of foreign trade. As a result of the research, along with the positive developments in the export of the Republic of Azerbaijan in recent years, some negative cases have been identified. Based on the requirements of the specific environment and international practice, it has been concluded that it would be appropriate to improve export regulation in the agribusiness system of our country in accordance with the directions outlined in the article. In the agribusiness system, the implementation of the government's export policy priorities as outlined in the article is the most important task in implementing effective foreign economic activity. However, the specific standards that each country has in domestic trade cannot be attributed to foreign trade. Foreign economic activity is carried out in accordance with the world and international standards of the world market. If there are domestic prices in domestic trade, then foreign trade has world market prices. Foreign economic relations are based on economic relations, production, demand, quality of goods, and international standards. As a result of the article, proposals were developed to identify ways to improve state regulation of exports in the agribusiness system.

Keywords: *agribusiness, system, export, agrarian sector, industry, state regulation, products, improvement*

1. INTRODUCTION

Due to state regulation in the current economic environment, business entities in the agrarian sector are able to realize their potential in producing highly productive products and achieving competitiveness. This fact is confirmed by the existing practices of developed countries, where the economic importance of entrepreneurship and prospects for development in the agrarian sector are known. Export regulation by the state in the agribusiness system contributes to the creation of a favorable business environment. The creation of an export-oriented business environment in the agribusiness system takes all the specific features of the agricultural business. Taking into account the current economic conditions, the problem of improving the export regulation system in the agribusiness system is of particular importance. This indicates the relevance of research and indicates the relevance of its development, whether it is practical or scientifically. In this regard, the choice of the topic of the article and the main directions of the research were determined on the basis of the above-mentioned issues.

2. THE ESSENCE OF THE STRUCTURAL POLICY OF TRADE IN THE FORMATION OF AGRIBUSINESS

Economists cannot confidently discuss the effects of the international economy or recommend changes to the state's trade policy without assuring that their theory is strong enough to explain foreign trade. As Paul R. Krugman, Maurice Obstfeld, and Marc J. Melitz as a consequence, attempts to explain the structure of foreign trade, namely, to whom to sell, have become the main occupation of international economists [1, p. 5]. In the early nineteenth century, British economist David Ricardo described trade in terms of international differences in labor productivity, and this explanation is still relevant [2, 3]. But in the XX century, alternative explanations have been made. Andrew B. Bernard, J. Bradford Jensen, Stephen J. Redding, and Peter K. Schott provided a non-technical description of the empirical structure of trade at company level in US companies [4, p. 105-130]. The structure of trade is, on the one hand, linked to the relative resources of national resources such as capital, labor and land, and on the other hand, the relationship between these factors and their relative use in the production of various goods. Foreign Trade Economist Douglas A. Irwin responded to the anti-commercial rhetoric that emerged in the 2016 US presidential election campaign [5, p. 84-95]. Marc J. Melitz and Daniel Trefler explored the monopoly competition model, taking into account the differences in performance among the companies. This study provides a detailed description of the impact of the Canadian-US Free Trade Agreement on Canadian companies [6, p. 91-118]. Paul Anthas's excellent book on offshoring, outsourcing and the global value chain, covering both theoretical and empirical aspects, explains the importance of structural trade policy in business formation [7]. Also, a number of theories put forward by some international economists have suggested the importance of random components along with scale savings in the structure of foreign trade [8, 9, 10]. The results of our research indicate that despite some positive changes in the foreign trade activity of our country in the recent years, the advantages and opportunities provided by the present conditions should be used fully and effectively. In general, there is a need to improve the foreign trade activity of our country, taking into account the requirements and potential opportunities of the new economic environment. It is well known that the solution of this problem involves identifying the causes of real difficulties in this area, finding ways to address them in the new economic environment, identifying areas for the development of foreign trade in accordance with the country's potential and advantages, and developing practical proposals on this basis. Based on the theoretical-methodology of exporting products in the agribusiness system and under current economic conditions, we have come to the conclusion that, based on the current world conditions, the practices of the countries that have become the leading exporters in the world, and our national characteristics, be upgraded [11, 12, 13, 14, 15]:

- Increase exports and gradually improve its structure over the final product;
- Optimization of imports by improving import substitution and improving the structure of imports;
- Encouraging foreign investments for technical and technological modernization of production and infrastructure and formation of modern production and infrastructure sectors;
- attempting to make the most of the opportunities created by the international division of labor, economic integration and cooperation;
- Formation of the country's advanced economic security system;
- Formation of the organizational-administrative system of export regulation, meeting the requirements of the new economic environment;
- professional development of export specialists.

Poor competitiveness of production is the main factor of low profitability of products produced in agribusiness system of the Republic of Azerbaijan in world markets. However, it is also important to remember that there is no appropriate policy pursuant to the stimulation of exports in the agrarian sector. It is important to pay attention to such an important point here. First of all, the implementation of such a policy, even when no efforts have been made to address the structural problems in our economy, which are reflected in the foreign trade sector, could further aggravate the situation. Thus, it can lead to the degradation of production resources and the strengthening of the “colonial” structure of foreign trade by attracting foreign investors and production resources of the fuel and raw complex. The stimulating effect of such exports on economic growth is also possible under the condition that revenues can be channeled to revitalize industries with high potential for development and the organization of advanced technological new productions. In other words, it is impossible to solve the structural problems of integration into the world economy through purely export regulation measures. The implementation of this task should be based on industry policy, which aims at implementing sector-specific priorities. One of the key tasks facing our country's economy is to integrate global trade with diversification of foreign trade, primarily based on dynamic comparative advantages in relation to our known resources. Thus, we conclude that the reorganization of the structure and the deepening of foreign trade are interrelated issues. However, in the context of their solution, a policy of structuring to a leading position should be made. It is quite clear that such an approach to economic policy in the short and medium term makes it necessary to include elements of protectionism in export regulation. Under these circumstances, the completion of systemic transformation of the economy should not be left out of focus. Therefore, a true market and favorable competitive environment can be ensured by the implementation of this task, which will further enhance the impact of foreign trade policy on targeted protectionism measures. Otherwise, the protection of the local market can only protect the useless production environment, weaken the national production base, and increase its dependence on foreign markets. In these circumstances, one cannot forget that the implementation of protectionism measures in areas where development elements are weak due to the poorly defined structural priorities can have the most serious consequences. In the context of the implementation of similar measures, advanced international practice should be considered. These issues are detailed in Michael Porter's work that explains the success of national exports as a result of industrial clusters, namely the effect of external scale [16]. At the same time, in the non-technical work of J. Bradford Jensen on the effects of increased trade in services on the US economy, the stage of structural adaptation was also mentioned [17]. Thus, some countries have experienced the stage of structural adaptation. This stage covered France from the late 1940s to the late 1960s (from Japan in the early 1950s to mid 1970s and in South Korea from the early 1960s to the second half of the 1980s). In pursuance of its economic policy, South Korea has pursued the following three important measures: encouraging savings to increase investment resources; reduction of the national currency rate and assistance to advanced sectors. At that time, integration into the world economy began not only with the liberalization of imports but also with the encouragement of exports. The general situation inherent in these countries, as well as Japan and other countries following the relevant strategy, was to gradually increase the export potential and stimulate exports, in line with increased development. The implementation of such a structure requires, first of all, an analysis of the local production potential and the situation in the foreign market, and on this basis, our interests and prospects in the global economic system. But then, using all the opportunities of the regulatory mechanism, opportunities for the development of those spheres should be created, as well as some programs for the elimination of production areas without development elements.

In determining the import policy in the agribusiness system, the real situation is not only the production of specific products must be considered, but also the perspectives of these products for domestic and international division of labor in the structure of the country's economy. The protectionist regime in relation to different types of products should have a clear purpose and be softened as far as it is concerned. The scarcity of our investment resources requires that appropriate policies, as a rule, focus on industries and industries that are considered to be the driving force behind growth. These important ways must be discovered through close cooperation between government agencies and businesses. Based on the realities of our country, we believe that there is no alternative to our WTO membership in the strategic plan. Under this condition, it is possible to achieve the perfect structure of export of the Republic of Azerbaijan [18]. Only the benefits of a full-fledged member of the international foreign economic system can enable us to increase the export of highly processed agricultural and food products in our country, to enter the industrial markets of economically developed countries. We can also increase our ability to benefit from the WTO mechanisms to protect our interests. This step can help to increase the stability of our economic relations with other countries, to participate in the development of international trade conditions, and to create a more favorable investment climate.

3. DEFICIENCIES IN THE EXPORT OF AGRIBUSINESS SYSTEMS AND WAYS TO PREVENT THEM

As it seen in our research, it was clear that theoretically independent international economic cooperation, as well as free trade, is profitable for each of the participating countries in this process. However, in real life, the interests of different countries do not coincide with the need to regulate exports through different means [15, 18, 19]. In the current economic environment, the cooperation of states with themselves and with international structures means that their foreign trade will not only increase interference with other countries, but also follow the rules of joint activity and domestic economic policy. In short, the role of external factors, along with the internal factors in regulating the country's economy, is increasing, and the economic processes of the state as well as the functions of export regulation are undergoing changes. As a result of our country's participation in these processes, import quotas and export subsidies, the exchange rate of the national currency, the central banks' discount rate, etc. The traditional means of government regulation, such as the one they like, are limited. As such, the interdependence of national entrepreneurship is growing, and states are forced to take into account the interests of other countries, as well as transnational corporations (transnational banks), which are subjects of international economic relations. This can, in a certain environment, cause undesirable consequences for the country's national interests and economic interests. From our research, it is clear that in the export of the Republic of Azerbaijan, there are some negative ones, along with the positive developments that have occurred in recent years. In our opinion, these are the following reasons:

- results of the general crisis of the national economy;
- Inability of products produced in this field to compete either in foreign or local markets because the technical and technological level of entrepreneurship in the agrarian sector is far below international standards;
- excessive opening of the national economy for foreign competition without effective structural changes in local business;
- The lack of development of theoretical bases of the state level for the effective use of the opportunities created by the international division of labor, economic integration and co-operation, etc.

In the current economic environment, export regulation should be based on international law and international practices, as well as the requirements of the World Trade Organization, and should serve the purpose of establishing an efficient integrated economic system for the world economy:

- Creation of entrepreneurship specialization, taking into account the advantages of the country in international labor division, real economic situation and local demand;
- adaptation of technical, industrial and social policies to international requirements;
- ensuring compliance with local and world market prices;
- ensuring the national currency's worthiness;
- legal and economic guarantees of movement and protection of foreign capital in the country;
- Ensuring active participation of the Republic of Azerbaijan in international and regional economic organizations.

The main theoretical principles for implementing this strategy are:

- Determining the succession of goals and objectives with the economic processes taking place in the global world, including the features and prospects of the global economic system and the country's economy;
- objective assessment of the real situation of foreign trade;
- ensuring completeness, consistency and predictability of foreign trade policy, etc.

4. IMPROVEMENT OF EXPORT REGULATION SYSTEM IN THE CONTEXT OF AGRIBUSINESS DEVELOPMENT IN OUR COUNTRY

In the current economic environment, the established mechanism of export regulation in the Republic of Azerbaijan does not allow fully considering the peculiarities and requirements of the market principles due to the extreme degree of liberalization of the international economic cooperation. In this regard, we believe that one of the main objectives of the foreign-economic activity is to create a mechanism for the export, effectively combining the current and prospective interests of the country's economy. It is clear from the nature of external threats that only the short-term and limited benefits of mitigating the impact of these threats through operational regulation can be achieved. Therefore, with a view to enhancing economic security, it is important to implement institutional, economic and legal measures that address the long-term goals of addressing large-scale national objectives related to the content and goals of macroeconomic, structural and industrial policies. The key to such a strategy for enhancing economic security is, in our view, the increase of foreign trade turnover and, above all, the 'industrialization' of exports. To this end, an export base development program should be developed, first of all, as an important element of the foreign trade strategy and, in accordance with its provisions, the investment activity in competitive sectors of the economy should be encouraged, and export support through tax credit and economic diplomacy tools. Specific steps that can be taken to address the problem in this area may include the following:

- to create a system of state export credit with long production stages;
- Formation of a system of export insurance against political and partial business risks;
- in the future to ease tax burden on export promotion of products;
- Determine the volume of export products in accordance with strategic areas at the expense of the state budget;
- establishment of a system for disseminating information on foreign trade with the support of private equity and banks;
- to achieve non-discriminatory trade and currency regimes in relation to Azerbaijani exports in the international arena and work towards achieving full-fledged membership in the World Trade Organization.

Thus, the main purpose of the foreign trade activity is to ensure the country's integration into the system of foreign economic relations, access to the international market of national entrepreneurship entities, regardless of the form of ownership, and foreign exchange revenues of domestic consumers. All of the above will allow for stable and reliable generation of state budget revenues. Foreign economic activity of the state is mainly based on effective foreign trade policy. The foreign trade policy of the state, as a rule, serves to protect the strategic interests and national security of the state. In the free economic environment, liberalization of the principles of planning and administrative division in all areas of farming is accompanied by the transparency of economic boundaries. The Decree of the President of the country "On further liberalization of foreign trade in the Republic of Azerbaijan" demonstrates the existence of a favorable system for exporting agricultural products under transparent economic boundaries [20]. The existence of transparent economic boundaries excludes any interference with imports and exports. It is precisely in this environment that the effectiveness of its foreign-economic policy is conditioned by the prevention of the dependence of the national economy on external factors and the inclusion of numerous foreign exchange revenues within the country. In terms of transparency of economic boundaries, liberalization of foreign trade, the export of imported products in the form of money in the country is not considered a favorable foreign trade (at best, foreign capital flows). Consequently, if imported products are converted into cash and exported within the country, this may result in a lack of capital in the country and the withdrawal of cash. This results in the vassalism of the state and its dependence on one or more foreign countries, as well as the global marketplace. Based on our research and based on the requirements of the specific environment and international practices, we conclude that, in the current situation, it would be appropriate to improve export regulation in the agribusiness system of our country in the following areas:

- Completion and improvement of the legal and regulatory framework of the national export control system in accordance with international law and international practice, as well as with the requirements of the World Trade Organization;
- encouraging export and import substitute production for the balance of the gift;
- improvement of export and currency control system;
- Increasing the amount of foreign exchange revenues and revenues of entrepreneurship entities;
- Encourage national entrepreneurs to enter the foreign market and provide competitive product offerings;
- Preparation and implementation of the State Program in accordance with export development and stimulation;
- Formation of export crediting and insurance system;
- Customs and tariff regulation of imports taking into account the economic security interests of the country, as well as improvement of the taxation system;
- improving the quality control system for imported products in accordance with international standards;
- establishment of relations with different countries and groups of countries in accordance with the principles of reciprocity, etc.

In the agribusiness system, the implementation of the above-mentioned priorities of the government's export policy is the most important task in the implementation of effective foreign economic activity. However, the specific standards that each country has in domestic trade cannot be attributed to foreign trade. Foreign economic activity is carried out in accordance with the world and international standards of the world market. If there are domestic prices in domestic trade, then foreign trade has world market prices.

Foreign economic activity is based on the economic relations between the countries, production, demand for it, the quality of the goods, and compliance with international standards.

5. CONCLUSION

In general, the article provides the following conclusions and recommendations on theoretical and practical study of its development in accordance with national specifics to determine the directions of export regulation in the agribusiness system of the country.

1. In the agribusiness system, there is always a great need for state regulation of exports and the implementation of protectionist state policies. Therefore, work should be done in the following areas:
 - Improve the regulatory framework for the administrative legality of export policy (issuance of licenses, access to modern technology, etc.), as well as the rules of settlements with the participating countries in this area, financial issues, customs tariff rates and tax systems.
 - Non-standard tariffs should be introduced to prevent various difficulties and restrictions of licenses;
 - Civil law of foreign trade participants and international arbitration issues should be improved;
 - high customs tariffs on imported agricultural products should be applied and conditions for their compliance with national characteristics, health and other technical regulations of the country;
 - The formation and development of export potential in the agribusiness system of Azerbaijan, the change in export structure, the bonus system (export of processed agricultural products) should be implemented;
 - Increase the competitiveness of agrarian industry producers in Azerbaijan and attract investments for technical modeling in the agrarian industry;
 - The structure of export of agricultural products should be improved so that agricultural products should be exported as raw materials and not as competitive products.
2. Supporting the organization of export of agricultural products produced in Azerbaijan should be raised to the level of state policy. The tendency of customs fences to be applied to the borders of post-Soviet countries and the disruption of traditional markets significantly increases the importance of this work. In this regard, the agribusiness system must be supported by every possible means to adapt to the needs and requirements of business suppliers, and to form modern collective and individual sales cooperatives. From the point of view of economic management the agrarian market of the country should be regulated, as well as the wholesale and retail network of products produced in the agribusiness system should be formed and the number of cooperatives should be increased. In this economic environment, the pricing situation of exports and imports should be determined (experience shows that the agri-product market is not a large-scale network and is considered an obstacle to modern business development).
3. Improvement of regulatory and legal framework and customs regulation to improve the state regulation of exports in the agro-business system of Azerbaijan; harmonization of customs control methods with international standards and automation of customs procedures; smuggling; increasing the fight for other offenses; development of customs infrastructure; Implementation of our proposals in the field of specialist training and international cooperation will help to achieve the following results:
 - further strengthening of the material and technical base of the customs area;

- organization of customs infrastructure in accordance with new requirements;
 - capacity building of staff;
 - increase in revenues to the state budget;
 - wider use of modern tariff and non-tariff regulation in foreign trade;
 - Accelerate WTO membership;
 - full application of automated customs administration;
 - increasing the effectiveness of customs control;
 - Adaptation of customs regulation tools to regulatory instruments, which are generally accepted in the world practice;
 - improvement and development of customs tariff policy;
 - increasing the importance of the customs sector in strengthening the economic security of the country;
 - strengthening of the fight against offenses in the customs system;
 - increasing the importance of the customs sector in the socio-economic development of the country;
 - simplification of import and export clearance of foreign trade operations.
4. In the agribusiness system, special emphasis should be placed on enhancing the cooperation of foreign entrepreneurs with foreign entities through the introduction of innovations in production and the use of modern technologies to adapt the export to the strategic goals of the state and enhance its profitability. These cooperatives should, first of all, create conditions for the production of competitive industrial products in the global market and the selection of its successful sales channels.

Along with the modernization of the structure of the state's export of agricultural products, it is facilitated by the national agribusiness entities to access machinery and equipment, technology, transport and communications on the world market. For this purpose, economic, financial and marketing support should be provided to national agribusiness entities, and the introduction of agro-industrial products to markets and markets where monopoly exists.

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PROBLEMS OF TAXATION OF EDUCATIONAL INSTITUTIONS AT THE MODERN STAGE OF DEVELOPMENT OF THE ECONOMY OF AZERBAIJAN

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ABSTRACT

Today, the education system to a large extent characterizes the quality of life of the population, creating the starting conditions for the development of the human and economic potential of the country. The legislation of the Republic of Azerbaijan on Education states that education is defined as a socially significant good, a focused process of education and training in the interests of a person, family, society, and the state. That is why the development of the educational sphere is the most important area of activity of the state. Recently, the education sector in Azerbaijan underwent a qualitative reform in the form of a change in the legislative framework, a change in the orientation, goals and objectives of the educational process, a change in the funding mechanism for education, etc. The Tax Code of the Republic of Azerbaijan and the laws adopted in accordance with it contain provisions defining the specifics of taxation in educational institutions. It should be noted that the taxation of educational institutions is a dynamically developing institution of tax law, as it has been subject to a number of changes in legislation and law enforcement practice. In addition, through the implementation of all the functions of taxes, including fiscal, regulatory, reproduction, taxes are perceived as an effective mechanism for influencing the country's economy. Moreover, most of the leading foreign countries of the world consider education as a specific sector of the economy.

Keywords: *state, tax code, taxes, tax system, tax benefits, educational institutions*

1. INTRODUCTION

As is known, taxes are the basis of the tax system of Azerbaijan. Taxes are mandatory payments levied by central and local public authorities on the basis of the law from legal entities (enterprises, organizations, entrepreneurs) and natural persons (citizens) in connection with their receipt of income, economic operations, the availability and use of assets and social needs. The tax system is one of the main objects of discussions about ways and methods of reforming of economy of the state today. In the western countries the extensive experience of a research of a system of taxation in educational institutions is accumulated. Fundamental principles of taxation have been developed, which national tax systems are able to move towards the best possible option in this area. The tax mechanism for educational institutions is linked to the strategic objectives of national education development, and therefore needs to be adapted to the strategic objectives of the tax policy for educational institutions. This requires appropriate changes in existing legal instruments, the alignment of tax policies with national education goals, and financial and educational monitoring economic indicators of the effectiveness of the fiscal measures taken.

At the present stage of development of the international community education becomes one of the major factors providing sustained economic growth, social stability, development of institutes of civil society and national security of the state. Level of educational training of the population, and especially younger generation is one of the indicators characterizing competitiveness of the country. The next strategic task facing Azerbaijan is to ensure sustainable economic development and improve the living standards of the population by further modernizing the socio-economic life and bringing it into line with international best practices. First of all, modernization is associated with the successful application in the socio-economic life of the country of advanced technologies and management methods, innovations created on the basis of scientific achievements. The development of human capital in the country and the integration of the individual into modern knowledge and skills are priorities in this regard, along with the acceleration of the integration of the country's economy into the world economy. The development of human capital, being one of the most important conditions in the process of successful integration of the economy of Azerbaijan into the global system and more efficient use in its favour of international competition, is the main task of the State education system.

2. ROLE OF THE STATE IN THE SOCIO-ECONOMIC DEVELOPMENT OF EDUCATION IN AZERBAIJAN

At present, the role of education in economic life has increased considerably. At present, education, together with the knowledge and skills required by the economy, must fulfil the task of fully preparing citizens for integration into future life and society. And meeting a person's need for lifelong learning is the most important factor that enhances the role of education in economic life. Professional staff with high education level are a basis of intellectual potential of the country. At the present stage successful and steady economic recovery of the countries is reached due to purposeful development of the human capital. All this gradually raises an education priority in the public expenditures. Expenses of the state on education have high economic profitability for society.

Indicator	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Education	979.7	1147.9	1180.8	1268.5	1453.2	1437.7	1553.9	1605.1	1754.4	1742.7	1966.7

Table 1: The expenditures of the state budget of Azerbaijan for education for the period 2008-2018, million manats: [3]

Recent years can be described as the period of the heyday of education, the deepening of state reforms in this area. The development of education is a priority in the state policy of Azerbaijan. Thanks to the approved strategies and programs in the field of education, the state budget expenditures on education were significantly increased, amounting to 2.3 billion manat in 2019, which is higher compared to 2013 (by 1.4 billion manat or 60%). Attracting adequate financial resources to education, gradually bringing the ratio of expenditures on financing education to GDP to 5-6 percent, planning a result-oriented budget, and creating financing mechanisms from various sources. In recent years, important steps have been taken in Azerbaijan to develop education. The regulatory framework of education was improved, based on the orders of the President of the Republic of Azerbaijan, broad measures were taken aimed at its material and technical support. The use of information and communication technologies in educational institutions has expanded significantly. In recent years, significant achievements have been made in the field of educational development in the Republic of Azerbaijan. As part of ongoing state programs in all regions of the country, the infrastructure of general education has been significantly updated. The country has created a regulatory framework for education that meets modern requirements. State programs have been adopted in higher education, projects have been implemented in order to apply the most important principles arising from the Bologna

Declaration, modern information and scientific and methodological support for educational institutions, upgrade educational infrastructure, improve textbooks, provide remote rural schools with teaching staff, build pre-school and vocational services education at the level of modern requirements. In addition to the above, there is a need to take new steps to ensure that the educational system in the rapidly modernizing Republic of Azerbaijan meets the challenges of human capital development, Bringing the quality of general education into line with European standards. The goal of the state strategy is to create an educational system in the country with competent tutors, an infrastructure based on the latest technologies, which occupies a leading position among the countries of the world in terms of quality indicators and coverage. The educational system of Azerbaijan should be economically sustainable and meet the standards of the world's leading educational systems. The implementation of the state strategy, allowing restructuring the content of education, training, the education management system and educational infrastructure in accordance with international best practices and the development concept of Azerbaijan, will ensure the establishment of a knowledge-based economy in the country, the formation of an information society and the country's sustainable development. The main tasks in the development of education are as follows:

- to develop the human capital necessary for the modernization of the country and thereby enhance the international competitiveness of the Republic of Azerbaijan;
- to train independent and creative citizens and individuals who are aware of their responsibilities, who respect the principles of democracy and the national traditions of the people, human rights and freedoms;
- to train competitive personnel with modern thinking that preserves and develops national, spiritual and universal values, that have a broad vision of the world, that can evaluate initiatives and innovations, that are integrated into theoretical and practical knowledge;
- to ensure the acquisition of systematized knowledge, skills and complementary education to prepare the learners for life and productive work.

3. TAXATION IN EDUCATIONAL INSTITUTIONS AND THEIR PROBLEMS

Educational institutions in Azerbaijan are taxed for income, profits, property, land, and the value of goods (work, services) provided. In accordance with Article 13.2.4. Tax Code of the Republic of Azerbaijan, a taxpayer - any person who is obliged to pay taxes on objects of taxation defined in accordance with the Tax Code [1]. Educational institutions are taxpayers in the status of legal entities in accordance with the Tax Code. In accordance with article 8 “Device of the education system” of the Law of the Republic of Azerbaijan on Education, it is indicated that the education system includes [1]:

- all educational institutions, other structures involved in the educational process and providing educational services, research and information centers providing educational activity and its development, design, manufacturing, clinical, medical and preventive, pharmaceutical and catering structures, sports, health and recreation complexes, campuses, cultural and educational institutions and organizations, libraries, dormitories, camps and other facilities infrastructure facilities;
- education management bodies and enterprises and organizations operating in their subordination;
- non-governmental organizations, associations, societies, scientific and methodological councils and other structures operating in the educational field.

State educational institutions in the Republic of Azerbaijan do not have a direct goal of making a profit. The activities, rights and obligations of educational institutions are established by its charter, taking it into account the relevant legislative acts of the Republic of Azerbaijan.

The following types and types of educational institutions are established: [1]

- preschool educational institutions (day nurseries, day nurseries, kindergartens, special kindergartens);
- general education institutions (elementary, secondary and full secondary schools, general education boarding schools, special schools and special boarding schools, special schools and boarding schools for children with disabilities, institutions for children in need of special care, schools for talented students, gymnasiums, lyceums and other institutions);
- out-of-school educational institutions (schools of children's creativity, youth sports schools, youth chess schools, centers of environmental education and experience, centers of technical creativity, tourist and local history centers, centers of extracurricular activities, centers of aesthetic education and art, etc.);
- primary special vocational educational institutions (vocational schools, vocational lyceums);
- secondary specialized educational institutions (colleges);
- higher educational institutions (universities, academies, institutes, etc.);
- institutions of continuing education (universities, institutes, centers, etc.);
- other educational institutions.

Education in educational institutions is provided by the state and on a paid basis. The creation, reorganization and liquidation of an educational institution is carried out in accordance with the Tax Code of the Republic of Azerbaijan. The State ensures, in accordance with the law, the development of all educational institutions, including private educational institutions, through the granting of loans, grants and the application of privileges to State educational institutions. The material and technical base of the educational institution and educational infrastructure cannot be lower than the standards established by the relevant executive authority. An educational institution is a legal entity and has its own balance sheet. In accordance with relevant legislation, an educational institution may have a current account and other accounts with commercial banks. An educational institution is free, within the framework of the current legislation, in the implementation of its administrative, financial and economic activities. An educational institution is obliged in accordance with Article 16 of the Tax Code of the Azerbaijan Republic: [2]

- pay taxes established by law, as well as interest calculated in accordance with the Tax Code, applied financial sanctions and other obligatory payments;
- obtain a tax identification number (TIN) from the tax authorities;
- keep records of income (expenses) and objects of taxation in the manner prescribed by law;
- provide representation by persons who are required to keep accounting in electronic form in accordance with the Law of the Republic of Azerbaijan "On Accounting";
- comply with the legal requirements of the tax authorities to eliminate identified violations of tax laws, and also not impede the execution of legitimate activities by tax officials;
- in cases and in the procedure established by the Tax Code, provide the tax authorities and their officials with the necessary information and documents, as well as in the case of accounting in electronic format, provide such information at the request of the tax authority;
- ensure, within the period prescribed by law, the preservation of accounting and other documents necessary for the calculation and payment of taxes, as well as documents confirming the income received (for legal persons - also expenses incurred) and paid (withheld) taxes;
- when making cash payments, provide a cheque, bank statements, receipts and other forms of strict accounting and ensure that the information prescribed by law is reflected in the cheque, bank statements or strict accounting forms;

- make appropriate entries in the notification parts of duplicate certificates received from tax authorities for opening accounts for entrepreneurial activities in non-resident banking institutions and other non-resident credit organizations, and submit them to the tax authority before the deadline for transactions on these accounts
- send to persons registered as a taxpayer an electronic invoice in connection with goods, works and services in the manner prescribed by the Tax Code;
- ensure the implementation of operations, the implementation of which in cash is limited by law, only by bank transfer;
- draw up an act of purchase for goods purchased from individuals not registered with the tax authority.

Financing of an educational institution is carried out on the basis of Article 38, Law of the Republic of Azerbaijan on Education. The state allocates funds from the state budget and other sources for the development of education. In accordance with the procedure established by law, educational institutions are entitled to provide individuals and legal entities with various fee-paying educational services, engage in entrepreneurial activities and receive donations and voluntary assistance from natural and legal persons. Funds and other property obtained from these sources do not affect the amount of funds allocated from the budget to a state educational institution and are used freely in accordance with its charter [1]. The profit that is received by state higher and secondary specialized educational institutions can only be directed to the development of education, the social protection of students and teachers. Financing of a state educational institution is carried out on the basis of financial standards established for each level of education. These standards are established in accordance with the type, type and category of the educational institution, taking them into account the amount of expenses per student. If necessary, by the decision of the relevant executive authority, small-sized state general educational institutions can be funded in excess of the existing standards. In accordance with the Statute, the State educational institution independently determines the direction of expenditure of funds received from tuition fees and other extrabudgetary funds, and the proportion of contributions for the material promotion of employees, Provides material assistance to teachers and students. The State ensures the granting of long-term and individual loans for the development of educational institutions, the payment of the costs of tuition and education, and the allocation of grants for scientific research, as appropriate, funding for doctoral programmes, international experience and other purposes. The procedure and conditions for issuing loans and grants are established by relevant legislative acts. State educational and research grants cannot be used to finance other areas of the educational institution. The State ensures the creation of a favourable investment environment for attracting investment in education, including foreign investment, and to this end, investors are granted concessions in accordance with the procedure established by law. Foreign investment in the education system is carried out in the manner prescribed by law. State and municipal educational institutions are financed from the following sources:

- in accordance with the legislation of the state budget and local (municipal) budgets;
- funds from paid education;
- grants provided in accordance with the legislation by individuals and legal entities, including foreigners and stateless persons, foreign legal entities, funds left by them, their donations and assistance;
- research grants allocated by the state on the basis of the competition;
- funds received from the provision of educational, scientific, industrial, consulting (consulting) and other services established by law;
- funds allocated by individuals and legal entities for training, advanced training of specialists and retraining of personnel;

- funds received from targeted programs and projects financed by state bodies;
- funds received in accordance with the law from the sale of an educational institution owned and morally and physically obsolete equipment, vehicles and other property unsuitable for educational purposes;
- grants and funds, in accordance with the law, received by an educational institution as a result of international cooperation;
- funds received from other sources not prohibited by law [1].

Today, the mechanism for taxing the activities of educational institutions is not presented in the scientific literature, and issues of increasing the effectiveness of its implementation are topical. In order to understand which taxes and on what basis educational institutions in Azerbaijan should pay, taking into account the characteristics of their activities and status, it is necessary to carry out studies on each tax separately in accordance with the tax legislation.

3.1. Individual income tax

Income earned by an individual in connection with employment in educational institutions is recognized as income derived from wages, benefits or benefits derived from such work, including from previous employment or from future employment. In accordance with Article 101.1-1 of the Tax Code, the tax on the monthly income of individuals employed is calculated in accordance with table 2.

Amount of monthly taxable income	Tax rate
up to 2500 manat	14 percent
over 2500 manat	350 manat + 25 percent of the amount over 2500 manat

Table 2: Amount of monthly taxable income [2]

Tax on monthly income from employment of individuals working with taxpayers and belonging to the non-state sector. (Retained from January 1, 2019 for 7 years). Table 3.

Amount of monthly taxable income	Tax rate
up to 8000 manat	0 percent
over 8000 manat	14 percent of the amount exceeding 8000 manat

Table 3: Amount of monthly taxable income [2]

Income tax on the income of natural persons employed in two or more places of employment is calculated and paid to the State budget separately from the amount paid at each place of work.

Annual income for non-business activities is withheld at a 14 per cent rate. The following are exempt from income tax:

- gifts, material assistance, lump sum received in a calendar year:
- cost of gift, material assistance, lump-sum allowance for education or treatment - up to 1,000 manats, cost of material assistance, lump-sum allowance for treatment abroad - up to 2,000 manats;

Persons who have received education or treatment fees, this privilege is granted only if they submit the relevant documents confirming the payment of these amounts as intended.

3.2. Income tax from legal entities

Resident and non-resident enterprises in Azerbaijan pay income tax.

The income of an educational institution is subject to taxation. Income earned by an educational institution is taxed at 20 per cent [2].

Not subject to tax:

- gratuitous transfers, membership fees and donations received by non-profit organizations;
- profits of educational institutions, including educational institutions created for the training of persons with disabilities, - with the exception of part of the profits allocated for the payment of dividends;
- income of preschool educational institutions and orphanages received from this activity - for a 10-year period from January 1, 2014;
- with the exception of legal entities, 51% or more of the shares (stocks) of which are directly or indirectly owned by the state, and public legal entities created on behalf of the state, part of the part of the profit of the taxpayer reporting year, not exceeding 10 percent, transferred to enterprises, institutions and organizations operating in the field of science, education, healthcare, sports and culture and meeting certain criteria established by the body (structure) - from January 1, 2019 for a period of 10 years. These provisions apply only to expenses incurred by bank transfer.

3.3. Value added tax

Entrepreneurs who have a taxable volume of transactions for any month (months) of a consecutive 12-month period exceed 200000 manat must submit an application for registration for VAT purposes within 10 days. If the total amount of taxable transactions of the taxpayer within 12 calendar months does not exceed 100,000 manats, the taxpayer may apply for cancellation at any time after one year from the date of the last VAT entry. The object of taxation is the provision of goods, the performance of work, the provision of services, the trade allowance applied during the retail sale of agricultural products produced in the territory of the Azerbaijan Republic, and taxable imports. The transfer by the taxpayer of goods, the performance of work or the provision of services to its employees or other persons, with or without payment, as well as barter transactions, are deemed to be taxable transactions. The provision of paid educational services is exempt from VAT. The VAT rate is 18 percent. The VAT reporting period is set as a calendar month.

3.4. Property tax

Educational institutions are property tax payers. Educational institutions pay property tax at 1 per cent of the value of fixed assets. The educational institution shall file an annual declaration on property tax with the tax authority not later than 31 March for the reporting year.

3.5. Land tax

Educational institutions are land tax payers who own or use land parcels in the territory of the Republic of Azerbaijan. Land owned or used by educational institutions in the territory of the Republic of Azerbaijan is subject to taxation. With the exception of lands provided for in Article 206.1 of the Tax Code, rates for each 100 square meters of land are applied in accordance with table 4.

Settlements	Lands of industry, construction, transport, communications, trade and consumer services and other lands of special purpose. Amount in manat	
	up to 10000 m2	over 10000 m2
Baku city, as well as its villages and villages	10	20
Ganja, Sumgayit, Khirdalan cities and towns and villages of Absheron region	8	16
Other cities and district centers	4	8
Cities of regional subordination, towns and villages	2	4

Table 4: Land Tax Rates [2]

Land tax is paid in equal amounts not later than August 15 and November 15.

3.6. Simplified tax

The right to become a payer of simplified tax belongs to persons who are not registered for VAT and whose taxable transactions for a 12-month period are at least 200,000 manat. The subject matter of taxation is the gross proceeds received for goods (works, services) and property provided by the taxpayer, as well as extraordinary disposals during the reporting period. A simplified tax is calculated from the amount of funds received from the provision of goods, the performance of work, the provision of services and non-operating income at a rate of 2%. The reporting period for simplified tax is a quarter. Simplified taxpayers submit a tax declaration to the tax authorities no later than the 20th day of the month. Based on the study, it is noticeable that tax benefits in the Tax Code are provided for certain categories of taxpayers in relation to certain taxes. A comprehensive approach to the taxation of educational institutions is unfortunately lacking. The taxation of all budgetary institutions has been the subject of much debate. The situation is even more complex for State educational institutions. Today, there are several problems of taxation in educational institutions:

- At the current stage of economic development, it is very important to identify the most fundamental problems in educational institutions, which clearly exist in the development of the tax system, and to make recommendations for their solution.
- In the Tax Code, with regard to property tax, land tax and simplified tax, there are practically no specific issues and tax benefits for educational institutions.
- in spite of the fact that the Tax Code of the Azerbaijan Republic provides a unified taxation methodology for all commercial and non-commercial organizations, for educational institutions, certain features of the calculation of the taxable base of educational institutions should be included in the definition of income and expenditure excluded from the tax base, calculation of depreciation, calculation of tax and advance payments, tax return.
- The taxation of educational institutions has been the subject of much controversy, which has intensified with the adoption of the new legislation regulating these matters. They stem not only from contradictions in tax legislation, but also from a narrow departmental approach to the problem, which seeks to interpret laws solely in the direction of the growth of the tax base and financial sanctions. Little account is taken of the fact that education, including the provision of fee-paying educational services, cannot be applied without taking into account the specificities of these activities, regulations which are mainly directed at industrial enterprises.
- tax legislation on the basis of Chapter IX of the Tax Code of the Republic of Azerbaijan provides a single procedure for taxation of profits. Profit is defined as the difference between all income (except for income exempted from taxation) and expenses deducted from income, assuming the same algorithm for calculating the tax base, applicable tax rates, and the absence of tax benefits for budgetary institutions. This approach is mainly characteristic of the tax laws of developed countries.
- The Tax Code of the Republic of Azerbaijan defines the structure common to all organizations (including educational institutions) of expenditures related to the production or sale of products, works or services, which include material expenses and labour remuneration costs; Depreciation accrued, miscellaneous. However, not all agency expenditures included in the economic classification of expenditures are considered to be justified for tax purposes.

4. CONCLUSION

Education is an essential element of the social sphere of the State, providing a process for the acquisition of knowledge, skills and competencies for effective use in professional activities. The profound and comprehensive modernization of the education sector at the State level, with the allocation of financial resources and the establishment of mechanisms for its effective use,

is highly relevant. The most important problem that arises in the activities of educational institutions is the problem of taxation of income derived from commercial activities. Currently, many countries use preferential tax mechanisms for educational institutions. In a number of countries there are special tax incentives that allow educational institutions to deduct from the tax base more than 100% of the funds spent on research and development. In order to achieve this goal and to develop promising economic directions in the taxation of educational institutions, the following needs to be addressed:

- development of new tax concepts that promote education without compromising.
- introduction of modern information technologies in the tax system, application of electronic tax auditing, expansion of electronic services, building partnerships between tax authorities and taxpayers (educational institutions).
- introduction of an effective taxation mechanism for educational institutions.
- the current system of taxation of educational institutions should be reviewed once a year.
- applying a general taxation regime or a simplified taxation system.
- to develop in legislative acts guidelines for improving the taxation of educational institutions.
- minimization and elimination of ambiguities in the legal framework for taxation and related areas.

The use of foreign experience stimulating the development of education through the use of tax benefits should also be used in Azerbaijan, which will not only improve the quality of education, but also stimulate the investment process, also attracting foreign investors to the development of the education system.

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STRATEGIC ASPECTS OF DIVERSIFICATION AND EXPORT POTENTIAL INCREASE OF THE NON-OIL INDUSTRY IN AZERBAIJAN

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ABSTRACT

The article is concerned with the strategic aspects of the increase of diversification and export potential of the non-oil industry in Azerbaijan. In view of this the essence of development features of the country economics and main features of the economic development model were revealed. Directions and structure of non-oil sector development and its present situation were analyzed. The priority of non-oil sector development in Azerbaijan was stated and attracting investments to this sector is reviewed. The indexes and structures of the industrial production on the types of economic activities are given. The structure of total product release in the non-oil industry was researched. The essence of measures taken to decrease the dependence of the country economics on the oil was given, and the problems with meeting of the strategic goals of this sector were analyzed. The importance of creating of the enterprises network based on the economic mechanisms and high technologies which were of particular importance in the development of the non-oil industry was stated. The importance of the technoparks in efficiency increase of the economic development and formation of new stages in the economic growth in Azerbaijan was explained. The importance of the industrial clusters formation in non-oil industry development was noted. The directions of increasing the production and export potential of non-oil industry in Azerbaijan were studied. Especially the attention was drawn to the advantages of the industry potential in Sumgait, and the existing structure of it was analyzed. The issues of raw material supply of one of the largest industrial and processing enterprises of the country the "Ethylene-Polyethylene" plant in Sumgait, and the dynamics of production of basic chemical products were considered. The export potential of non-oil industry was revealed. Substantiated proposals on the strategic aspects of diversification of the non-oil industry and export potential increase are given.

Keywords: Azerbaijan, diversification, export potential, non-oil industry, non-oil sector

1. INTRODUCTION

Since the development processes features of the world economics and the implemented mechanisms cannot influence every country the same way the research of related issues demands the complex and systematic approach. After the fall of the Soviet Union Azerbaijan became one of the participants of the world economic processes by restoration of independence and formed its independent economic development model. In such a circumstance the issues of mobilization of natural and economic resources available in the country and their effective usage advanced to the forefront. In terms of natural resources in Azerbaijan, with the production of oil and gas raw materials and their export to the world market, these sectors are considered to be the leading and motivating power of the country economics. Admittedly the economics of Azerbaijan depends on the oil and gas factor to wide extent, thus in a time of the economic, financial and energy crisis on the world markets this factor inevitably manifests itself and has a significant impact on the economics of the country. The last world financial crisis did not constitute any exception to this, and multiple drops in oil prices made important the diversification of the country economics structure. From this point of view the development of the non-oil sector was set as a strategic task.

In fact, it should be like this, the state should stimulate the economy sectors that allow the economic diversification and growth, and the state support mechanism should be implemented actively (Brendan O., Terence H., David H., Patrick L., 2016). From the other side the objective analysis of the non-oil sector and export potential, creation of the competitive and export-oriented enterprise network are in the spotlight. For this reason a preference should be shown for development and implementation of different fiscal mechanisms by the state, as well as the use of tax allowance and the other mechanisms of state regulation (Gerard T., Darragh F., Stephen Mc., 2015). More attention should be paid to development of the value-added areas by balancing the resources. Exploring the development characteristics of the value-added chain and taking of necessary measures should be systemic (Acemoglu D., Robinson J.A., 2013). Thus, the increase of export potential of the non-oil sector, increase in foreign exchange inflows into the country due to the export products of this sector is evaluated as an important progress. Alongside with providing the impetus for development of the local processing industry, the export potential increase of the non-oil oriented economic sectors, can provide a serious impetus for diversification of its structure (Aliyev Sh.T., 2016). Azerbaijan economics has the most complex stages of the improvement period of its development model last years. It is true, due to the ‘Contract of the Century’ signed on September 20, 1994 our country was able to propel its economics into the world, the environment of investment attractiveness was formed. In 1994-2004 the characteristics of features and processes of the country economics consisted mainly of the following: 1) the development of the economics were established on the basis of the market principles, the processes of the market infrastructure creation were accelerated and the legislation basis of the economic development was formed; 2) our country served as an initiator of the energy and transport projects which were of strategic importance in the region and in the world, played an important role in these projects and provided the safety of national economic interests; 3) alongside with the processes of intensification of the oil-and-gas sectors development, the certain steps were undertaken for putting in motion the non-oil sector potential, as well as for development of the non-oil industry, economic and institutional reforms were deepen. Since 2004 the strategic approaches adequate to the global tendencies in the national economic development have been provided. For diversification of the economics and its development on the basis of high technologies the processes of formation of the infrastructure network in the country and their development in accordance with the global standards were conducted. But as we have mentioned before 2008 the financial crisis started in the end of 2008 caused the formation of new conditions and challenges. Even if economics of Azerbaijan had demonstrated strong immunity against the influences of the financial crisis for some period, starting with 2004 the oil revenues of our country began to decrease due to fall in oil prices on the world market, and the inflow of foreign currency into our country weakened. At the same time the depreciation of domestic currency manat happened and the financial and credit system of the country faced problems. In the ‘Azerbaijan 2020: Development Concept of Future Outlook’ confirmed by the Decree of the country President dated after December 29, 2012, the formation of the high competitive economics and creation of a globally competitive economic system are considered to be important. In this Concept the strategic views on economic structure improvement and non-oil industry development were formed, and the main priorities were determined (Azerbaijan 2020: look into the future concept of development, 2012). In the ‘Azerbaijan 2020: Development Concept of Future Outlook’ the measures considered for development of the non-oil sector as well as non-oil industry were reviewed in wide range, and the main aim is intensification of the social and economic progress of our country. Alongside with all these, in the ‘Strategic Roadmap on national economic perspectives of Republic of Azerbaijan’ confirmed by the Decree of the country President dated after December 6, 2016 the short-term and long-term strategic targets on development of the different sectors of the national economics on the basis of high technologies were determined (Strategic

Roadmap for the National Economy Perspective of the Republic of Azerbaijan, 2016). The heavy industry and machinery-producing industry had strong enough resources to increase the potential of the non-oil sector, and also was traditional for economics of Azerbaijan and its industrial sector in the Soviet period. Determination of strategic targets of the heavy industry and machinery-producing industry, and realization of large-scale projects on these draw attentions. The strategic approaches to the development of heavy industry and machinery-producing industry were reected in the ‘Strategic Roadmap on development of heavy industry and machinery-producing industry of Republic of Azerbaijan’ (Strategic Roadmap for Development of Heavy Industry and Machinery-producing industry in the Republic of Azerbaijan, 2016).

2. LITERATURE REVIEW

The problems and strategic aspects concerned in the article were researched and analyzed in the scientific works of the different Azeri and world economy scientists. The provision of economic growth by taking advantage of economic efficiency and national economic resources, the problems and issues of extension of the economic structure were reviewed in the scientific works and considerations of Gerard T., Darragh F., Stephen Mc. (2015), Ajemoghlu D., Robinson J.A. (2013), Brendan O., Terence H., David H., Patrick L. (2016), Yasin E.G. (2017) and the other scientists. Formation and development of the economic policy, economic development model by Azerbaijan as an independent state, the problems of diversification of economics on the account of effective use of the non-oil industry sector and increase of its export potential was reflected in the researches of Abbasov N. (2019), Aliyev Sh.T. (2016), Bayramov V.I. (2018), Hajiyev A.V. (2016) and other scientists. Formation of the modern strategic approaches to the non-oil industry development in order to provide the increase of the economy stability of the country, and achievement of this through the implementation of advanced management mechanisms and high technologies were reviewed in the works of such researchers as Bayramov V.A. (2018), Huseynov A.S. (2017), Aliyev Sh.T. (2018) and Seyfullalı R.I. (2019). The problems of innovative development provision which make possible to increase the non-oil industrial sector and export potential, and the factors delaying the innovation of the economics of the country are researched in the monographs of professors Aliyev T.N. (2016) and Tagiyev A.H. (2018). It is mentioned that expansion of the industrial parks, technological parks and industrial clusters network in this direction is of strategic importance. Approaching from the authors’ ideas technological parks being the multifunctional economic activity mechanisms bring an opportunity of high productiveness and increase of the volume and types of the competitive export-oriented products. The importance of taking measures on modernization of country economics, intensification of the high technologies transfer and in connection with this, investment attractiveness of the non-oil sector and improvement of the non-oil industry structure were substantiated in the scientific articles of such researches as Ismayilov A., Aliyev Kh. (2013), Mehtiyeva N.Z. (2018), Salifova T. (2017), Suleymanov G.S., Garayev R.H. and Guliyev G.H. (2019). The important provisions, approaches and suggestions on diversification of Azerbaijan economics, adapting of its structure to the requirements of modern times in the context of global challenges, especially the diversification of the non-oil industry, directions in increase of the export potential are given in the works of such researches as Aliyev Sh.T. (2019), Valiyev E.R. (2016) and Zeynalov M.N. (2017). Alongside with all these mentioned, there is a demand in fundamental complex and systematic research of the strategic aspects of the export potential and non-oil industry diversification in Azerbaijan, taking the new challenges of the rapidly accelerating world economic processes as a basis, and in determining the relevant solution ways.

3. RESEARCH METHOD

Diversification of economics, increase of efficiency of the economic processes directly depends on the level of country economics organization and the adequacy of the economic development model to modern challenges. For this reason, it is important to actively use the various methods and approaches available in economics to achieve the sustainable and dynamic development by maximum rational use of the possible natural and economic resources of the country economics. Azerbaijan economics has peculiar features and economic development priorities. From one side the country is rich with natural resources, and from the other side there are favorable conditions for abundant labor resources, energy resources, and development of economic resources and human capital. All these laid the ground for diversification of economics and export-oriented development. With the purpose of achieving this first of all the use of basic methods actively used in the economics were preferred, as well as the use of such methods as observation, author's approach, analysis, comparative analysis, synthesis, generalization, evaluation and forecasting. At the same time the approaches, ideas and considerations of the foreign scientists and researches and local scientists on these problems were considered. There were referred to the analysis and forecasts for the economic growth provision and production structure expansion on the basis of analysis of the non-oil industry opportunities in Azerbaijan, and for diversification of the country economics generally on the account of non-oil industry sectors and determination of the export potential, the ways to reveal the potential is determined. The concrete proposals and activity directions of scientific-practical significance on the basis of analysis on problems and perspectives of this sector were given, and such kind of methodological approaches are considered to be important in this article.

4. RESULTS AND DISCUSSION

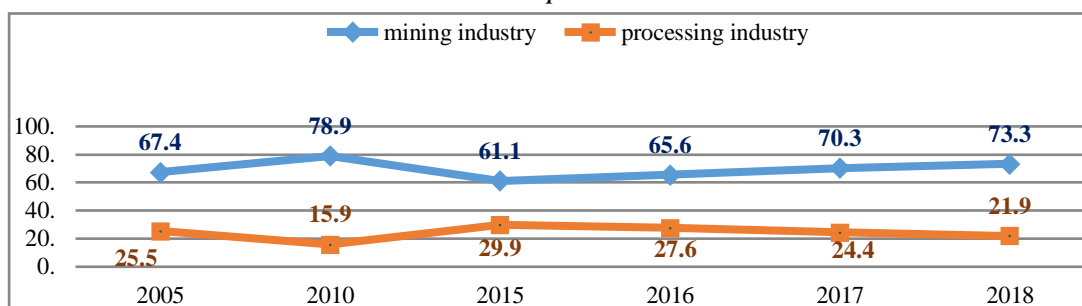
Deepening of the economic reforms and diversification of the non-oil industry in these processes appeared as a necessity in the context of diversification of Azerbaijan economics and issues of decrease of its dependence on the oil. Thus, there are conducted systematic works on managing the complex tasks like improvement and innovation in accordance with the situation arising from the global impact of economic development processes in last years in our country. The structure of the economy is being renewed and improved, also at the same time the serious attention is given to the implementation of economic mechanisms which draw attentions with their efficiency in the global experience, the export potential is being increased. As it can be seen, in recent years, the modern strategic approaches to the development of the non-oil sector in the country, primarily the non-oil industry, have been attracting attentions. It was possible to manage a significant part of the tasks set on diversification of the country economics and increase of the export potential, and the increase of the non-oil industry role in the economy grows in recent years is related to this. It is known that diversification of economics and optimal determinations of the economic development model of the economics under conditions of global challenges are observed through the similar processes for the most of post-soviet republics. The economy scientist Yasin Y. in his considerations about the reconstruction of economics as well as development of post-Soviet economics says that to adapt the post-Soviet economy to global challenges first of all the improvement of the economic structure should be provided and the challenges oriented to the future should be considered (Yasin E.G., 2017). At the same time the level of efficiency of economic processes must definitely bring income and create added value for the participants in these processes. One of the important issues is development of the non-oil industry to strengthen the economic development of the country, and in this regard, the more efficient involvement of natural and economic resources in the economic turnover (Hajiyev A.V., 2016). There should be provided complex approaches to the issues of dependence of the country economics on the oil factor, diversification of the economics and development of the non-oil sector (Zeynalov M.N., 2017).

For that purpose multiplicative development should be stimulated by the active use of the state support mechanisms and fiscal tools which influence positively the dynamics and efficiency of the non-oil industry as well as the non-oil sector (Huseynov A.S., 2017). One of the important conditions is provision of the strategic approaches to the sustainable economic development and deep research of the issues and factors that delay the creation of value-added sources, and to the issues limiting the economic development (Valiyev E.R., 2016). From the perspective of economy expert Bayramov V. in the country the economic reforms started in 2015-2017 were observed with the institutionalism, the state structure were relatively optimized, the important decisions were made to increase efficiency (Bayramov V.I, 2018). Undoubtedly all these formed a basis for development and diversification of the country economics, and increase of the export potential. The remarkable thing is that the requirements of the time and global challenges, the growing prestige of our country in the world, the high assessment of Azerbaijan's economic development by most international organizations set new strategic goals. These tasks are based on significant decrease of dependence of economics on the oil-and-gas factor, provision of the stable and dynamic growth tempo of the economics, achievement of the higher growth rate of the non-oil industry. At present, a new situation and conditions were formed in terms of the economic development priorities of our country. These demand the formation of new financial sources and profit. A new DIP of social economic reforms in our country are carry out on the account of economic growth and revenues obtained in the non-oil sector in recent years, the further acceleration of these processes were set as strategic tasks.

4.1. Analysis of the investment attractiveness of the non-oil sector and the structure of the non-oil industry in Azerbaijan

Let us draw attentions to a number of analyses for the better review of investment attractiveness in the non-oil sector, economic growth and export potential in our country. As it can be seen, during 2011-2018, the attraction of overseas investment was not so stable, and the oil factor, oil-and-gas sector reserved its priority in these issues. The attraction of investments to the non-oil sector was not too high. For example, in 2011 this indicator was 900 million USD, in 2017 - 800 million USD and in 2018 - 970 million USD. The share of the investments to the non-oil sector in the overseas investment over the whole country was % 11.8 in 2018. The industrial production structure on economic activity types in Azerbaijan in 2005-2018 is given in Figure 1, and the decrease tendency in the share of the processing industry was shown.

Figure 1: The industrial production structure on the economy activity types in Azerbaijan in 2005-2018, according to the general results, based on the actual prices of the relevant years, in per cent



(Prepared on the basis of ARSSC data – <https://www.stat.gov.az/>)

In 2018 the products in the amount of 27.47 billion USD was produced in the non-oil sector, and the amount of 5.88 billion USD of it, or % 21.4 falls to the share of the non-oil industry. If we review the indicators of the non-oil sector in Azerbaijan during 2015/2016 we review the

indicators of the non-oil sector in Azerbaijan during 2015-2018 shown in Table 1, we can see that the role of non-oil industry in the non-oil sector did not increase much in recent years. However, the increase of the total product production in the non-oil industry was observed.

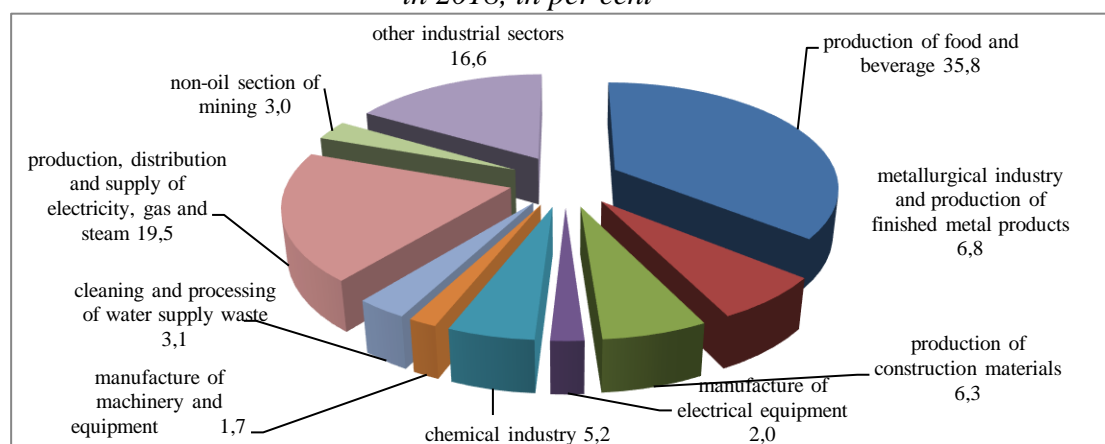
Table 1: A number of indicators of the non-oil sector in Azerbaijan in 2015-2018

Indicators	2015	2017	2018
Value added in the non-oil sector, billion USD	22,18	25,94	27,47
The special share of value added in GDP in the non-oil sector, in %	69,3	62,8	58,5
The share of the non-oil industry in the value added in the non-oil sector, in %	8,2	7,0	7,1
Product production in the non-oil industry, million manat	7660,3	9484,8	10047,9
including:			
In comparison with previous year, in %	8,4	3,7	9,1

Source: Ministry of Economics of AR <https://www.economy.gov.az>

In Figure 2, the structure of the total output of the non-oil industry in Azerbaijan is given. Briefly, if we look at the analysis of Figure 2, it can be seen that the share of high potential non-oil processing industries is quite low. The share of the chemical industry with great potential is only % 5.2, and the share of metallurgy and production of finished metal products is % 6.8.

Figure 2: The structure of the total output of the non-oil industry in Azerbaijan in 2018, in per cent



(Prepared on the basis of ARSSC data – <https://www.stat.gov.az/>)

4.2. Multiplicative role of technoparks, industrial parks and clusters in the development of the non-oil industry

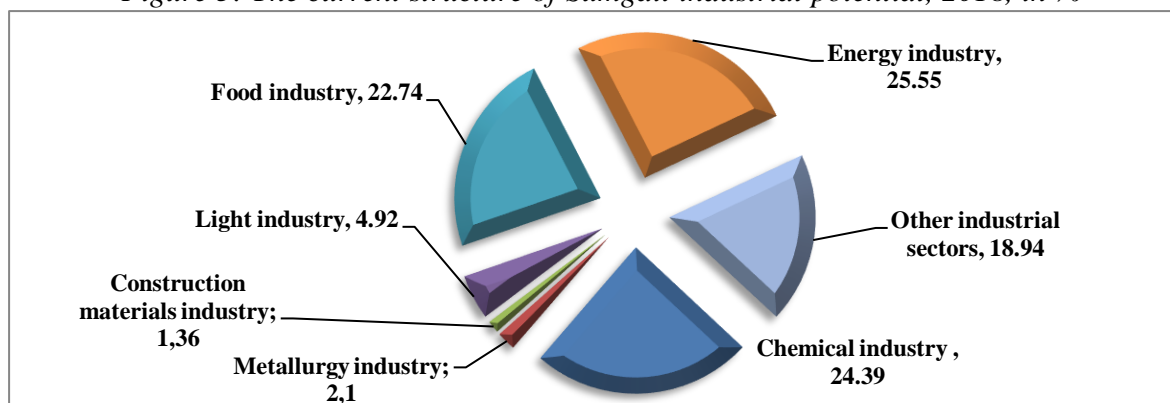
The priorities of development of the country economics on the basis of high technologies created additional impetus in diversification of the non-oil industry and formation of new sources of export potential. Thus, the strategic targets on economics innovation and high technologies acceleration were given in the ‘Strategic Road Map for the Development of Telecommunication and Information Technologies in the Republic of Azerbaijan’ confirmed by the Decree of the country President dated after December 6, 2016 (Strategic Road Map for the Development of Telecommunication and Information Technologies in the Republic of Azerbaijan, 2016). Technoparks alongside with positive impact on the economic development as multifunctional economic development mechanisms are considered to be quite attractive for overseas investment and high technologies transfer. The process of developing a technopark institution in Azerbaijan was already begun. There is a unified approach till the implementation of high technologies, investigations, inventions and innovations developed and gained by the scientists, inventors, rationalizers, and constructors in technoparks in a systematic and

sustainable way (Tagiyev A.H., 2018). In the technoparks organization of different production sectors and implementation of the scientific institutions and inventions to the production processes are conducted effectively, and foreign investors are usually very interested in such kind of operation zones (Aliyev Sh.T., 2018). From the other hand technoparks draw more attention as multifunctional operation mechanisms, they play a huge role in development of the enterprise and efficiency increase of business processes (Aliyev Sh.T., 2015). Formation of source of profit at the expense of technoparks creates more favorable conditions for minimizing the dependence on oil as well as diversification of the country economics. The existence of the state support mechanisms for these processes in the technoparks, implementation of tax allowances during 10 years make possible the effective operation of enterprises and business subjects (Model Regulations on Industrial Parks, 2013). Alongside with technoparks intensification of development of the industrial parks at the same time they have positive effect on acceleration of the innovative development in our country. However, for this, it is necessary to increase the efficiency of existing organizational and economic mechanisms. The start of the creation of industrial parks is important in terms of some parameters, thus in accordance with foreign experience, the industrial parks has the potential to support entrepreneurship and ensure sustainable development of the non-oil sector (The main of stimulus mechanisms for innovation activity, 2017). Formation and development of the industrial zones goes hand in hand with the process of development of innovative processes. These zones are notable for quiet attractiveness for both domestic and foreign investors (Salifova T., 2017). The industrialization policy itself had to be updated over time undergoing the changes with the impact of innovations in the economy and the added value created (Aliyev T.N., 2016). That is a state that wants to have an innovation-based economy should constantly follow innovations, study the experience of other countries, and create favorable conditions for the application of innovations in the economy (Ismayilov A., Aliyev Kh., 2013). The state should create an opportunity to achieve high results in improvement of its innovation policy and innovation of economics by the means of industrial parks, and in formation of the effective sources of the economic growth by the means of production of the innovation-oriented products. Evaluation of the economic value of the region chosen as a cluster target can determine the complex indicators system, and it will be effective to add employment, level of added value, technological growth of the region, innovation and the potential to create a new product and to adapt to new technologies, economic growth potential and etc. among these indicators (Aliyev Sh.T., 2015). Creation of clusters, first of all formation of the industrial clusters can be quite profitable.

4.3. Directions for increasing production and export potential in the non-oil industry of Azerbaijan

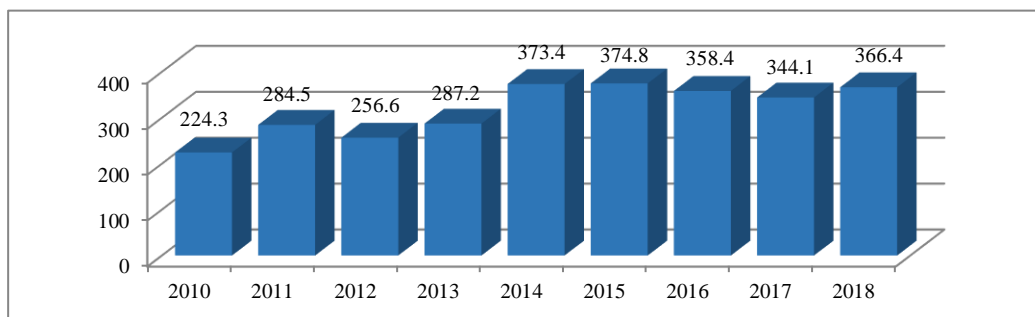
Sumgait industrial center plays an important role in development of the non-oil industry in Azerbaijan. In recent years the production of competitive and export-oriented industrial products in this industrial center increases. In Figure 3, there is given a structure of industrial potential in Sumgait by the end of 2018, and the share of the chemical industry as the main export-oriented non-oil industry is about % 24.4. But the share of the metallurgical industry with strong potential does not correspond to its potential, and it is important to accelerate the work which should be done in this direction.

Figure following on the next page

Figure 3: The current structure of Sumgait industrial potential, 2018, in %

(Prepared by the author on the basis of official data)

The role of facilities and large plants commissioned by SOCAR in recent years expands in increasing of the production and export potential of the non-oil industry. SOCAR - Urea and SOCAR Polymer plants started the production of fertilizers, polypropylene, as well as linear-polyethylene, and the supply of raw materials at the level of their production capacity is of strategic importance. These raw materials are manufactured on EP-300 device at the 'Ethylene-Polyethylene' plant in Sumgait, but provision of this device with raw material is much lower than the project power. The indicators of provision of the with 'Ethylene-Polyethylene' plant in Sumgait with the raw materials in 2010-2018 is shown in Figure 4, and in 2014-2018 the raw materials provision kept the same level.

Figure 4: Indicators of provision of Sumgait 'Ethylene-Polyethylene' plant of 'Azerkimya' IA with raw materials in 2013-2018

(prepared on the basis of plant report)

It is remarkable that one of the important issues in development of the non-oil industry is increase of its export potential, and therefore this means the increase of non-oil export. Thus, the export potential created at the residents of Sumgait Chemical Industrial Park 'SOCAR Polymer' and 'SOCAR Urea' was estimated at 400 million US Dollars average annually (Aliyev Sh.T., 2019). The structure of export in Azerbaijan in the end of 2018 is given, and as it can be seen, the share of mineral fuels in exports is quite high – % 91,9, and the share of chemical and petrochemical complex of non-oil industries with large export potential is quite low. As a strategic approach, we consider it important to strengthen the export potential by increasing domestic production and increase the volume of the non-oil industry production. Besides, in 2017-2018 the rubber tires in the amount of 128 million USD, vinyl chloride polymers in the amount of 42 million USD, ethylene polymers in the amount of 96 million USD, propylene polymers in the amount of 61.5 million USD, synthetic detergents in the amount of 130 million USD, and mineral fertilizers in the amount of 145 million USD and etc.

were imported to the country. Most of the imported petrochemical products have the potential to be produced in our country, and in this regard, the organization of production in these areas in our country could increase the export potential of the non-oil industry.

5. CONCLUSION

Thus, it is possible to note that Azerbaijan has a high potential to diversify the non-oil industry and increase its export potential. The main strategic issue is rational use of this potential, and we considered a number of strategic measures and generalization of the operation directions to be important for this:

- With the aim of non-oil industry diversification and export potential increase the new targets and strategic approaches adequate to the challenges of the modern age should be determined, substantiated forecasts for at least till 2025, development of a set of operation programs and measures and commencement of their execution without delay should be provided;
- Transparency and accountability measures and principles should be more deepened and a healthy competitive environment must be ensured to achieve the diversified economics and to increase the role of non-oil industry in these processes;
- The organization of the Sumgayit industrial logistics center should be considered with the purpose of balancing the supply of raw materials for the enterprises operating in Sumgayit, the main center of the non-oil industry in the country, efficient provision with the raw materials and finished products flow and their use, creation of flexible commercial mechanisms in accordance with the principles of market economy
- We consider it expedient to develop and implement the 'State Program on increase and innovation of the competitiveness of the non-oil industry sectors in Azerbaijan' (2020-2025) with the purpose of rapid and sustainable development and diversification of the non-oil sector, as well as taking measures for comprehensive and systematic development of the non-oil industry, creation of new production facilities based on high technologies, acceleration of the innovation processes of the non-oil industry and significant increase in export potential.

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THE CORRELATION BETWEEN THE EXPECTATION OF BUSINESSES FROM ACCOUNTING AND ITS EDUCATION IN THE HIGHER EDUCATION INSTITUTIONS: THE CASE OF AZERBAIJAN

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ABSTRACT

The last 20 years, as the companies have become globalized fast and hence, conventional production methods, service quality and traditions have changed, Azerbaijani companies followed the suit and have kept up with the international course. As a corollary, changing circumstances make the companies expect more from accountants. In return, in order for accountants to meet the requirements of businesses, they should gain certain skills to confirm with the changing environment. The purpose of this study is to show to what extent the accounting education given in Azerbaijani higher education institutions meet the expectations of businesses operating in Baku. In the study, a survey was conducted a questionnaire on 405 companies that are operating in Baku, and obtained data were analyzed by SPSS 23 package program. Collected data was subjected to “Wilcoxon Paired-Signed Rank Test on dual comparisons” and “Kruskal-Wallis One Way Analysis of Variance” on multi-comparisons. For the rest of data, frequency, percentage and arithmetic means were calculated and analyzed. As a result of the analysis, it was detected that all areas of accounting do not live up to the business expectations. Meanwhile, the most satisfying field of accounting was taxation, on the other hand, the least satisfying sphere was managerial and cost accounting. In order for universities to meet business expectations perfectly, suggestions were presented.

Keywords: *Accounting, Accounting education, Business expectations*

1. INTRODUCTION

As circumstances are changing, businesses` expectations from accountants are changing as well. Accordingly, in order for accountants to meet the mentioned requirements they have to be equipped with the appropriate knowledge and skills. For effective accounting knowledge, accounting education should comply with all sphere`s requirements. Students who are having the accounting education must keep up with the perpetually updating changings in the field. The responsibility is at least incumbent on university lecturers as much it is on students. High awareness of academicians at the universities will direct the students, professional accountants and related professions to be more effective and efficient. At the same time, academic researchers have highlighted the need for accounting students to have technology and data analytic skills in order to be successful in accounting profession (Andiola al.,2020). The scope of this study is to determine to what extent high education institutions meet the expectations of businesses from accounting field under the changing circumstances.

While reviewing the literature it is detected that there is a few amount of relevant studies in Azerbaijan. That is why, this study is believed to contribute to the field.

2. LITERATURE RIVIEW

In the middle of 1980s, the Bedford Committee of the American Accounting Association (AAA) assessed the state of accounting education (AAA, 1986). The committee's analysis indicated that accounting education would require major reorientation by the year 2000. The report stated that massive changes had taken place in the business environment—particularly in technology and social values. However, at the same time, academic institutions had failed to evolve as rapidly as business practice. As a result “. .a complete reorientation of accounting education is needed”. In 1989, the chief executives of the eight largest public accounting firms presented their position on education for the accounting profession. The theme was the same as stated by the Bedford Committee: although the business environment had changed in dramatic ways, accounting education had not kept up-to-date. Curricular change was mandatory for accounting degree programs and for the introductory accounting courses as well (Stiverset al., 2011). Several studies on accounting education have been conducted. Articles might be categorized into five sections corresponding to traditional knowledge bases: (1) curriculum and instruction, (2) instruction by content area, (3) educational technology, (4) students, and (5) faculty (Barbara al., 2019). Fay and Hardin (2000), studied the peculiarities which the accounting educators should possess in order to meet the requirements that are expected from the accounting education. Study showed good command of subjects, teaching skills and desire, practitcal knowledge in accounting field, motivating skills and fair evaluation of the exams are considered as the most leading features that might bring the prosperous outcomes in accounting education. Çürük and Doğan (2001) “The meeting level of accounting education of business expectations; Case of Turkey” In this comprehensive study the questionnaire was conducted among more than 500 big companies and accounting lecturers at the universities in Turkey. The given study which looked into whether the universities meet or not the requirements of the businesses on accounting, concluded with the necessity of university-business cooperations and noticed that the curriculums should be compiled according to the business requirements. Chonko and others (2002), carried out survey on 750 company and students overall. The researchers who gathered the detailed information about the education level of students and the expectations of the businesses, through the outstanding questionnaire, detected that the current education was sufficient enough and new methods on teaching would be more attractive for students. Başer (2010) has had a master thesis “Accounting Education in Vocational High Schools and their Structurizing According to the Businesses` Requirements”. In this study 650 companies which were located in SME village called OSTIM Industrial Zone in Ankara and vicinity targeted and some recommendations for improving the accounting education were made. İbiş and Çelikdemir (2011), have had a study about the expectations of the banking sector from the accounting education. Vice directors of 32 bank organizations responsible for the accounting, were carried out questionnaire. As to conclusion, the theoritical knowledge was met, however, for the better results bank-university cooperations were strictly recommended. Delikanlı (2011) did “The Scope of Daily Financial Reporting Facilities in Non-Banking Organizations, Organizational Structure and Expectations from Accounting Education”. The necessity of implementation of IFRS on mentioned organizations and their publicly disclosure obligation were referred. Therefore, the lessons which consist the international standards should be optional in the universities curriculum. Bal, Koçyiğit and Öztürk (2011) have the study “Hospitality Industry`s Expectation from Accounting Education and Implemantion in 5 Stars Hotel”. The study which targets 5 stars hotel in Ankara shows that the universites` accounting education is sufficient. Acar (2011) “Construction Industry and Expecations as Accounting Information System from Professional Accountants and Accounting Education” In this study,

according to the results of the survey, %88 of participants agreed that it is necessary for accountants to work and practice in different departments of construction sites. Güney and Dızman (2015), have had a study about the meeting level of expectations of businesses from accounting profession. The study contains the questionnaire and its analysis that was carried out on 61 enterprises located within the Erzincan borders. Findings demonstrate the very certain responding of accounting to requirements of businesses. The difference of this study from others might be determined as there was no similar scientific study before which focuses on the expectations of the businesses in Azerbaijan from the accounting education in the high educational institutions. Moreover, this study comprises all universities that have the accounting education.

3. METHODOLOGY

3.1. Scope of the Study and Hypothesis

In the globalizing world perpetual renovation of businesses in accordance with the changes around them is one of the fundamental principals of being successful under stiff competition. This changing occurs under the agreement of business structure and its expectations. Therefore, as a result of the outstanding changes the probable outcomes will affect every business function, even more closely will affect the accounting. Particularly, the determination, measurement and assessment of businesses' expectations from the higher education institutions accounting education is of crucial importance. In this study, the analysis of satisfaction level of businesses located in Baku with higher education institutions' accounting education is targeted. Study was conducted in Baku, the capital of Azerbaijan Republic between the dates 01.12.2017 – 31.03.2018. The scope of survey includes the measurement of workers' accounting knowledge and therefore 7 different accounting fields were targeted as a scale and finally survey was carried out among business owners and managers. In order to reach the purpose of the study 8 different Hypothesis were improved and tested. The main purpose of study is to determine whether the accounting knowledge of accounting personnel working in various businesses live up to the expectations of those businesses. Therefore, the expectations, command level of 7 different accounting fields and perceptions of owners were determined as a scale of measurement and following Hypothesis below were improved;

- H1: is the difference between the expectations and perceptions of business owners of accounting personnel knowledge level about general accounting.
- H2: is the difference between the expectations and perceptions of business owners of accounting personnel knowledge level about managerial and cost accounting.
- H3: is the difference between the expectations and perceptions of business owners of accounting personnel knowledge level about audit.
- H4: is the difference between the expectations and perceptions of business owners of accounting personnel knowledge level about financial statement analysis
- H5: is the difference between the expectations and perceptions of business owners of accounting personnel knowledge level about computerized accounting
- H6: is the difference between the expectations and perceptions of business owners of accounting personnel knowledge level about international accounting
- H7: is the difference between the expectations and perceptions of business owners of accounting personnel knowledge level about tax system
- H8: There is a meaningful variance between the mathematical difference of business sector and the difference between the expectations and perceptions of business owners.

3.2. Data Set and Method

The main population of this study which aims to measure the business expectations from accounting education of high educational institutions is various 78482 business enterprises

(The Republic of Azerbaijan State Statistics Committee, 2017:6) that are located within the borders of the Republic of Azerbaijan. Since the number of population is more than 78K the the number of sample companies are required to be 384(Serekan, Bougie, 2016: 264). In this study, by the basic random sampling method, the survey research which contains questionnaire was targeted on 500 enterprizes and in the end 405 applicable questionnaire were recieved. Considering that the number of sampling got ahead of the targeted amount the generation of informatoin on behalf of population will be quite meaningful. Questionnaire is comprised of 3 parts. In the first part, in order to recieve the general information about companies 8 descriptive questions were asked. In the second, there were 14 total questions which comprises 2 questions per 7 different accounting fields. These questions targeted to measure the expectations of businesses from the high educational institutions therefore addressed to company managers and questions included whether they were satisfied with the knowledge of the accounting personnel. In the third part, there were 14 questions which addressed to the accounting related academicians and assistants in order to measure the perception level of the businesses. As a result, the number of general question 8, and per perception and expection 14 questions made up the total number of questions 36. Since it was thought that the responding rate would be increased, in order to make them easy to understand, questions in the questionnaire were prepared very clearly and explicitly. In expectation and perception style qestions Likert -type scale was used. On the questionnaire, 5 different checkboxes were given to participants to express their expectation degree where they represented in ranges “1- completely do not agree and 5- completely agree”. For analysing the date SPSS 23.0 (Statistical Program for Social Sciences) was utilized. In order to test the hypothesis, on behalf of gaugeing reliability, first of all for measuring the internal coherency among the questions and determining the reliability degree of the scale (overall questions of the questionnaire) were carried out. After scoring the expectation-perception elements, the dual and multi comparison among the study hypothesis of variables were made. For this, tests were used to determine if there was a normal distribution of related variables or not. Because there was not a normal distribution, non-parametric tests utilized to execute the dual and mutli comparisons. For dual comparisons “Wilcoxon paired biserial-correlation rank test and for multiple comparisons “Kruskal-Wallis One-way Variance Analysis” were used. For the other data, frequency, percentage, and arithmetic means had been addressed.

4. FINDINGS

The first part of the questionnaire was allocated for determining the profile of respondents and then in the second part of the questionnaire the scale which gauge the expectations and perceptions of businesses were assessed.

4.1. Descriptive Statistics

In the study the respondents were tried to be selected from a large specter and categories were held broad too. As business profile, following variables were selected; sector, busines entity, number of personnel, number of accounting personnel, the position of the participant in the company, the foundation date of the company, which resource they keep abreast of professional improvement, and what duties accounting personnel fulfil.

Table following on the next page

Table 1: Statistics related to company profile

		Frequency	Percentage
Distribution of companies according to the sectors	Production	207	51
	Service	135	34
	Commerce	42	10
	Other	18	5
Legislative Structures of Companies (Business Entity)	Sole Company	51	13
	Holding	18	4
	Partnership	10	3
	Limited Liability Company	297	74
	Stock Joint Company	25	6
Total number of workers	1-9 persons	26	7
	10-29 persons	121	30
	30-49 persons	122	30
	50-99 persons	70	17
	100 +	64	16
Total number of accountants	1 person	57	14
	2 persons	34	9
	3 persons	219	55
	4 persons	28	7
	5+	62	15
Position of participants in company	Business Owner	76	19
	General Director	78	20
	Assistant Director	66	16
	Head of Accounting	146	36
	Other	37	9
Foundation of company	Before 1995	27	7
	1995-1999	9	2
	2000-2004	105	26
	2005-2009	89	22
	2010-2014	145	36
	After 2015	27	7

The profile of the participants were presented in Table 1. According to the sectoral distribution of companies the majority of participated companies (%51) are production oriented. On the other hand, according to business entity Limited Liability were dominant with %74. As for distribution of workers according to the number of workers, while companies with the number of workers between the 1-9 range made up %7 olduğu, companies with 30-49 workers were in majority. The data about the accounting personnel the dominance (%55) ticked alternative “3 persons”. And the the position of the participants presented us Chief Accountant (%36) were relatively more than the others. In the end, the foundation of the most companies were in 2000 which coincides with the period of the burgeoning years of Azerbaijan. The last two questions about the company profile aimed to determine from which resources the accountants provide their personal improvements and which duties accountant mostly employed for. The responds for this question was in multiple choice form and collected data were presented on Table 2.

Table following on the next page

Table 2: Statistics according to company profile

		Frequency	Response percentage	Company percentage
Resources for personal improvements	Bulletins of Professional Associations	89	7	22
	Participations in seminar and courses	322	27	80
	Published articles	329	27	81
	Internet	357	30	88
	Other	101	8	25
The duties that accounting personnel fulfill in the company	Book Entry	343	17	85
	Preparation of Financial Statements	360	18	89
	Procurement and Purchase	240	12	59
	Following the official works	141	7	35
	Inventory	259	13	64
	Collection and Payment	295	15	73
	Internal Audit	75	4	19
	Cost Calculation	282	14	70

According to Table 2 the query “Resources which accountants follow on behalf of personal improvement” was responded by 405 enterprises with total number of 1198 alternative responses. Professional associations (%7) and other resources (%8) fell short in informing companies about professional advancements. Besides, multiple choice from professional associations (%22) and other resources (%25) perspective are concluded either less utilized by companies or were insufficient. Through the internet (%88), published articles (%81), and participation in courses (%80) channels the learning of professional improvements were far better preferable by business enterprises. 405 enterprises responded to 1995 multiple choice on the question “The duties accounting personnel fulfilled within the companies”. Results also showed that internal audit (%4) and following the official works (%7) operations had been undergone less comparing to other works. Book entry, preparation of financial reports, procurement, inventory, collection and payment, and cost calculation activities were rated the same level of necessity. Furthermore, the most two percentages among all were preparation of financial statements(%89) and book keeping (%85). Notwithstanding, internal audit (%19) was the least among all activities.

4.2. Calculation of scores and Statistical Analysis

Before starting statistical analysis, it is necessary to ascertain the data that collected to measure the satisfaction level of businesses are reliable. Ad hoc, reliability had been done in the first place, therefore on the light of it Alpha model was used. Cronbach’s Alpha factor is the adaptation value depending on the interquestions correlation. This value ranges between 0 and 1. If the Cronbach’s Alpha factor is equal or over 0.70 then it is counted reliable (Cronbach, L. J. 1951). Reliability test realized by receiving responses to per 14 questions, total 28 that addressed to measure the expectation and perception. Cronbach’s Alpha value was found as this value shows that the data are quite reliable. In order to understand whether the knowledge of the personnel in the companies which the questionnaire was carried out live up to the expectations, first of all the company managers’ and accountants’ expectations and perceptions were tried to be gauged. After testing the statistical meaningfulness of the differences between the expectation and perception in case measured expectations be less than perceptions ($E < P$) the expectations will be considered as met excessively, in case of equality ($E = P$) the expectations will be counted as met fully, and in case expectations be greater than perceptions ($E > P$) the expectations will be considered as not met.

On behalf of this ,7 different accounting fields , on the second part of the questionnaire the averages related to expectation questions and the averages related to perception questions that are on the third part of the questionnaire were calculated. On the next step, the arithmetical variances were recieved and one average difference per each accounting field was found. The results are on the Table 3.

Table 3: Expectation and Perception Scorings Related to Accounting Education

Fields	N	Expectations (E)	Perception (P)	E-P	AVE (E-P)
General Accounting	405	4.124	3.332	0.792	1.389
	405	4.659	2.674	1.985	
Managerial and Cost Accounting	405	4.484	2.533	1.951	2.077
	405	4.573	2.370	2.202	
Audit	405	3.543	2.259	1.284	1.195
	405	3.338	2.232	1.106	
Financial Statement Analysis	405	4.064	2.111	1.953	1.925
	405	3.678	1.782	1.896	
Computerized Accounting	405	4.654	3.432	1.222	1.273
	405	3.817	2.494	1.323	
International Accounting	405	3.677	2.311	1.365	1.381
	405	3.970	2.573	1.398	
Tax System	405	4.052	3.249	0.802	0.741
	405	4.104	3.425	0.679	

As it is obvious on the Table 3, first of all, in all accounting fields the expectations are greater than perceptionsn ($E > P$), in other words all variances were poztitive. It means that,the in the outstanding fields of accounting the expactations from the accounting education are not met fully. By far, the least expectations meeting were seen in managerial and cost accounting field. In order to understand and make sure a what extent these differenceese are statistically meaningfull about the findindgs, later herein the proper statistics were made, too. Statistical tests are divided into two groups; “parametric tests” and “ non-parametric test” (Serekan, Bougie, 2016). In order to determine to which of these tests the collected data from the result of study are compatible with, the normality tests were made on relevant variables. Normality test about the companies expectations and perceptions are presented on Table 4. While testing the related variables the used Hypothesis are like this;

- H_0 : the data are distributed by %95 reliability
- H_1 : the data are not distributed reliably by %95

As it can be seen on the Table 4, 2 different testing types such as “Kolmogorov-Smirnov” and “Shapiro-Wilk” were used. Here, since the "Sig." values of both tests (p values) were smaller than 0.05 H_0 will be rejected for all expectation and perception variables. hipotezi reddedilir. Namely, according to both result, all expecations and perception variables are not distributed reliably by %95. In social sciences it is accepted to be plausible when there is no normal distribution.

Table following on the next page

Table 4: Test of Normality

	Fields	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistiks	sd	p-value	Statistics	sd	p-value
Expectations	<i>General Accounting</i>	0.385	405	0.000	0.624	405	0.000
	<i>Managerial and Cost Accounting</i>	0.295	405	0.000	0.706	405	0.000
	<i>Audit</i>	0.279	405	0.000	0.756	405	0.000
	<i>Financial Statement Analysis</i>	0.398	405	0.000	0.618	405	0.000
	<i>Computerized Accounting</i>	0.387	405	0.000	0.643	405	0.000
	<i>International Accounting</i>	0.384	405	0.000	0.737	405	0.000
	<i>Tax System</i>	0.361	405	0.000	0.683	405	0.000
Perceptions	<i>General Accounting</i>	0.325	405	0.000	0.799	405	0.000
	<i>Managerial and Cost Accounting</i>	0.358	405	0.000	0.692	405	0.000
	<i>Audit</i>	0.388	405	0.000	0.758	405	0.000
	<i>Financial Statement Analysis</i>	0.356	405	0.000	0.731	405	0.000
	<i>Computerized Accounting</i>	0.311	405	0.000	0.816	405	0.000
	<i>International Accounting</i>	0.399	405	0.000	0.643	405	0.000
	<i>Tax System</i>	0.305	405	0.000	0.827	405	0.000

By test of normality it is concluded that the data has no normal distribution and therefore in statistical analysis of the data non-parametric tests were used. Among non-parametric statistical tests first Wilcoxon paired biserial-correlation rank test was used. This test is known as non-parametric alternative to dependent groups t-test. In calculation of Wilcoxon test statistics the ranking is done by difference between expectations and perceptions of accounting fields. After receiving the difference, sign of rank value is changed with the found sign. This test might be considered as the most preferable among others since the information about the amount and direction of difference of every business is preserved. So the results received from Wilcoxon paired biserial-correlation test are presented in Table 5 and Table 6.

Table following on the next page

Table 5: Wilcoxon Test Rankings

Field expectations and perceptions		N	Rank Average	Rank Sum
General Accounting	Negative Rank	346	194.01	67128.50
	Pozitive Rank	27	97.13	2622.50
	Equality	32		
	Sum	405		
Management and Cost Accounting	Negative Rank	359	198.30	71189.50
	Pozitive Rank	21	57.17	1200.50
	Equality	25		
	Sum	405		
Audit	Negative Rank	298	182.44	54367.00
	Pozitive Rank	37	51.70	1913.00
	Equality	70		
	Sum	405		
Financial Statment Analysis	Negative Rank	324	192.12	62247.50
	Pozitive Rank	35	67.79	2372.50
	Equality	46		
	Sum	405		
Computerized Accounting	Negative Rank	311	185.68	57746.00
	Pozitive Rank	33	48.30	1594.00
	Equality	61		
	Sum	405		
International Accounting	Negative Rank	337	189.27	63782.50
	Pozitive Rank	25	76.82	1920.50
	Equality	43		
	Sum	405		
Tax System	Negative Rank	340	187.10	63613.00
	Pozitive Rank	27	145.00	3915.00
	Equality	38		
	Sum	405		

Note: Negative Rank: Defines the ($E > P$) number in situations Expectations (E) greater than (P)Perceptions. Pozitive Rank: Defines the ($E < P$) number in situations Expectations (E) smaller than (P)Perceptions. Equality: Defines the ($P = E$) number in situations Expectations (E) are equal to (P)Perceptions.

Table 6: Wilcoxon Test Statistics

Field expectation and perception	Z	p-value
General Accounting	-15.824	0.000
Managerial and Cost Acc.	-16.680	0.000
Audit	-14.989	0.000
Financial Statement Analysis	-15.768	0.000
Computerized Accounting	-15.706	0.000
International Accounting	-15.988	0.000
Tax System	-15.265	0.000

According to results in Table 5 and 6, among the accounting education given in universities, General Accounting, Managerial and Cost Accounting, Audit, Financial, Statement Analysis, Computerized Accounting, International Accounting, Tax System, z- statistic, p value and Negative Rank about the test which is related to the difference between field expectations and perception, H1-H7 hypothesis will be accepted. This means, there is a meaningful difference between the expectation and perception of company managers of accounting personnel's command level of the given accounting fields. As for final hypotethesis of the study "There is another meaningful mathematical difference between business managers` expectation and perception and on whcih sector businesses facilitate. In order to test H8 hypothesis statistically, "One-way Kruskal-Wallis Variance Analysis" was utilized.

This test is non-parametric alternative to one-way variance analysis. The purpose of this test is to obtain whether the mathematical difference which occurred between expectation and perception shows the meaningful variance according to the businesses various sectors or not. Test results have been demonstrated on Table 7 and Table 8. H8 hypothesis was accepted because chi-square statistics and p-value on the Table 7 and Table 8, p values which all related to questioned accounting fields were $0.000 < 0.05$. Namely, the mathematical difference between the expectations and perception of the business administrators according to the sectors that the businesses facilitate were statistically accepted.

Table 7: Kruskal Wallis Test Results

Expectation and Perception Difference according to the field	<i>General Accounting</i>		Managerial and Cost Accounting		Audit		Financial Statement Analysis		Computerized Accounting		International Accounting		Tax System	
Business Sectors	N	Rank-Average	N	Rank-Average	N	Rank-Average	N	Rank-Average	N	Rank-Average	N	Rank-Average	N	Rank-Average
Production	207	250.47	207	257.62	207	254.77	207	259.2	207	255.41	207	260.25	207	227.76
Service	135	132.17	135	128.25	135	122.79	135	124.61	135	119.66	135	128.13	135	162.58
Commerce	42	225.1	42	211.18	42	235.39	42	217.3	42	240.24	42	199.02	42	229.87
Other	18	103.28	18	82.89	18	100.17	18	77.72	18	105.03	18	81.94	18	125.22
Total	402		402		402		402		402		402		402	

Table 8: Kruskal Wallis Test Statistics

Expectation and Perception Difference according to the field	Ki-square	sv	p- value
General Accounting	114.492	3	.000
Cost Accounting and Managerial Accounting	140.520	3	.000
Audit	131.082	3	.000
Financial Statement Analysis	163.112	3	.000
Computerized Accounting	152.377	3	.000
International Accounting	149.316	3	.000
Tax System	45.849	3	.000

5. CONCLUSION AND RECOMMENDATION

According to the study results none of the accounting fields meets thoroughly the businesses' requirements from accounting. Tax system education is detected to meet the requirements the best among the all accounting fields which are given in universities. Cost accounting, on the other hand, determined as the least meeting field. Besides, the expectations according to the different sectors are also examined. In businesses in Azerbaijan the "tax oriented accounting" perception has been sprung up. So, until the recent years "generating the fair information" function of accounting has been avoided. This is because the legislative regulations mostly used to take the directions from Azerbaijan Tax Code and therefore on behalf of public authority who regulates the accounting profession was the The Ministry of Taxes of the Republic of Azerbaijan. This study which detected the no-meet of requirements of the businesses has also revealed the poor relationship between universities and businesses.

On the one hand, education programs and curriculums are not sufficient to respond the requirements of businesses, on the other hand businesses have never involved universities into the problem solving processes. For the future studies related to this issue, inclusion of the education level and the educational background of accounting personnels to the questionnaire form can be recommended. Collecting these data and assessing the results will allow to measure to what extent the accountants personal education and their educational background are effective on meeting the requirements of the businesses more precisely.

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A CONCEPTUAL APPROACH TO IMPLEMENTING A SUSTAINABLE STRATEGY FOR ECONOMIC DEVELOPMENT

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ABSTRACT

In order to ensure sustainable economic growth and prepare development strategies, it is necessary to approach social, economic and environmental aspects equally. Sustainable development is an innovative process that supports scientific and technical development and innovative policies. Successful projects are rapidly growing by high profitability that governments implement policies that encourage innovation. The establishment of Sustainable Economic Development Strategy is to generate innovation, efficiency, usage of all natural and human resources is the best way to increase jobs, incomes, productivity. As a result of the effective formation and sustainability of the national economy, the social welfare of the population will improve, the pace of economic development will be accelerated, and the environmental balance will be ensured. In this framework many countries try to prepare one-off national plans that to way out of problems. The paradigm of sustainable economic development suggests that the long and worthy welfare of the human community is determined by the state of the economy, social sphere, environment, where only macroeconomic indicators improve, (such as GDP per capita, inflation, trade surpluses, etc.) but this is not enough to talk about sustainable economic development. This paper analyzing 7 main elements that plays main role in the sustainable economic development policy applied in developed countries. This results show that sustainable development is a very broad concept, interconnected with many factors, such as welfare, education, human rights, environment, etc. Also one of the urgent tasks for achieving success in the field of sustainable development is this informational completeness and adequacy of the presentation of the interconnected elements of the components of sustainable development.

Keywords: *Governance, Sustainable economic development, Sustainable strategy*

1. INTRODUCTION

The priority of the tasks facing different countries and even different regions of the country in the context of sustainable economic development is different. Some of the common key sustainability features are especially important at the local level, for example, the following tasks:

- The ability to understand and analyze problems;
- Partnership with various resources / organizations to find an adequate solution;
- Using local resources to generate decisions at the local level;
- Involving the entire community and all stakeholders to participate in all activities;
- The ability to unite and adopt external resources to solve internal problems;

In the practical implementation of the sustainable economic development policy the following 7 main elements are distinguished [1]:

1. Participation.
2. Decision-making.
3. Partnership.
4. Governance.
5. Knowledge and information.

6. Continual improvement.
7. Lifestyles.

2. ANALYZE OF ELEMENTS

As expected, there are significant intersections and connections among these seven elements. Therefore, it is not correct to examine them in isolation. But, since each of them is a rather complex object with internal components, for ease of perception and understanding, we will analyze each element separately.

2.1. Participation

Community participation in policymaking can take the following 6 formats [2]:

- Participants who only listens;
- Participants who listens and gives information;
- Participants who consults;
- Participation in the analysis and setting of the agenda;
- Participation in reaching agreement on the main elements of the strategy;
- Participants involved in decision-making on a policy, strategy or its components.

Sustainability involves promoting participation, i.e. dialogue, cooperation and communication. For real ensuring sustainable development at any level, the participation of interested groups is necessary, but their formal participation is not enough, it must be effective. The following requirements are presented for effective participation in strategies [3]

- agreed methods
- politics, laws and institutions
- catalysts for participation
- learning environment
- certain actions and events, etc.

Requirements for participation depend on the strategy, goals and potential participants. They also depend on political and cultural circumstances.

2.2. Decision-making

In the context of sustainability, the cornerstones of decision-making are: reaching agreement, public scrutiny and hearing, achieving awareness.

Decision-making also includes issues such as ownership, flexibility, empowerment, informed consent, community choice, etc. The main problems that arise when making decisions on sustainable economic development are as follows [4]:

- Lack of standard definitions for sustainability concepts.
- Finding the right level of detail to classify sustainability.
- Limitations of sustainability analysis.
- Consistency issues due to loose semantics of target models and different modeling styles.
- Scalability issues.
- Verification of target models.

2.3. Partnership

Partnership - relations between people or groups, which are characterized by mutual assistance and responsibility for achieving an agreed, specified goal. The three elements of strong partnership in terms of sustainable economic development are the interdependence of partners, their grouping and the creation of their business network.

The key to an effective community partnership is that its members contribute to the public various resources, skills and knowledge needed for the enterprise. This stimulates mutual respect between community members and interactions with people who have similar interests or problems. Action is needed to expand the nature and productivity of partnerships for sustainability. Partnership support: This is necessary to help stakeholders succeed. Support in this matter can be provided in the following ways. [5]:

- Recognition and providing a space for acknowledgment.
- Creation of training centers.
- Holding partnership fairs.
- Allocation of resources to stimulate participation.
- Partnership Management.

2.4. Governance

Sustainability requires reliable local governance - transparent, efficient and responsible. Good governance occurs when social norms and practices empower and encourage communities to take on more and more control over their own development, without infringing on the rights of other communities. Good governance requires a free flow of information - transparency. Processes, institutions and information are directly accessible to those interested in this, and it is sufficient to understand the processes in progress and to control them. In the innovation community, authorized and responsible participants have more power and responsibility for making decisions, can improve their goals, as well as managing human and financial resources - responsibility. Making the best use of the closest available resources to maximize results is also a key component of a community management system — efficiency.

2.5. Knowledge and information

Sustainability of economic development is impossible without the management of knowledge and information, which must be reliable timely and accessible. Knowledge and information underpin the community's ability to become innovative - to learn, make decisions, communicate and act. In order to be able to fulfill them, it is important that the community has knowledge and information that is adequate and relevant, easily accessible - in a form that can be easily understood and also accessible in a timely manner. In solving these and other problems arising in connection with knowledge and information, special attention should be paid to the following priority measures [6]:

- 1) The overriding importance of the learning process and the organization of online learning.
- 2) A strong emphasis should be placed on the training of trainers, effectively combining all available resources from face-to-face interaction to digital communication via the Internet.
- 3) Promoting the rapid circulation of scientific knowledge in all parts of the world, especially in less developed areas.
- 4) Encouraging research and debate on a balanced legal system, protecting intellectual property and supporting its general accessibility.
- 5) Promoting balanced partnerships among the private sector, between the public sector and civil society organizations, as well as between individuals and other groups.

The analysis shows the importance of integrating local community knowledge with scientific and technical data, as well as the willingness of scientists and experts to work closely with people in the community to conduct research and compile environmental information.

2.6. Continual improvement

Within sustainability, three important components of continuous improvement are monitoring and evaluation, feedback and needs assessment. Continuous improvement refers to the

preparation of corrective action and a preventive measure system, as well as a learning environment that draws on lessons learned and involves all members of the community. For effective continuous improvement it is necessary to take into account the following actions [7]: New working methods, capacity building, transformation of corporate services and acquisition of knowledge from partner organizations.

2.7. Lifestyle

A community of any level has its own lifestyle. On a global scale, it is established by international treaties, conventions and etc. At the country level, this is the constitution, legal norms, and informal institutional relations established by traditions that have developed in society. At the level of firms and enterprises, these are the relevant provisions and informal requirements of managers. In the context of sustainable economic development, three determinants of lifestyle are distinguished: behavior, values and ethics. A sustainable lifestyle is the goal of any modern community. Ultimately, the success of an environmental control plan or program at any level will depend on the lifestyle choices adopted by the community — and the cost at which they value the natural resources they consume. “Stable lifestyles are patterns of actions and consumption used by people to join the community and differentiate themselves from others, in which: basic needs are met, a better quality of life is ensured, the use of natural resources and the emission of waste and pollutants are minimized over the life cycle, and endangered by the needs of future generations”[8]. Sustainable consumption is associated with the process of buying, consuming and disposing of products, while stable lifestyles include a wider range of activities and values, such as interactions and education, which include the consumption of materials, but are not limited to this [9]. However, the price is paid in the form of a deterioration in many ecosystem services and an increase in inequities and differences between people. In some countries, meeting basic needs, such as access to clean water, food, and adequate health care, is still an unresolved problem. About 1.1 billion people still use unsafe sources of drinking water without access to 20-50 liters of clean water per day to guarantee their basic needs [10]. 14% of the world’s population goes hungry every day, and malnutrition takes 10 million lives every year [11]. Economic development increases productivity, which leads to lower prices for goods. Income is also increasing, as well as the purchasing power of people. Ideally, high returns coupled with true information could lead to a more stable purchasing choice. Technological advances lead to the delivery of more efficient products and technologies (including design in accordance with environmental principles and dematerialization). They can, however, create new visions for lifestyles or conditions that could stimulate people to adapt to a lifestyle in which resources are consumed more intensively. Strategic actions affect lifestyles through regulatory tools (e.g., prohibitions and rules) and financial measures (e.g., taxes), or through information provision (e.g., environmental signs), affecting the behavior of all actors. Despite some improvements, there are still many strategic actions that send confusing signals to the markets. And in some countries there is no even a basic health and safety policy. Socio-psychological factors include personal motives and the influence of the social environment. Some studies indicate that the connection with happiness persists only up to a certain level of income, after which it is separated from economic well-being, and instead, the quality of our lives is determined by other factors, such as the availability of time, the ability to have family and friends [12]. Cultural and historical aspects also influence lifestyle and unspoken norms of behavior in every society. An understanding of the basic cultural and historical attitudes of each social group is important for understanding how the vision of lifestyles that still remain based on the cultural and social context and are an integral part of them can be changed.

3. CONCLUSION

All of the above shows that sustainable development is a very broad concept, interconnected with many factors, such as welfare, education, human rights, environment, etc. In this case, measuring sustainable development within the framework of a simple economic model is almost impossible, since it is very difficult to measure the significance of all factors using quantitative criteria. It is even more difficult to ensure the commensurability of such diverse and volumetric factors that it is necessary to obtain integral estimates. Also, in our opinion, we must take into account that at the moment, generally accepted calculation models are not found for all factors, and existing ones are sometimes subjective due to political, geographical and other reasons. Therefore, one of the urgent tasks for achieving success in the field of sustainable development and in the implementation of this concept is this informational completeness and adequacy of the presentation of the interconnected elements of the components of sustainable development.

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GLOBAL PANDEMIC CALL AND SUSTAINABLE DEVELOPMENT

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ABSTRACT

The solution of socio-environmental problems in the direction of sustainable development of the country requires the improvement of technical, economic and management aspects. Three types of interactions must be chosen in the project of sustainable development: 1) society-nature; 2) society-man; 3) human nature. Also, in order to achieve sustainable development, three basic elements must be coordinated: economic growth, inclusive society and environmental protection. There are dangers for the sustainable development of mankind. One of them is pandemic. Proponents of the version of nature's revenge from people considers the pandemic as a tsunami, hurricane, earthquake range in response to the cruel exploitation of the planet's resources by humans and environmental pollution. Proponents of the version of direct human involvement in this case point out that it has been given various signs in books, music videos and movies. The reason is that according to Malthus's theory, food increases numerically, people increase geometrically. The word of the Holy Qur'an opposes these ideas: "God sends sustenance to man before he is born." States and international organizations, especially the WHO, have mobilized resources to fight. Aggregate demand and aggregate supply sharply have decreased - the volume of world economy is demoted Within medicine, the production of personal protective equipment and disinfectants, antiviral and immune-boosting drugs, artificial respirators, as well as the digital economy, which makes social isolation interesting and profitable, are growing. States and individuals must always be prepared for defense. We want to say this because we wrote this material on the eve of April 22 - Earth Day-Live the planet, live

Keep live humanity, planet, live!

Keywords: sustainable development, pandemics, WHO, planet

1. INTRODUCTION

Sustainable development means development that allows future generations to meet today's needs without compromising their ability to meet their own needs. To achieve sustainable development, the three basic elements must be combined with each other: economic growth, inclusive society and environmental protection. These elements are interrelated and all important for the well-being of individuals and societies.

2. SUSTAINABLE DEVELOPMENT

The solution of socio-environmental problems in the direction of sustainable development of the country requires the improvement of economic-oriented technical-economic and management aspects in the regions. Three types of interactions are selected in the design of sustainable development: 1) society-nature; 2) society-man; 3) human nature. Here, the first and third types of attitudes are the object of ecological research. The second type is the object of study not only in economics, but also in the humanities. Thus, the design of sustainable development in support of economics is a process that determines what needs to be done for social and natural systems to work together (1).

In order to design sustainable development, decisions in various subject areas must be reconciled with the laws and dynamics of nature. Only in this case, the management of socio-natural systems will not depend on unreasonable assessments. The rules of continuous action of this system should be a "machine" system that acts as an auxiliary "tool" for the harmonization of decisions with the laws of nature. The creation of such systems is unprecedented in history and requires a single scientific knowledge that allows you to effectively design the future development of the world, country, region, industry, enterprise. The Sustainable Development Goals (SDG), set out in the Global Agenda for Sustainable Development 2030, adopted by world leaders at the historic UN summit in September 2015, officially entered into force on 1 January 2016. Against the backdrop of these new universal goals, over the next fifteen years, countries will mobilize all their efforts to end all forms of poverty, address inequality and combat climate change, guided by the principle of "no one left out". The SGPs, also known as the Global Goals, are based on the results of the Millennium Development Goals (MDG) and aim to further eradicate all forms of poverty. The uniqueness of the new SDG is reflected in their call on all countries, including the poor, rich and middle-income countries, to take steps to promote progress, provided they protect the planet. The SGP affirm that poverty eradication must be linked to strategies for economic growth. They focus on a wide range of social needs, including education, social protection and employment opportunities, as well as the fight against climate change and environmental protection. Although the implementation of the SDG is not legally binding, Governments are expected to adopt these 17 goals and create national frameworks to achieve them. The main responsibility of the countries is to monitor and analyze the progress made in the implementation of the SDG. This requires the timely collection of quality and accessible information. The monitoring and analysis of the implementation of the SDG at the regional level will be based on the analysis conducted at the national level and will be used in the monitoring and analysis at the global level.

3. PANDEMIC CALL

Mankind has identified sustainable development as the main goal for the 21st century, but such ideas have existed since time immemorial. There are constant dangers to the sustainable development of mankind. Sometimes their severity increases. Global dangers: can be divided into those created by society and by nature. One of these threats is pandemics (in Greek, the whole nation). The analysis shows that infectious diseases that existed BC 600 years ago still live among humans. There are some of them caused the collapse of the Byzantine Empire (malaria), in the twentieth century, leading life up to 500 million people (ospa) also.(2) The Spanish pandemic, a type of flu, killed between 50 and 100 million people in 1918-20. This should make humanity think very seriously. The coronavirus is like a demon that Aladdin casts out of a magic lamp into the world. Unfortunately, the number of infected people exceeds 5 million, and this figure continues to grow.

4. REASONS

The Spanish flu was after World War I. But is there a serious cause for infectious disease on a global scale now? The increase in the intensity of infectious diseases is a complication of globalization. It is not yet clear whether today's coronavirus pandemic was created by nature or by society. There are those who think that it is created by nature, and there are those who think that it is a biological weapon. Proponents of the version of nature's revenge from people considers the pandemic as a tsunami, hurricane, earthquake range in response to the cruel exploitation of the planet's resources by humans and environmental pollution. Proponents of the version of direct human involvement in this case point out that it has been given various signs in books, music videos and movies.

Thus, those who accompanied Madonna in the 2019 Eurovision Song Contest in Israel with the anthem "Future", the description of 2020 in the literary work "Prophecy" by American writers Sylvia Brown (Shoemaker) and Harrison Lindsay is surprising. The book, published in 2004, states: "In the 2020s, you will see many people using surgical masks and plastic gloves due to the outbreak of a pneumonia-like disease that seriously affects the lungs and bronchi and is untreatable." There are examples in history of artificially transmitted diseases. For example, in the 16th century, it can be remembered that Spanish colonists donated smallpox-infected clothes to the Indians - to kill aborigines with bacteriological weapons.(3) Maybe Spanish flu is nature's revenge for the Hindus centuries later? The idea of reducing the number of people was based on theory that food would increase numerically and people would grow geometrically, by English priest and economist Thomas Robert Malthus. The word of the Holy Qur'an opposes these ideas: "God sends to man sustenance before he is born." There is enough land on earth to live on. For example, the population density is 146.8 in China and 8.57 in Russia (2020).

5. MOBILIZATION

National states and relevant international organizations, especially the World Health Organization, have mobilized medical, administrative and economic resources to fight. There are results, but it will still take a long time to fully win and heal the wounds. This mega event leaves a deep mark on all areas of human activity. The pandemic changed the state / transnational company penetration ratio in favor of the state. As the English say, "My house is my castle," according to the word the Turkish told the people who were drawn to the house: "The house is full of life, life fits into the house." Two ideas from ancient philosophy are useful for society: "An impossible event is possible" by Agafon, "I did not do it knowing that others did not do it out of fear of the law." by Socrates. The conquest of Istanbul by Sultan Mehmed Fateh. Innovation is a well-forgotten antiquity. "This will pass" expression which was wrote on the ring of King Suleiman, joins too.

5.1. Pandemic lesson

States and individuals must always be prepared for defense. Medical masks and disinfectants should be kept in state reserves and enterprises, as well as firefighting equipment. It should be possible to check everyone at the border. Herbs can also help. Juníperus shrubs planted along the road effect against virus by releasing phytoncides (garlic-onion element) into the air.

6. WHAT IS HAPPENING IN THE ECONOMY?

6.1. The virus attacks

The structure of the economy, which deals with the creation, exchange, distribution and consumption of material goods, is changing. Complications caused by infection and quarantine have covered all phases of reproduction. As a result, aggregate demand and aggregate supply have fallen sharply - the world economy is shrinking. Energy prices are falling. As a result of the crisis, the price of gold is rising. Some areas are collapsing.

6.2. Economy is on counter-attack

But there are hopes. Azerbaijan proverb:

"He is brave, he works hard

He is brave, he gets off the horse and jumps. "

- Supply of computers, refrigerators, cupboards, minimal food, masks, disinfectants and the tendency to cash are growing.

- In the field of medicine related to the economy, the production of disinfectants and personal protective equipment, antivirus and immune-boosting drugs, artificial respirators are increasing.
- The digital field that makes social isolation possible - interesting - profitable is growing. Computer sales increased 3.1 times compared to last year. Sharp dynamics is observed in share indexes. Shares of Zoom, an online video provider, have risen sharply. It is observed that consumption of carrots, mushrooms, fish to strengthen the computer-intensive eye increased, interest in learning foreign languages to benefit more from the digital world increased. FOREX has become more active and wants to take capital out of national markets. The use of facial recognition systems for exams is emerging. The vest, made by the French, reminds workers to keep their distance by vibrating as they approach each other. Card payment is popular because there is no contact.
- Labor relations are becoming more transparent. Population and employee data are verified. Bases are improving.

Crisis is a monster, it disinfects the economy.

6.3. Future economy

I think:

- 1) Within the framework of individual isolation measures, the share of personal vehicles in traffic and related infrastructure will increase: bicycles, scooters, horses, mopeds, motorcycles, cars, yachts, business (small) aircraft, drones carrying passengers in the near future. Private corners in public transport, driverless taxis, high-speed trains as an alternative to aircraft - its new types will be included in the system. Ship-hospitals will be built for the protection of cruise liner travelers.
- 2) In individual yards, the pools will be small sports and health corners, the transition from the city center to the outskirts, from cities to regions - from buildings to courtyard houses (to compete, the building complex must provide luxury amenities and disinfection) and the opening of new transport lines
- 3) Ensuring the proximity of workplaces to residential areas will be an important desire.
- 4) Creams that evaporate into the air and disinfect can be produced - as a medicine in the US military to keep sharks out of the ocean. Streets and public places should be provided with disinfection equipment. Then the robots will disinfect, there will be an automatic system in indoor places. Air purifiers are expected to increase. Chewing gum and fresheners will be created to disinfect the oral cavity.
- 5) Smartphones and smart watches will be provided with programs that show vital signs: temperature, blood pressure, heart rate, mineral and vitamin levels in the automatic mode. Confidence in the complete safety of medical tests must be formed.
- 6) Insurance companies can offer a special type of insurance against coronavirus.
- 7) Let's make insulation interesting. Hold lotteries on TV based on ID card numbers for the population, especially for groups over 65 years old.
- 8) Rules of conduct during a pandemic will be included in secondary school textbooks. For the sake of efficiency, educational institutions will create backup e-schedules that combine some online lessons to avoid duplication.

The strength of the Ministry of Economy depends on entrepreneurs. Therefore, the development requirements of each entrepreneur should be studied and those that are in the public interest should be implemented. Economic security must be ensured within national or regional boundaries.

It is necessary to use all resources to produce what the country needs within national borders. Proximity to the state is necessary for the sustainability of business. The involvement of more companies in public procurement is becoming more urgent.

7. SYSTEMATIZATION OF GROWING AREAS SUFFERED DAMAGES AND BENEFITED FROM THE PANDEMIC (TOTAL GLOBAL QUARANTINE)

Suffered damages:

- Energy, especially the oil industry, which has been hit by failed negotiations within OPEC
- Foreign trade;
- Transport;
- Tourism, hospitality, catering;
- Barber shop - beauty salon, fitness, sports, cinema, etc. culture and entertainment;
- Lease of non-residential areas,

Winners:

- IT; e-commerce, computer games; mobile telephony
- food and ready meals;
- Production and sale of medicine, drugs and medical supplies (4)
- media
- bank card processing
- ASAN service

8. GLOBAL REGULATORS ON THE SUBJECT AND STATISTICS.

The Secretary-General of UN Antonio Guterres: - 10% of global GDP could go to pandemic recovery. This figure has been mentioned in fantasy movies before - 10% of global GDP. The UN forecasts a global economy by the end of 2021: the global economy is expected to shrink by 3.2% ,in 2 years, this figure is expected to reach \$ 8.5 trillion. This is the sharpest decline since the Great Depression. The UN considers it possible to counteract the effects of this complication by raising global cooperation to a new level of quality. The pandemic is hitting more low-skilled workers and the African continent, increasing poverty and deepening the rich-poor ratio. The UN believes that a more resilient economic model is needed in the post-crisis recovery process. There is also a need to strengthen the health care system and focus on social protection, the use of green technologies and the fight against climate change.(5)

8.1. Infected economy

At present, people are interested in the world after the pandemic. IMF Executive Director Kristalina Georgieva says more than 80 developing countries have applied for a total of \$ 2.5 trillion in loans from the fund. Azerbaijan is in a better position on this issue. As a result of the oil strategy put forward and implemented by the national leader of Azerbaijan Heydar Aliyev, Azerbaijan has changed from a borrowing country to a lending country. The country's Central Bank and State Oil Fund have more than \$ 50 billion. According to the CRB index, the prices of most commodities of stock have decreased. On the contrary, the price of gold is rising. At an online meeting on March 26, the G20 countries will support the world economy through monetary and fiscal instruments worth \$ 5 trillion. This strange virus is not as deadly as the Hong Kong flu that covered the world half a century ago, but it is shaking economies one by one. Being the engine of the world economy for a long time China's industry, a long-term engine of the world economy, lost 13.5%, compared to last year's investment 1/4, sales fell by 1/5.

Thus, the demand for hydrocarbon resources decreased and the budget plans of oil and gas exporters were disrupted - exchange rates came under pressure.

9. THE IMPACT OF THE PANDEMIC ON TECHNOLOGY

The literary description of the plague pandemic that covered Europe in the middle of the 14th century belongs to Arthur Conan Doyle: "Death in 1348 was brought to Europe by Genoese merchant ships from the northern Black Sea coast. The main method of struggle was quarantine. The first task of the government was to create food reserves. Mortality was 20%. After the pandemic, the price of labor and knowledge rose, property prices fell. Even Edward III, nicknamed Evil, King of England, who was from the Plantagenet lineage in response to complaints, signed a decree imprisoning workers who demanded higher wages. Rising labor costs have encouraged the invention of new technical devices that can keep fewer workers. Thus, the plague laid the foundation of the technological revolution." However, this affected Russia in a different way. Due to its low population density, the country lost 5-10% less people. According to Ajamoglu and Robinson, the lack of labor in Russia allowed for the continuation of feudal exploitation and the supply of rising bread to the West. The country also needed merchants who could turn simple products into technology and armed guards who intimidated everyone.⁽⁶⁾ Based on history, we can say that even now the pandemic will give impetus to new inventions. Collateral is comfortable - A person with social security is comfortable with quarantine. People think - Will there be discounts on unpaid rent, credit debt, telephone and internet? The state is making concessions, but what about the private sector?

10. CONCLUSION

It is time to think and re-evaluate the values. The feeling of compassion among people is growing. Compared to the previous period, mankind has more opportunities to fight. The world is getting used to the online system. Online total control is increasing. Internet access should be easier, service quality indicators should be improved. The travel mode remains unclear. The crisis also shows the weaknesses of the global health system. It focuses on the treatment of increasingly complex and expensive diseases. The system of mass control of infectious diseases does not meet the requirements. The Azerbaijani state was able to take adequate measures and was assessed by the WHO. Another reason for the popularity of books and films about World War II is that during the war, all resources are mobilized, first of all, human resources - the seriousness of the people increases. Then this tempo serves for peaceful construction. So, the postpandemic period is the basis for rapid development. The value of time, or rather virus-free time, will be better known. I propose to adopt the Baku Convention. Accordingly, national states should immediately notify the WHO if any disease exceeds a certain number of infections. According to the idea "A microbe is nothing, and the environment is the basis." by French physiologist Claude Bernard, a healthy person means a healthy society. The state is ready. This is similar to the Japanese attack on the United States on Pearl Harbor on December 7, 1940, which destroyed a third of the navy, but suddenly lost its advantage. Currently, 2 billion people suffer from water and sanitation. This means that there are fertile conditions for infectious diseases. We recall the words of former US President Bill Clinton: "By turning a blind eye to the famine in Africa, we are endangering the future of America." The presence of works such as "Creating Markets for Vaccines" by M. Kremer, winner of the Nobel Prize in Economics in 2019 (USA), shows that the economy supports not only financial but also intellectual support to health. If the coronavirus is a biological weapon, then there are drugs and vaccines. One remains its emergence. It will also appear when a pandemic vaccine arrives on the market.

The book *The Genius of Negotiation* states that the strongest conversation was between God and The Prophet Musa (7):

- God: You have made me an idol of gold, I will destroy your village.
- Prophet Musa: Of course you can, but there is a believer.
- God: I keep live that place for the sake of one believer.

The world lives for the sake of billions of believers!

P.S. Since I wrote the summary during the pandemic, but on the eve of April 22 - Earth Day, I conclude the article as follows:

Live the planet, live

Keep live humanity, planet, live!

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“THE RELATIONSHIP BETWEEN STRATEGIC HUMAN RESOURCE MANAGEMENT AND THE ORGANIZATIONAL COMMITMENT : THE CASE OF AZERBAIJAN”

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ABSTRACT

Nowadays, the survival and competitive advantage of businesses are related to the degree of human resources and the ability to retain resources. Businesses that resist competition and have to change because of not staying behind and surviving in the global environment are obliged to be managed with a strategic perspective in human resources management. Accordingly, strategic human resources management develops more than familiar human resources, and the competition race, which increases rapidly with changing management techniques, changes the perception of management in organizations and turns human resource management into the strategic element of organization management. Strategic human resources management is expressed as the design of corporate systems to provide sustainable competitive advantage through individuals. Given the fact that the works are done through people, it is obvious how important the sense of commitment of the human resource to the organization is. The effective use of human resources in the enterprise is an important tool in terms of commitment to the organization. Organizational commitment expresses the strength of the employees' commitment to their businesses. In this study, it is aimed to examine the relationships between strategic human resources and organizational commitment. Within the scope of this aim, the opinions of the employees of one of the companies operating in Azerbaijan have been consulted and a survey study has been started in this company that investigates the relationships between human resources and organizational commitment.

Data have been collected within the three-dimensional “Organizational Commitment Scale” developed by Meyer and Allen and the “Strategic Human Resources Management Scale” conducted by Shen (2015).

Keywords: *Strategic Human Resources Management, Organizational Commitment, Human Resources Management*

1. INTRODUCTION

Businesses that accept human beings as a strategic resource and are aware that the way of achieving competitive advantage passes through human beings set off on a quest and form their structure in line with new approaches that emerge as a result of research in order to continue their presence in the harsh conditions of global competition. One of these approaches is strategic human resources management. Strategic human resources management which is defined as the process of associating human resources management practices with the organizational strategy (Schuler & Walker, 1990) or the whole of the plans, programs and trends made by considering the environmental conditions of the organization and the needs it will bring (Schuler & Walker, 1990) or the integration of human resources management processes with organizational strategies (Organizer's environmental conditions and needs) has been widely accepted, especially in private sector organizations. Strategic human resources management; has emerged with the aim of managing human resources more effectively and managing in accordance with organizational strategies. Effective use and effective management of human resources in the enterprise is significant on several counts, it is also a very important tool for ensuring organizational commitment.

Organizational commitment, often defined as a strong willingness to remain a member of an existing business, is a voluntary effort to be a part of an enterprise, and the psychological commitment that employees feel towards an organization. The high level of organizational commitment has been confirmed by research in the literature, which provides a number of benefits for both the individual and the organization. There are findings regarding that employees with high organizational commitment have lower intention to quit, increase in performance levels, and low absenteeism rates. As emphasized before, this study aimed to examine the relationships between strategic human resources and organizational commitment. For this purpose, answers to the questions were sought.

2. LITERATURE REVIEW

When the relevant literature is analyzed, it is observed that Strategic Human Resources Management is defined diversely by different authors. Some of these definitions are given below. According to Truss and Gratton, the concept of strategic human resources management is to harmonize human resources management with strategic goals and objectives by improving innovation in the business, increasing innovation and flexibility (Kiliçaslan, 2018: 18). Strategic human resources management (SIKY) can be defined as a process in which differentiations in the internal and external environments of organizations affect or determine the human resources strategies of organizations. (Öğüt et al., 2004: 282). Strategic human resources management establishes a relationship between the organization's strategic objectives and human resource management to develop organizational culture and improve organizational performance that will promote innovation and flexibility (Cingöz, 2011: 37). Strategic HRM is an approach that has a broad perspective on the strategic management of human resources according to the direction an organization wants to be in the future. Strategic human resources management is concerned with broad issues such as employee loyalty, quality, values, determining resources according to future needs and long-term human problems (Bingöl, 2016, p. 13). While strategic human resources management works to increase the efficiency of the employees within the enterprise, it also tries to increase the gains of the employees. Based on the definitions, we can list the objectives of Strategic human resources management as follows (Canman, 2000, p. 64-65; Armstrong, 1994, p. 182).

- To ensure that the company achieves its goals through the employees, who are the main element of the business,
- To evaluate how the employees can benefit from their qualifications by evaluating what they can achieve,
- To maximize the efficiency of employees and businesses,
- To provide competitive advantage of businesses
- To create a culture based on this by integrating the decisions and actions towards reaching the goals or targets determined for strategic human resources management and business,
- To provide employee deployment that can take the business to next levels by identifying the needs of the business with the existing opportunities,
- To provide environments where employees can reveal their inner capacities,
- To ensure that employees have the ability to team up and is knowledgeable with efficiency, effectiveness, total quality management,
- To ensure that employees take responsibility while doing all these and to provide their continuity by creating this.

When the literature on strategic human resources management is analyzed, it is seen that the researchers, who have made an important contribution to the theoretical development of the field, generally discuss the theoretical basis of strategic human resources management in the context of universalist approach, condition dependency approach, structuralist approach,

contextual approach and resource-based approaches. Unlike the classical period approaches, post-modern management approaches have revealed that the existence of organizational goals and individual goals finding a middle ground at and becoming close to each other is inevitable for the success of the organization. According to this approach, “human” is considered as the main factor in increasing organizational performance and achieving organizational goals. Researchers, who focus on individual behaviors related to organizational outputs due to the increasing role of employees in organizational success, argued that members of the organization are the basis of organizational success and high organizational performance, therefore, it is necessary to focus on the behaviors that increase the level of commitment of employees to their organizations (Çakınberk, 2011). Research on the roles of organizational members in achieving organizational goals has brought brought new concepts aimed to increase the motivation, dedication, belonging, efficiency and loyalty of its members. “Organizational commitment” is also among the topics that come to the fore as a result of these researches. The broadest accepted definition of organizational commitment is the definition of "relative strength of an individual's bond to the organization" proposed by Mowday, Steers & Porter (1979) (Act. Song, 2009). In more detail, Porter et al. (1974) (Act. Song, 2009), Mowday et al. (1982) (Akt. Joo, 2010) described three characteristics of organizational commitment. These are strongly believing and accepting the goals and values of the organization; The willingness to make remarkable efforts for the benefit of the organization and a strong desire to become a member of the organization. Organizational commitment is both a core activity and ultimate goals of businesses' efforts to protect their assets. If organizational commitment exists, employees are more compatible, more productive and have a higher degree of belonging and sense of responsibility (Keser, 2019: 245,246). Allen & Meyer discussed the concept of organizational commitment in three dimensions: affective commitment, continuance and normative commitment (Boylu et al., 2007: 58). Affective commitment refers to the emotional commitment of the employee related to identity and organization. If the employee has a strong affective commitment, he continues to work with the organization because he wants it himself (Meyer & Allen, 1990: 3; Meyer & Allen, 1991: 67). It is the identification of employees with the organization and intra-organizational activities and their devotion. When the employee feels that their own values and the values of the organization match, they are emotionally attached to the organization (Demirel, 2009: 117). Continuance commitment refers to the awareness of the costs related to leave the organization. Staying employee continues to work primarily because he / she needs the organization (Meyer & Allen, 1990: 3; Meyer & Allen, 1991: 67). If the employees believe that there are only a few suitable job alternatives for them in a labor market, their loyalty to their current employers will be much higher (Kaya, 2007: 43). Normative commitment is the dimension of commitment where staying in an organization stems from feelings of obligation. Normative commitment also has a moral dimension. The general belief that people should not leave the organization lies behind the commitment of the organization. Since the employee feels under an obligation like loyalty, he continues to stay in the organization. (Keser, 2019: 248). In organizations with high organizational commitment, positive developments are observed in areas such as job performance, job satisfaction, information sharing, organizational trust, continuance, effective use of resources and organizational citizenship behavior (Demirel, 2009: 116). If the commitment to the organization is insufficient, there are certain negative behaviors such as dismissal, absenteeism and late arrival, decreased performance, and increased level of job stress (Duygulu and Abaan, 2007: 65). In the literature reviews, it has been observed that sufficient studies have been carried out to investigate the relationship between strategic human resources management and organizational commitment, as well as to examine the effects of both variables on different variables. However, there is no study finding investigating whether there is a relationship between strategic human resources management and organizational commitment being implemented in enterprises operating in Azerbaijan.

In this respect, it is thought that the study will contribute to the literature. This study aims to examine whether there is a relationship between the company's employees' perceptions of the strategic human resource management used in the company and their commitment to the institution. In order to achieve this goal, the answers for the following questions were sought:

1. At what level are employees' perceptions of strategic human resources management?
2. At what level are employees' perceptions of organizational commitment?
3. Do employees' perceptions of strategic human resources management and organizational commitment show a statistically significant difference based on their gender, age, marital status, and years of experience?
4. What kind of relationship exists between the company's employees' perceptions of strategic human resources management and their organizational commitment?

3. METHOD

3.1. Research model

This study, which examines the strategic human resources management and organizational commitment levels of the employees and the relationship between the two variables, is designed with quantitative methods. Relational screening method was used in this research. According to Karasar (1994: 81), the relational screening model is defined as "the research model aiming to determine the presence and / or degree of co-variation between two and more variables". Quantitative techniques were used to analyze the data obtained.

3.2. Working group

The working group of the research consists of business employees operating in the retail sector. The name of the company is not specified in the study upon the request of the business. Within the scope of the research, the opinions of 110 employees were discussed. Demographic information about the participants is presented in Table 1.

Table 1: Demographic information of the employees

Variable		N	%
Gender	Female	63	57.3
	Male	47	42.7
	Total	110	100
Marital status	Single	81	73.6
	Married	29	26.4
	Total	110	100
Age	20-30	84	76.4
	31-40	26	23.6
	41-50	0	0
	Total	110	100
Years of experience	1-5 years	66	60
	6-10 years	37	33.6
	11-15 years	6	5.5
	16-20 years	1	0.9
	Total	204	100

3.3. Data collection tools

Data have been collected within the three-dimensional "Organizational Commitment Scale" developed by Meyer and Allen and the "Strategic Human Resources Management Scale" conducted by Shen (2015). The organizational commitment scale includes three dimensions

that determine the causes of organizational commitment and consists of a total of 18 expressions. The strategic human resources management scale is a measurement tool consisting of 26 items. The responses to the statements on both scales are graded in the five-digit Likert type as "absolutely disagree", "disagree", "indecisive", "agree", "strongly agree". The scale was scored one-sided and those who say "absolutely disagree" to an expression that includes academic procrastination were scored as 1, and those who say "I strongly agree" were scored as 5 points. In the study, the Cronbach alpha reliability coefficient of the Organizational Commitment Scale was calculated as .76 and the Cronbach alpha reliability coefficient of the Strategic Human Resources Management Scale was calculated as .91.

3.4. Collection and analysis of data

The data in the study were collected from 110 employees. The data obtained were analyzed with descriptive statistics and Pearson Correlation. In interpreting the relative perceptions of the participants about the variables; The range of "1.0-1.80" is considered as very weak, the range of "1.81-2.60" is weak, the range of "2.61-3.40" is medium, the range of "3.41-4.20" is high and the range of "4.21-5.0" is very high. In the evaluation of the correlation between the variables, "0-.29" interval is considered as weak, ".30-.70" interval is medium and ".71-1.0" interval is high relationship.

3.5. Findings and interpretation

The perception levels of the employees regarding both variables were examined and the results are presented in Table 2.

Table 2: Employees' perception levels of strategic human resources management and organizational commitment

Scale	N	\bar{X}	Ss
Human resources management	110	3.47	.54
Organizational commitment	110	3.05	.52

As can be seen from Table 2, employees' perception levels of strategic human resources management are relatively high. As is seen from Table 2, the organizational commitment levels of the employees are relatively moderate. T test was used in binary groups to determine whether the perception levels of the employees differ in terms of gender and marital status. The results are shown in Table 3.

Table 3: T-test results of employees' strategic human resources management and organizational commitment levels by gender and marital status

Scale	Variable	N	\bar{X}	Ss	Sd	T	P
Strategic human resources management	Gender	Female	3.44	.48	108	.590	.56
		Male	3.50	.60			
Organizational commitment		Female	3.02	.50	105	.307	.47
		Male	3.09	.55			
Strategic human resources management	Marital status	Single	3.46	.54	108	.717	.76
		Married	3.50	.53			
Organizational commitment		Single	2.98	.53	105	.220	.029
		Married	3.22	.45			

$p < .05$

Although differences may appear between the averages, both strategic human resource management and organizational commitment levels of employees do not show a statistically significant variety by gender ($p > .05$). However, the perception levels of employees regarding organizational commitment show a statistically significant variety according to marital status ($p < .05$). One-way ANOVA was used to determine whether the perception levels of the employees differ in terms of age and years of experience. The results are shown in Table 4.

Table 4: ANOVA results of strategic human resources management and organizational commitment levels according to the age and years of experience of the employees.

Scale	Variable	N	Sd	F	P			
Strategic human resources management	Age	20-30	84	1-108	2.65	.107		
		31-40	26					
		40-50	0					
Organizational commitment		20-30	84	1-105			0.74	.786
		31-40	26					
		40-50	0					
Strategic human resources management	Years of experience	1-5 years	66	2-106	0.77	.926		
		6-10 y years	37					
		11-15 years	6					
		16-20 years	1					
Organizational commitment		1-5 years	66	2-103			.363	.697
		6-10 years	37					
		11-15 years	6					
		16-20 years	1					

$p < .05$

As can be seen from Table 4, there were no statistically significant differences in the perception levels of employees regarding strategic human resources management and organizational commitment in terms of age, years of experience variables. In order to determine whether there is a statistically significant relationship between strategic human resources management and organizational commitment, Pearson Correlation coefficient was calculated and shown in Table 5.

Table 5: Pearson Correlation coefficient between variables

Variable		1	2
1	Strategic human resources management	1	.391**
2	Organizational commitment	.391**	1

$p < .01$

As can be seen from Table 5, there is a moderately positive and statistically significant relationship between strategic human resources management and organizational commitment.

4. CONCLUSION AND DISCUSSION

In this study, the relations between strategic human resources management and organizational commitment were examined according to the opinions of the employees. As a result of the research, it has been observed that the perception levels of the employees regarding strategic human resources management are relatively high. At the same time, as a result of the research, it has been observed that the perception levels of the employees regarding organizational commitment are relatively medium.

In other words, employees working in different enterprises show moderate organizational commitment behavior. The high level of perception of employees regarding strategic human resources management can be explained with various reasons. As an example of these can be the situations in which the human resource management practices applied in their enterprises are effective and its results cause employees to be satisfied. The fact that the perception levels of the employees about organizational commitment are relatively moderate can be explained by the fact that this perception is not caused by the effect of a single factor in the employees, but by the effect of several factors. In the study, it was concluded that the employees' strategic human resources management and organizational commitment behaviors did not differ significantly by gender. In other words, there is no relationship between students' academic procrastination behaviors and their gender. In the study, it was concluded that the perception levels of the employees regarding strategic human resources management did not show a statistically significant difference by marital status, but the perception levels of organizational commitment showed a significant difference. In the current research, it has been determined that the perception levels of the employees of the enterprise regarding strategic human resources management and organizational commitment do not differ according to their age and years of experience. In other words, there is no relationship between the age of the employees, how many years of experience they have and their strategic human resources management and organizational commitment behavior. In the research, a moderate positive relationship was found between the perception level of strategic human resources management and organizational commitment. In other words, as the perception levels of strategic human resources management increase, organizational commitment behavior also increases. As a result of the research, the following suggestions have been developed:

- Studies can be carried out jointly by identifying other variables that are related to the strategic human resources management variable.
- Other factors that affect the moderate organizational commitment behavior can be investigated.
- Various studies which will increase organizational commitment can be conducted.
- Other variables that are thought to be related to the organizational commitment variable can be identified and joint studies can be conducted.
- The opinions of individuals working in the private sector related to the variables can be examined in different and larger samples.

Research aimed at examining the relationship between strategic human resources management and organizational commitment variables can also be carried out in the public sector, and the results obtained as a result of the research whether there is a relationship, as well as the opinions of public employees regarding the variables can be compared.

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STRUCTURAL POLICY OF THE STATE FROM THE PRISM OF ECONOMIC SECURITY IN AZERBAIJAN

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ABSTRACT

The process of globalization deepens the interaction of each country with other countries. Economic security in its essence represents the sum of the methods of combating the level of economic development of the state and the factors that threaten its development. The organization of the economy in terms of economic security is one of the most important issues in the world. Balancing internal and foreign policies, creating an economic structure that will provide effective trade, countering shadow economy, enhancing the competitiveness of the country and its products, overseeing the flow of foreign exchange reserves, rational use of resource potential, and other considerations of national security. Country risks are related to the existence of global risk, depending on the political and economic stability of the countries, importers or exporters, and other factors that cause internal and external economic risks. Such assessments are made by both foreign and local companies. In this article, we reviewed and applied the two most popular methods: the methodology of the Russian Universal Company and the German BERI methodology. In the early 1990s, when the country was part of the Soviet empire and gained its economic and national security, the national economy was facing many dangers and economic crises because of the lack of a rational and competitive economic structure in the early 1990s. Azerbaijan gained independence after being in the USSR for a long time, transitioning from the administrative economic system to the market-based economic system and is currently experiencing a new era of development.

Keywords: *Azerbaijan economy, economic security, national security, GDP, structural policy*

1. INTRODUCTION

Today, the world is rapidly evolving, with regional and global integration processes deepening, and countries also need to make some changes in their strategies, making these changes essential to the national economic development model. At the same time, a number of interventions threaten our economic and national security. To overcome them, the state takes a systematic approach to the formation of economic structures, develops existing economic security concepts and strategic roadmaps. Using such tools, the government is trying to be prepared for all the problems that may arise in the future. Developing and providing economic security concepts and strategies for all countries in the developing world is an important task. Economic security is one of the key attributes of the state's security and its integrity and is part of the national security strategy. In modern times, the notion of "economic security" in economics is relevant. But what is security itself? From the investigations, we know that insecurity is a very broad concept. However, we can summarize it as follows: "Security is the guarantee that individuals in the development process of any society can live freely and beyond the legal framework, without any danger to the individual and his or her freedom." The notion of economic security includes not only the economic situation of the individual but also the society and the country, factors that impede and slow them down, both internal and external provocations against economic stability and development, and the methods of combating them. In addition, security is also a compilation of factors that enable the individual to maintain and develop under existing external and internal threats. Based on this we can give two examples of economic security. The first is potential economic security. It is a security that will be developed and applied in the future for the development of society and the state.

The second is the concept of real economic security, which is a combination of the country's efforts to combat and prevent the threats that are still relevant.

2. FACTORS AFFECTING ECONOMIC SECURITY

The concept of security was first used in books to protect human morality from all kinds of dangers against it in the 12th century. However, changes have taken place over the years and in the level of economic and social development of different countries. Certain work has been done against the factors hindering the development of economic sectors. In this case, normal economic conditions for the development of the country should be fully ensured. The result is the creation of a single economically safe space. It requires making decisions and resolving some economic policies. The economic risk factors are studied in two groups, both internal and external. From ancient times to the present, there have been wars for empty and more productive territories, the seizure of one group by another, and the threat of living conditions for one group. Today, developed countries are struggling for raw materials and sales markets. As a result, external risk factors include high external debt, high raw materials for export, and a significant drop in trade turnover. Internal factors imply economic polarization within the country, that is, the small group is accumulating more wealth than other groups. The first of these is the global inter-state analysis of economic security. The second is to ensure the economic security of economic entities (enterprises, firms, companies, even society and individuals) that are not part of the government but operate within the state borders. The state should simply define the "rules of the game" in the economy, create a legal and economic framework and monitor the full implementation of these rules. In this case, the economy will be "safe". Joseph Stiglitz said: "According to this conservative view, the economy is a notion of productivity and the issue of equality should be left to the political sphere. My research on the knowledge economy has shown that knowledge is flawed, there is information asymmetry, and one side always has more information than the other. Therefore, the state cannot achieve maximum economic benefits without the required state regulation. The state should simply define the "rules of the game" in the economy, create a legal and economic framework and monitor the full implementation of these rules. In this case, the economy will be "safe". Joseph Stiglitz said: "According to this conservative view, the economy is a notion of productivity and the issue of equality should be left to the political sphere. Therefore, the state cannot achieve maximum economic benefits without the required state regulation "

Figure following on the next page

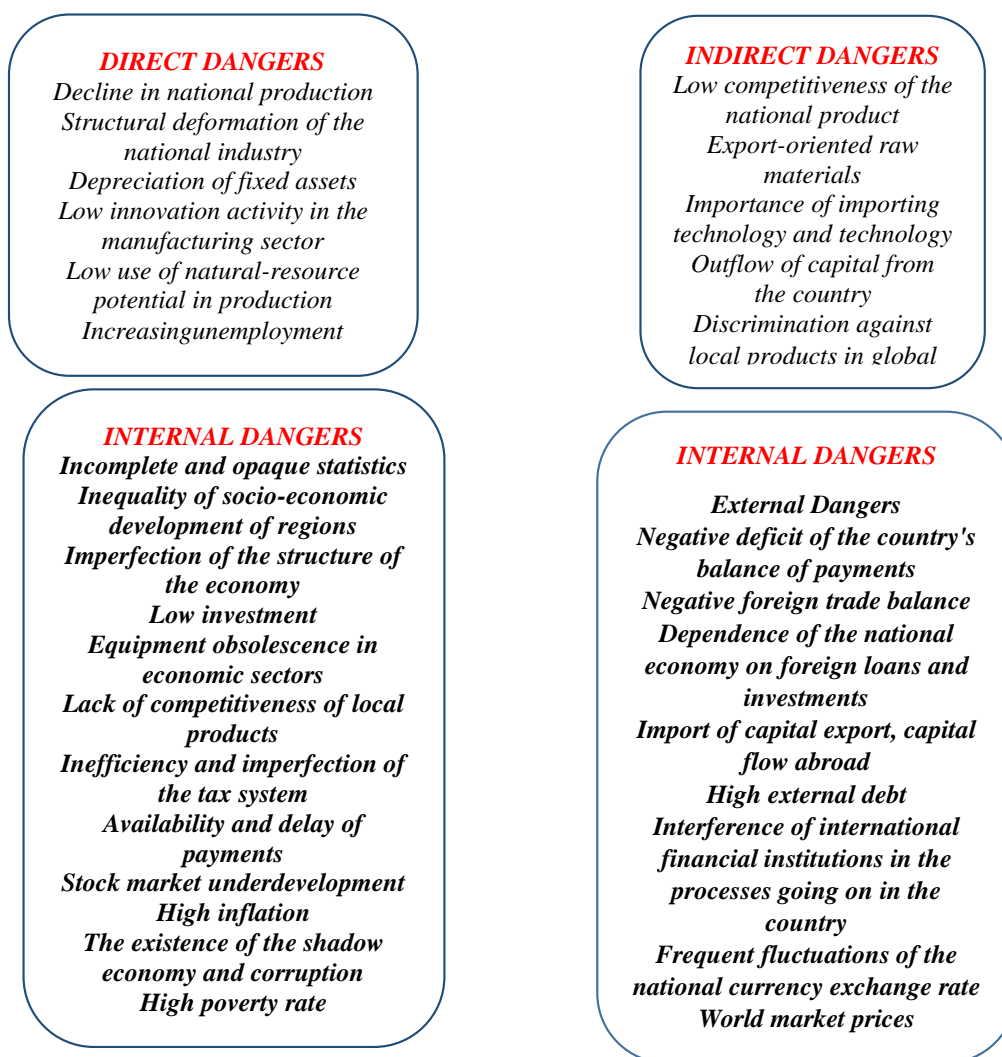


Figure 1: Factors affecting economic security

2.1. Indicators of economic security

Each country faces challenges as it seeks to ensure its economic security. Certain indicators are used as a solution. These indicators are:

1. GDP per capita in the country, its dynamics compared to other countries - 75% of the seven indicators, 50% of the average, 100% of the world average.
2. Specific weight of processing industry in GDP - 70%
3. Specific weight of mechanical engineering in the total product of industry - 20%
4. Ratio of investments to GDP - 25%
5. Ratio of Expenditure on Scientific Research and Research to GDP - 2%
6. Poverty level determined by international standards - 7%
7. Life expectancy is 70 years
8. The ratio between the population with the highest income of 10% and the population with the lowest income of 10% - 8 times
9. Unemployment rate according to international standards - 7%
10. Annual inflation rate - 10%
11. Public debt, its ratio to GDP, budget revenue - up to 75% of GDP
12. The ratio of foreign debt to GDP - up to 50% of GDP
13. Import, import rate, ratio to GDP, 30%
14. Import of food products, total food consumption and ratio of imported food products to consumed food products, 25%

One of the factors of national economic security is environmental protection and security. With irrational environmental management at enterprises, their accounting will lead to a deterioration in production indicators, which will affect financial results. Accounting prices of resource estimates will allow more reasonably determine the cost-effectiveness of development alternatives. The use of estimates can significantly affect the choice of capital construction options. For example, taking into account the fact that land resources planned for withdrawal can be used in agriculture and produce, it may make expedient to change investment projects in the direction of higher prices for the construction object itself due to its maximum concentration, additional costs for attracting uncomfortable land. Inadequate assessment of natural resources leads to underestimation of the effects of greening the economy, the transition to sustainable resource-saving development. The annual losses of oil, timber, various minerals of degraded land, etc. can be estimated at many billions of dollars. While ensuring its economic security, the state takes into account certain thresholds for these indicators. These ultimate limits are internationally defined and there are approximate limits used by each country. The state must always compare the boundaries they have with international borders and try to keep the threshold values close to each other. According to general international rules, these indicators have the following extreme limits:

1. Volume of investments in fixed assets - 25% of GDP
2. Defense expenditures - 3% of GDP
3. Costs of education and science for citizens of the country - in% to GDP, 1.5%
4. Innovation products ratio to all industrial products - 15% of GDP
5. The total weight of the machine-building and metalworking industries in industry - 25% of GDP
6. Specific weight of the population with incomes below the subsistence minimum - 7%
7. The income ratio between the population with the highest income of 10% and the lowest income of 10% - 8 times
8. Unemployment rate - in percent of economically active population, 5-7%
9. Monetization level (by the end of the year according to the GDP of the M2 deck
 1. weight,%
10. Foreign public debt - as a percentage of GDP, 30%
11. Domestic debt - 30% of GDP, 30%
12. Volume of annual inflation - 25%
13. The total weight of the internal and external public debt expenditures - 20% of the total budget expenditures
14. Annual State Budget - In percent to GDP, 3%

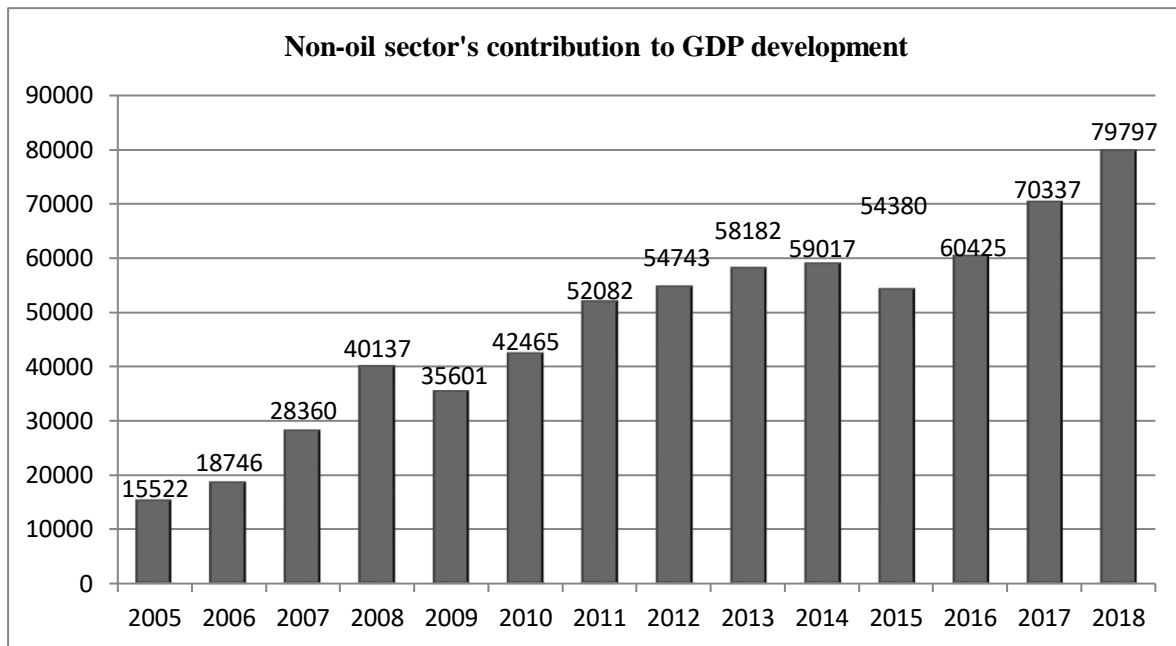
Economic stability prevails if the country's indicators are the same or close to these last thresholds. On the contrary, if the figures differ from the threshold indicators, it is the beginning of economic danger. A number of economists have had different views and opinions on this subject for some time. summarized the key indicators that are available and should be considered to ensure economic security as follows:

Table following on the next page

Indicators	Limitations	Results for Azerbaijan
GDP volume -		
a) the average of the seven in general	75%	-
b) From the average of the "seven" per capita	50%	-
c) per capita in the world	100%	-
The share of manufacturing industry in industrial production	70%	24.4%
The share of mechanical engineering in the manufacturing industry	20%	0.5%
Volume of investment in relation to GDP,%	25%	7.93%
The share of research expenditures in GDP	2%	0.16%
Share of new types of products in total output of mechanical engineering	6%	0.5%
Share of incomes below the subsistence line in the total population	7%	-
Life expectancy of the population	70	75.2
Difference between 10% of the population with the highest income and 10% of the lowest income	8 times	14%
Crime rate (number of crimes per 100 thousand people)	5000	253
Level of unemployment according to ILO methodology	7%	25.7%
Unemployment rate throughout the year	20%	26%
The volume of external debt in GDP during the comparable period	20%	60%
In relation to tax revenues		-
The volume of external debt in GDP	25%	65%
The share of foreign debt in the budget deficit	30%	-
Budget deficit from GDP	5%	2.57%
Volume of foreign currency in national currency	10%	17%
Foreign currency share, volume in national currency in cash	25%	-
Money supply in GDP (M2)	50%	29.11%
The share of exports in domestic consumption, including food	30%	-
Differentiation of regions by living standards	1,5 times	-

*Table 1: Current economic security indicators and recent thresholds, in percent
(Sergey Glazev - Economic Security)*

We often find in the economic literature the expression "non-oil sector." Many textbooks, journals and scientific articles written and published in our country emphasize the need for the development of this sector and emphasize the need for favorable economic structure and conditions for its comprehensive development. Azerbaijan and a number of oil-rich countries are always interested in the policy that the non-oil sector is at least as advanced as the oil sector. Only two years after this increase, the rate of growth has declined, due to the global crisis that shook the world. It should be noted that in the oil-rich and the oil-rich countries, the GDP growth rate is unstable. High or low rates of this increase depend on oil prices on the world stock exchange for the same year and on the ratio of the national currency to the foreign currency. The growth of gross domestic product of Azerbaijan has manifested itself in 2005-2008.



Graph 1: Non-oil sector's contribution to GDP development (stat.gov.az)

As can be seen from the graph, GDP increased 3 times over the period 2005-2008. The reason for this increase was the launch of the Azeri-Guneshli-Chirag oil field in the Caspian Sea during those years. Another contributing factor was the sudden rise in oil prices in the world market during those years and the stable rate of manat. The high volume of oil produced and produced during those years and, at the same time, high oil prices resulted in a large cash flow into our country.

3. WAYS TO ENSURE OPTIMAL ECONOMIC STRUCTURE FOR THE ECONOMIC SECURITY OF AZERBAIJAN IN THE CONTEXT OF GLOBALIZATION

In the context of globalization, Azerbaijan has always benefited from the experience of the developed countries of the world and has always tried to maintain its cooperation with the highest level. In order to protect the economic security of each country and to support economic development, the state adopts specific laws and regulations, develops and implements projects. One of the projects developed and implemented by the state is Strategic Roadmap, which will be implemented within a certain period of time. The purpose of this map is to achieve sustainable and sustainable economic development of the state, to enhance social and economic welfare, to have a stronger and growing economic system compared to the rest of the world, to create an attractive investment climate for the world's leading companies in Azerbaijan. To this end, the President of the Republic issued a decree on the preparation of the Strategic Road Map of Azerbaijan on December 6, 2016. The decree has to evaluate the role of the 12 activities in the road map in the national economy, analyzing those areas and identifying the weaknesses and weaknesses, and taking appropriate steps and steps to address them. The primary focus was on achieving, maintaining and sustaining macroeconomic stability and sustainable development in the financial and fiscal sectors in Azerbaijan. Here are 12 economic strategic roadmaps that have laid the groundwork for achieving these four goals:

1. Strategic Roadmap for the Future of the National Economy of the Republic of Azerbaijan
2. "Strategic Road Map for the development of the oil and gas industry (including chemical products) of the Republic of Azerbaijan"
3. Strategic Roadmap for Production and Processing of Agricultural Products in the Republic of Azerbaijan
4. Strategic Roadmap for Consumer Goods SME Development in the Republic of Azerbaijan

5. Strategic Road Map for the Development of Heavy Industry and Engineering in the Republic of Azerbaijan
6. Strategic Roadmap for the Development of Specialized Tourism Industry in the Republic of Azerbaijan
7. 1.7. “Strategic Roadmap for Development of Logistics and Trade in the Republic of Azerbaijan”
8. Strategic Roadmap for Promoting Housing in the Republic of Azerbaijan
9. Strategic Road Map for the Development of Vocational Education and Training in the Republic of Azerbaijan
10. “Strategic Roadmap for Financial Services Development in the Republic of Azerbaijan”
11. "Strategic Roadmap for Development of Telecommunications and Information Technology in the Republic of Azerbaijan"
12. “Strategic Roadmap for the Development of Utilities (Electricity and Thermal Energy, Water and Gas) in the Republic of Azerbaijan”

Target areas and priority issues after 2025 are also reflected in the Strategic Roadmap. The main goals for that period are to achieve full human development and social welfare, to have a strong competitive and thriving economy. The goals for the post-2025 period are to create a strong middle class in the country, to achieve undeniable advantage in competitive areas of the country, to establish economic cooperation with developed countries of the world, to carry out transformative and effective measures for the economy. It is foreseen to eradicate poverty for the same period, to have access to quality health care services for all citizens, and to develop human capital. Revenue between regions and cities is different and, given the polarization, it is expected to reduce this polarization difference by 50% to 40% by 2025. In each country, the state sometimes uses the term debt concept to achieve its short- and long-term goals. The extent and amount of this debt is reflected in the “Medium and Long-Term State Debt Management Strategy of the Republic of Azerbaijan”. This strategy is developed in accordance with the state budget law. The main purpose of the public debt strategy is to maintain a stable level of public debt and to manage all its risks reliably. The main essence of this strategy is the effective use of the state debt of the Republic of Azerbaijan for the period 2018-2025. Azerbaijan's foreign debt is estimated at \$ 7 billion according to 2017 figures. This figure is about 18% of GDP. Examples of international organizations and institutions borrowed are the World Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, and other agencies.

4. CONCLUSION

Economic Security is one of the most important issues facing each country. No matter how new this term is, it has an indispensable role in the protection and development of the world's economies. Economic security is an integral part of national security and is second only to its importance after national security. Economic security is the right of the state and citizens to choose the methods and means of their economic development without any pressure. Economic security means that the use of human resources, both material and human, does not depend on any other state or economy. GDP, unemployment rate, etc., to determine the threshold of economic security factors such as. However, it is clear that there are gaps in this provisioning mechanism as well. The security policy pursued by the Republic of Azerbaijan is an integral part of its national security and the debt of each country is to achieve full security through the laws and regulations. Currently adopted in this regard, the “Employment Strategy of the Republic of Azerbaijan for 2019–2030”, “National Strategy for Improving Solid Waste Management in the Republic of Azerbaijan for 2018–2022”, “Medium and Public Debt Management in the Republic of Azerbaijan” Long-term Strategy”, “Maritime Security Strategy

of the Republic of Azerbaijan”, “State Strategy for Alternative and Renewable Energy Sources in the Republic of Azerbaijan for 2012-2020”, “Long-term Oil and Gas Income Management Strategy” and the National Anti-Corruption Strategy” and various action plans reflect the key steps taken in this direction. Each country pays special attention to several indicators when designing its economic security and its concept. For this reason, the share of the non-oil sector in GDP in 2018 increased more than 6 times compared to 2005. Thus, based on the results obtained, we can state that the following suggestions for ensuring economic security are considered to be effective and that their implementation may have beneficial effects for ensuring economic security. Azerbaijan's export potential increased by 10% in 2018 compared to the previous year. Measures and projects to further increase this figure should be implemented, increased brand recognition abroad, and an export-oriented economy. To this end, the number of government programs should be increased and the export-oriented economy should be dominated by the full provision of the domestic market. In order to have an export-oriented, non-import-oriented economy, equal and parallel development of all sectors of the economy should be provided. It is desirable that all production processes, from small goods and services to large industrial production, should be organized in our country. All products must be fully supplied. The volume of non-oil industry should be increased in the GDP structure, and some of the oil revenues should be directed to the development of the non-oil sector.

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DEVELOPMENT PROSPECTS OF AGRICULTURAL PRODUCTION AND CONSUMER COOPERATIVES

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ABSTRACT

After agrarian reforms and privatization of state property, the process of disintegration in this area intensified, while at the same time, monopoly increased. Even in modern conditions, this monopoly has not disappeared completely. The new fundamentally constructive approach is required for the development of an agricultural cooperative that will lead to production efficiency. The mechanism and direction of the formation of agricultural cooperation should include sectoral and interregional cooperation at the enterprise, inter-farm, regional and regional levels. The agricultural cooperative system combines processing, supply, agro service, sales, credit, and insurance cooperatives. These cooperatives can operate at all levels, both vertically and horizontally. The composition and number of participants may vary. In the economic justification, it is advisable to take into account factors such as increased production and labor productivity, profitability, capital adequacy and the share of the profits they earn in return. Consumer cooperatives must be established by agricultural commodity producers (legal entities and citizens) with compulsory participation in the economic activities of the cooperative. At least 70% of the work done by the production cooperative must be carried out by members of the cooperative. Production cooperatives may benefit from paid employees' labor. Production-consumer cooperatives carry out one or more types of consumer cooperatives along with agricultural production. As a result of the research, the combination of property and land, production, processing, and marketing of agricultural products, individual cooperatives, and farm production cooperatives for joint agricultural enterprises, loans for agricultural enterprises, agricultural production cooperatives based on their efforts, agricultural and other farms, cooperatives of agricultural products, cooperatives of agricultural products, financing and co-financing of agricultural production, preparation, and implementation of measures for insurance cooperation.

Keywords: *agricultural, agricultural products, cooperative, production-consumer cooperatives*

1. INTRODUCTION

From an economic point of view, the importance of cooperation is that it allows small commodity producers to further expand production, and if they do not have the opportunity to use scientific and technical achievements on an individual basis, they can achieve this through cooperation. From the social point of view, cooperation becomes the main link in the organization and operation of the life support system of the village. Research and the experience of developed foreign countries confirm that cooperation contributes to the balanced development of all sectors of agriculture and the solution to the problem of reliable food supply to the population. The implementation of state programs adopted in the last fourteen years for the socio-economic development of the regions is of great importance. However, despite all these positive changes, there are still problems in the country's agricultural sector. Productivity indicators are much lower than the potential, the supply of material and technical resources is much lower than the normative indicators, the economic efficiency of economic activities has decreased due to the insufficient level of land reclamation. The formation of farmers' partnerships and the development of cooperation in agriculture have been identified as strategic goals of the Strategic Roadmap for the Production and Processing of Agricultural Products in the Republic of Azerbaijan. The country's small size, lack of mutual economic relations, lack of integration with processing enterprises, inefficient use of production resources and lack of production of competitive products, etc. hinder the development of the industry. After the implementation of agrarian reforms and the privatization of state property, the process of fragmentation in this area intensified. The rise in prices for industrial goods, which are considered necessary for use in agriculture, always outweighs the rise in prices for agricultural products. If we take into account that the country has not established enterprises producing agricultural machinery and equipment, mineral fertilizers, pesticides. This creates conditions for the violation of the price parity of agricultural and industrial products in favor of the latter. A fundamentally new constructive approach is required for the development of agricultural cooperatives, which contributes to the efficiency of production. At the enterprise level, cooperation involves the improvement of intra-farm relations. Depending on the level (degree) of independence, cooperation can allow production units to operate freely based on economic account and lease. Such units can open a personal account and distribute their income freely. In some cases, cooperation as a legal entity is possible. This option can be considered acceptable if the agricultural enterprise is fragmented and it is impossible to return it to its previous quality. In essence, this new formation can be a union of cooperatives or an association.

2. METHODOLOGY

The theoretical and methodological basis of the research is the research conducted by economists of the Republic of Azerbaijan and foreign countries on the establishment and development of cooperatives, as well as laws adopted by the Milli Majlis, decrees and orders of the President of the Republic of Azerbaijan, relevant decisions of the Cabinet of Ministers. organizes documents. The research method consists of observation, data collection, dynamics, data grouping, generalization, analysis, and other statistical methods. Materials of the State Statistics Committee of the Republic of Azerbaijan, the Ministry of Agriculture, the Ministry of Economy, research institutes were used in the research.

3. LITERATURE REVIEW

The approaches of world scientists to the classification of the development of cooperation are different. The classification of the development of cooperation is as follows: intra-farm cooperation; Establishment of cooperative formations based on reorganized agricultural enterprises Cooperatives at the district, inter-district and regional levels (VI Frolov, 1998, p. 21.).

However, these areas should be determined by considering the issues of intra-farm cooperation, the division of inter-farm cooperation into independent blocks at the enterprise level as an integral part, sectoral cooperation at the regional and regional levels, inter-farm and inter-sectoral cooperation at the national level. In particular, we consider aspects of the Business-to-Consumer and Business-to-Business one agricultural supply chain model. The business-to-consumer aspect directly deals with the sale of consumer goods in agricultural retail markets, while the business-to-business aspect is represented by transactions through agricultural cooperatives (Jang, W. and Klein, C.M., 2011, pp.359-374.). Eldar Ibrahimov believes that ... cooperation is the only system that will ensure the efficiency of a process that lasts from the producer to the final consumer (H.Israfilov, 2018). Agricultural production cooperatives have played and continue to play an exceptional role in the sustainable development of the economy and the formation of completely new types of farms in all leading countries of the world. Tugan Baranovsky, one of the world's leading economists in the field of cooperation, wrote that "agricultural cooperation can become a new kind of socially manageable organization. Cooperation accustoms rural workers (peasants) to hobby and helping each other, further develops their social sense, and most importantly, forms in them intellectual culture and economic thinking ... As for the farms themselves, with the help of cooperation, instead of the previous retail, Strong public relations are being established, and these relations are gradually expanding and arising not only between the farms of a village, but also through the population, through these cooperative unions. "Agricultural cooperation significantly increases the level of competitiveness of farms by significantly increasing labor productivity" (H.Israfilov, 2018). One of the main conditions for the formation of market relations is the formation of a competitive environment, the creation of various forms of economy, along with the improvement of the financial and credit mechanism, the state's support for the development of priority sectors of the economy. Experience shows that in a competitive environment, entrepreneurs in agriculture direct their resources to the area where they have the opportunity to make more profit. This leads to a violation of the macroeconomic balance between production and non-production. On the other hand, failure to take this important issue into account leads to the failure of agricultural products due to financial tensions. Therefore, the development of a superior agricultural sector in connection with supply and demand, the production and sale of competitive products should not be left to spontaneous competition and should be under the auspices of the state as one of the main directions of agrarian policy (İ. Ibrahimov, 2016, p.243). As noted in the State Program for the Development of Agricultural Cooperation in the Republic of Azerbaijan for 2017-2022, the merger of farmers and agricultural producers in cooperative farms will have a significant impact on protecting their economic interests, increasing the efficiency of agricultural production and increasing the competitiveness of their products. From this point of view, the formation of cooperation in agriculture is in the interests of both the state and farmers.

4. ANALYSIS

Territorial cooperation at the district and regional levels may be possible based on the establishment of agro-industrial and agricultural unions, associations, agro-industrial complexes, scientific and production systems. In this case, cooperation can be based on sectoral, territorial and combined principles.

Table following on the next page

Table 1: Number of agricultural enterprises

The name of indicators	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total number of enterprises, unit	2258	2392	2043	1917	1774	1669	1701	1659	1592	1608	1641
including:											
income earners	2059	2179	1869	1761	1665	1590	1577	1530	1488	1512	1560
those who work at a loss	199	213	174	156	109	79	124	129	104	96	81

Analysis of the data in the table shows that in 2008 there were 2258 enterprises, and in 2018 the number of these enterprises decreased by 27% compared to 2008 to 1641, the main reason being the lack of effective management and access to foreign markets. Interregional cooperation is manifested in the formation of unions, associations, scientific and production systems in seed production, breeding and other areas. The main issue in solving the problems of cooperation in modern times should be the development and implementation of measures in the following areas:

- ensuring the socio-economic interests of the members of the cooperative;
- development and implementation of the principles of creation and operation of a form of cooperative economy that ensures the protection of the rights of its members through normative documents;
- establishment of economic relations ensuring the balanced interests of partners in various forms of economic activity;
- participation of cooperative members in management;
- Defining the organizational form of development of cooperation and integration relations at different levels.

We believe that cooperation will develop in the following areas in terms of market demand:

- agricultural production cooperation based on collective property, aimed at meeting the socio-economic interests of workers engaged in production, processing, and sale of agricultural products, as well as other activities;
- agricultural production cooperatives based on personal labor in the combination of property and land shares, production, processing, and sale of agricultural products and other activities by the interests of the collective;
- production cooperatives based on personal assistants and farms to jointly operating agricultural enterprises;
- peasant (farmer) cooperation, which jointly performs agricultural production and other works;
- cooperation in the processing of agricultural products;
- logistics cooperation;
- credit and insurance cooperation on providing agricultural enterprises, peasant (farmer) farms with crediting at the expense of their deposits, savings and borrowed funds;
- inter-farm cooperation of legal entities and individuals to carry out separate work.

In our opinion, the mechanism and direction of the formation of agricultural cooperation should include:

- cooperation at the enterprise level;
- inter-farm cooperation;
- sectoral cooperation at the district and regional levels;
- interregional cooperation.

Inter-farm cooperation is inter-enterprise, peasant (farmer) farms, personal subsidiary farms, garden partnerships, etc. provides for inter-agency cooperation. Inter-farm cooperation can also be technological (sectoral). The system of agricultural cooperation unites processing, supply, agro service, sales, credit, and insurance cooperatives. These cooperatives can operate at all levels, both vertically and horizontally. The composition and number of participants may vary. In the multifunctional system of cooperation, the mechanism of its formation must be based on a clear economic rationale. During the economic justification, it is expedient to take into account such indicators as the growth of production and labor productivity, the level of profitability, the return on capital investment, the share of profits received by cooperative members in return for their deposits. It is more expedient to implement pilot projects when establishing production cooperatives. The pilot project should be implemented in three stages. In the first stage, the economic activity of the enterprise must be thoroughly analyzed. In the second stage, the project must be substantiated and developed. In the third stage, the project must be implemented. The main preparatory phase of the project for the establishment of agricultural cooperatives is given in Table 2.

Table 2: Pilot Agricultural Cooperative Establishment Project basic preparation stages

Stages of formation	Done works
1. Analysis of the economic situation of the enterprise - cooperative participants	Assessment of production and economic indicators, determination of specialization of production, organizational and production structure, market situation, risk probability.
2. Project preparation and substantiation	Determination of types of activities and organizational production structure, economic efficiency of perspective development, development of functions, draft normative documents (contract, charter, the composition of officials)
3. Project implementation	Conducting a constituent meeting with the discussion of the draft normative documents, correction (approval) and approval of the draft, preparation and registration of legal documents, preparation of documents, project implementation.

At the first stage, the main indicators of production and economic activity of the economy, the degree of specialization of production, organizational and production structure, the state of the market are assessed. In the second stage, the need for a project to establish a cooperative is substantiated and the number of founders, their location, and the mechanism of joint action are determined. For each structural unit of the cooperative, the potential production volume, processing of agricultural products, agro-service is estimated (calculated). The calculations are compared with the capacity of existing and prospective production facilities provided to shareholders. Market sales demand, wholesale and retail consumers of products, their economic situation, how much they will buy from each type of product, etc. is determined. If the needs of consumers are not fully met due to technological opportunities, then it is planned to build a new joint venture with a larger production capacity on a cooperative basis. Sources and amount of funding are also determined. All this is stated in the founding agreement and charter of the cooperative. The organization of the cooperative - more favorable concrete conditions for economic structures, the basis of economic relations between producers of raw materials and processing enterprises and service providers are being developed. The management structure is formed on the principle of "bottom-up". Economic relations between enterprises entering into cooperative relations, as well as the processes of supply, processing, storage and sale of products provide operational management, but also meet the economic interests of the partners.

The overall economic efficiency is determined on the basis of calculations made for each production and service unit of the cooperative. The project is discussed by the founders and decided by them. The third stage is the preparation and holding of the founding meeting of the cooperative members. At this stage, it is important to clarify the founding agreement and the draft charter of the cooperative. The content of these documents defines the whole complex of organizational and economic bases and mechanism of activity of the cooperative. Following the decision of the general meeting of founders, preparations are being made for the registration of documents in government agencies. After registration, the cooperative begins production and economic activities. Depending on the type of activity of cooperatives, this mechanism may have a number of features. The most important of these are: determining the commercial nature of the cooperative; absolute personal participation of members in economic activities; joint management on the basis of common land and funds; maintenance of social and household facilities at the expense of general funds. The project of formation of the cooperative is developed with the participation of the organizing committee (initiative group) of authoritative specialists of the enterprise, as well as representatives of administrative bodies. At present, the level of formation of agricultural cooperation can be underestimated in the presence of price disparity and the lack of state protection. There are many reasons for the lack of cooperation in our country. It is known that as a result of agrarian reforms, rural workers received shares at the expense of lands on the balance of liquidated collective farms, state farms, and other state enterprises. There have been negative changes in the specialization of production that has existed in the regions for years. Entities that received land shares preferred less labor-intensive production. Thus, due to limited resources in the same area, retail, unplanned, and whoever can grow the crop was preferred. As a result, the cooperation in question now seems very hopeless without the decisive intervention of the state. Consumer cooperatives should be established with agricultural producers (legal entities, citizens) and their obligatory participants in the economic activities of this cooperative. By the Decree of the President of the Republic of Azerbaijan dated June 14, 2016, the Law "On Agricultural Cooperation" was approved. Production and consumer cooperatives, along with the production of agricultural products, carry out one or more types of activities of consumer cooperatives. At least 70% of the work done in a production cooperative must be done by the members of the cooperative. The labor of employees in production cooperatives can be used. The number of these employees (excluding those involved in seasonal work) should not exceed 30% of the number of members of the cooperative. An employee of a production cooperative may not be a member of that cooperative and another production cooperative engaged in the same type of activity at the same time. Consumer cooperatives can be engaged in the following types of activities: processing cooperatives - the processing of agricultural products; supply and sale (trade) cooperatives - supply, wholesale and retail sale of agricultural products, as well as storage, sorting, drying, washing, wrapping, packaging and transportation of these products, sales market research, product advertising; service cooperatives - agro-service, veterinary and breeding, mechanization, electrification, land reclamation, transport, repair, construction, environmental rehabilitation, telephony, sanatorium-resort, medicine, consulting, audit services (works); supply cooperatives - purchase, import and sale of means of production, fertilizers, feeds, oil products, equipment, spare parts, pesticides, agrochemicals and other means necessary for the production of agricultural products; credit cooperatives - consolidation of free funds of cooperative members and granting loans to their members; insurance cooperatives - implementation of personal and medical insurance services of agricultural producers, insurance of plants and animals, crops and other property. Depending on the type of activity, consumer cooperatives are engaged in processing, trade, services, supply, seed production, horticulture, animal husbandry, credit, insurance, etc. divided into spheres.

There are two main directions of the formation and development of consumer cooperatives in the field of processing and services:

- first, - the establishment of an independent cooperative with agricultural producers without the participation of the existing enterprise;
- second, - the establishment of a joint cooperation with the operating enterprise (joint-stock company).

In modern times, taking into account the needs of agricultural producers in financial and logistical resources, it is more expedient to give preference to the second option. When preparing a perspective development model of cooperation, the natural and economic conditions of the region, the availability of production and social infrastructure must be taken into account for each specific case. It should be noted that it is inadmissible to provide loans to agricultural producers at high-interest rates by commercial banks. This is one of the main factors hindering the development of agriculture. The operation of credit cooperatives in the interests of the participants must be based on the following principles:

- voluntary establishment of credit cooperation and accumulation of financial resources of individuals and legal entities;
- financial support of the state;
- directing loans and other services to create a more favorable regime for participants;
- giving priority to directing the collected funds to production purposes;
- cooperatives of various organizational forms, including credit institutions.

4.1. Offers

After the cooperation is established and registered, it acquires the status of a legal entity. It is created voluntarily at the expense of share fees. The purpose of establishing cooperation may be the production and processing of livestock and agricultural products, their sale, the introduction of a new form of farming, increasing the economic efficiency of production. Cooperation can carry out the following types of activities:

- stabilization of livestock and agriculture, application of resource-saving technologies;
- organization of work on the supply and processing of agricultural products;
- sells finished products in the country and abroad;
- organization of meat and milk processing;
- provision of services such as the acquisition of material and technical resources and equipment;
- organization of application of scientific and technical achievements in the field of production and processing of meat and milk;
- organization of trade, procurement, and intermediation activities;

Cooperation is created at the expense of entrance and share fees and operates on the following principles:

- voluntary joining and leaving the cooperative;
- Mandatory payment of entrance and share fees;
- democratic management of cooperation (one shareholder - one vote);
- mutual assistance to the participants of economic and other activities of the cooperative and ensuring their economic interests;
- release information on the activities of the cooperative to its members and managers being accountable to the members.

Credit cooperation is very developed in many European countries. France's Credit Agricole, Germany's Deutsche-Genniosse and Shaftsbank-DQ Bank, the Netherlands' Rabobank Netherlands, Denmark's Dannesbank, Finland's OKO Bank and others. are considered a very reliable partner in dealing with their customers in their own countries and abroad. Credit Agricole serves 14 million customers and is a leader in lending to French farmers. More than 40% of deposits in the Netherlands are concentrated in Rabobank Netherlands. In Germany, more than 44% of the shares of cooperative banks are agricultural loans.

5. CONCLUSION

Improving the financial and budgetary framework for co-operative development mainly seeks to improve the productivity of farm production. Measures to strengthen the financial and budgetary processes in this regard need to be sustainable. Measures aimed at strengthening and stimulating the agricultural financial and budgetary process may be listed as follows:

- Improving tax policy in agriculture and, in this case, the use of differential tax rates and the implementation of tax rates applied to agriculture in the processing sector;
- implementing the required measures aimed at improving monetary policy which have a direct effect on the circulation of money.

Cooperation-the key goal of the creation of integration ties is to establish conditions for the large-scale replication of all the farms that have formed integration relationships. Economic sustainability of the agrarian sector with increasing the share of agricultural and agro-industrial products in the structure of GDP, financial stability of agricultural and processing enterprises, financial opportunities for simple and large-scale reproduction of enterprises, level of crop productivity, animal productivity, processing due to the maximum use of production capacity of enterprises. Achieving these goals is the essence of the concept of the economic sustainability of the agricultural sector. Thus, cooperation-integration relations as a factor in the sustainable development of the agricultural sector, with a view to alleviating the agricultural crisis, increasing the share of agricultural production in GDP, productivity of crops and animals, maximum utilization of processing capacity, the use of new technologies in production, losses in each production chain. Reduction, increase in income and living standards of rural workers, reduction of unemployment among rural residents, etc. The development and implementation of measures in the following areas should be the main issue for solving the problems of cooperation in modern times:

- ensuring the socio-economic interests of the members of the cooperative;
- developing and implementing the principles of the creation and operation of a form of cooperative economy, ensuring the protection of the rights of its members through normative documents;
- establishing economic relations that ensure the balanced interests of the partners in the various forms of economic activity;
- Participation of cooperative members in management ; - Defining the organizational form of development of cooperation and integration relationships at different levels.

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KNOWLEDGE MANAGEMENT SYSTEM IN HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

Based on a systematic analysis of the socio-economic revolution, getting new information from any individual, at the same time, based on the development of information and telecommunication technologies that enable them to be transformed into new knowledge and passed on to other people, we can say that this social challenge creates a new paradigm for ensuring human cognitive activity in the context of the educational space. A new paradigm of cognition in the process of forming a new educational space is a scientific theory built on the system of concepts that express the main features of reality. It is also a scientific model for creating and solving problems in the information society in a certain historical period. This, “knowledge society”, such as “knowledge-based society” and “learning society” is the scientific concept of our time. It should be noted that, learning knowledge becomes a key category in the development of society and one of the leading directions of modern civilization – the information era of social development. The features of knowledge system management in an educational institution are based on the knowledge and skills of knowledge holders and recipients who are constantly in the process of cognition, interaction, knowledge exchange for the purpose of acquisition and mastery of new knowledge. In this sense, it is important to pay attention to diagnostic issues to ensure the effectiveness of knowledge management. The diagnostic tools, first of all, should determine the quality of the mental work of teachers of the educational institution, the degree of impact on formalized (reporting) results of its activities.

Keywords: *development, education system, knowledge, level, management*

1. INTRODUCTION

As we know, it is a difficult process to develop the latest methods and techniques and to use in teaching and to formulate the need for their implementation. Modern knowledge management theory, derived from the general theory of management, has a special specificity in the field of education. This theory includes newer forms and methods of training. Creating a knowledge management model in higher education institutions is conditioned by the need to apply methodological knowledge in the information society. Knowledge management in the education system should be linked to the improvement of the innovation structure, which requires the identification of its national innovation system and the changes inherent in general education. Based on the classic paradigm of 'knowledge management', we can say that this is the process of creating, sharing, using and managing an organization's knowledge and information. It is very difficult to determine accurately the knowledge that is the object of management. It is a combination of ideas, views, concepts, considerations, methods and methodologies, know-how and generally accepted truths in a general sense. Knowledge is sought, acquired, collected, interpreted, organized, sorted and integrated for application in certain situations. In this case, it is necessary to distinguish between knowledge and information that consists of a set of facts (or information about the facts) that describe a particular situation. The main tool in modeling complex educational systems (including knowledge management systems) is the analysis of the goals and functions of the imaginary model. The most important are abstraction and generalization, analysis and synthesis operations, formed on the basis of a systematic analysis of practical reality, closely related to the mediating role of the word,

predicting the future state of the system and the importance of thinking about the subject concept of this model.

Used methods:

- Systematic approach
- Logical generalization

2. PROCESS AND PRINCIPLES OF KNOWLEDGE MANAGEMENT

Analysis of a new phenomenon of social development - knowledge management provides a high level of knowledge exchange and use in the information society. This can be considered as an intensively developing cognitive methodology. Methodology should be considered as a set of methods used in different scientific knowledge. At the current stage of social development, it is more expedient to apply the methodology of cognition and knowledge management in the process of acquiring knowledge by all subjects working in the education system. Based on a systematic analysis of the socio-economic revolution, we can say that this social challenge is based on the development of information and telecommunication technologies, which provide any individual with ample opportunities to acquire and process new information, as well as translate it into new knowledge and pass it on to others. It creates a new paradigm to ensure human cognitive activity in the context of the educational space. In the process of forming a new educational sphere, a new paradigm of cognition is a scientific theory built on a system of concepts that expresses the main features of reality. It is also a scientific model for creating and solving problems in the information society - in a certain historical period. This is the scientific concept of nowadays, such as "knowledge society", "knowledge-based society" and "learning society". It should be noted that knowledge is becoming a key category in the development of society and one of the leading directions of modern civilization - the information (post-industrial) era of social development. The features of knowledge system management in an educational institution are based on the knowledge and skills of knowledge holders and recipients who are constantly in the process of cognition, interaction, knowledge exchange for the acquisition and mastery of new knowledge. Teachers and students are the carriers of knowledge that define the essence of educational activity, which represents the intellectual cognitive potential of each educational institution, and they interact in a specially organized educational process. The knowledge management process is based on the following principles:

- a) The basis of knowledge management is to understand its origin, mechanism of formation and application potential to solve pedagogical problems;
- b) Knowledge should be the subject of constant research;
- c) It is important to assess knowledge for each level of education, pedagogical technology, and the educational process as a whole;
- d) Active knowledge management at all stages of the teaching process, which is important for trying pedagogical innovations, yields positive results.

In the information society, three areas of knowledge management theory and practice dominate:

- information and communication segment, which are assessed as the management of information flow in digital form, the creation and use of information systems that allow to increase the speed, volume and quality of data collection, storage, processing and dissemination in knowledge management;
- A segment in which knowledge approaches are developed and thus the organization of knowledge. This includes informing general education;

- Accumulation of intellectual capital, which is important in a competitive market, based on the emergence of new knowledge that forms the intangible assets of educational institutions and reputable capital.

The knowledge gained requires an objective assessment of compliance with the objectives achieved. In this sense, it is important to pay attention to diagnostic issues to ensure the effectiveness of knowledge management. First of all, diagnostic tools should determine the quality of the mental work of teachers of the educational institution, the degree of impact on the formalized (reporting) results of its activities. In addition, the mechanism of motivation of teaching staff (if any), the nature of intellectual activity and the mechanism of management decision-making require serious analysis. Pedagogical science has always preferred to study the concept of "knowledge". Among the types of knowledge that are important for teaching are terms, concepts, facts, laws, theories, methodological knowledge, assessment knowledge, etc. has a special meaning. Their types and components are interrelated. It is impossible to multiply modes of action without knowledge. In the presence of support skills, new knowledge creates new skills. The knowledge system in an educational institution includes the following subsystems:

- 1) individual knowledge on the topic of educational practice;
- 2) group knowledge about certain types of activities (methodological unity in the group); 3) modern structures - carriers (sources) of knowledge: textbooks and teaching aids, tele-radio-magnetic sources and carriers, internet, library, etc.

Individual and group knowledge subsystems in an educational institution may include:

- knowledge system of students in courses;
- system of professional knowledge of teachers - methodical, general pedagogical, psychological, subject, methods of training and education, etc. ;
- management of the educational institution, educational process, knowledge in the educational institution, etc. system of professional knowledge of managers (deputies);

The most important factor in the development of the knowledge system for the education system is the process of cognition, the acquisition of knowledge, specially organized in the educational institution. Today, knowledge management processes are actively explored and reflected in modern management concepts, which are supposed to create conditions for the development of the organization, employees and students to achieve the most positive results. Systematic knowledge management studies the parameters of a learning organization that provides intellectual capital, the use of information technology, best practices, team building and teamwork, and clarifies these questions: how to manage the most important corporate asset - intellectual capital ?; how can intellectual capital release other types of capital to increase knowledge, such as the personal life, professional qualities, and social welfare of a teacher or leader? What are the new principles and methods of knowledge management in the modern information situation? and so on. The knowledge possessed by an individual in the process of cognition must be multifaceted. Knowledge must manifest itself not only in an open form, but on the basis of universal methodological knowledge, and encompasses hidden knowledge that has become a person's worldview and value orientation. The knowledge management system in higher education institutions should ensure the accumulation of knowledge, the development of individual knowledge, the acquisition of knowledge, the development of organizational structures that support databases on issues of interest to the subjects of the educational process. The task of systematic knowledge management in an educational institution is not only to update the theoretical knowledge and ensure continuous development of the system by gaining continuous experience, but also to create and constantly develop databases on various subjects,

specialties and topics of the educational process within a single system. Formation of traditional educational plans on the subject is carried out by teachers in accordance with state programs and educational standards. The development of programs by different teachers inevitably leads to the repetition of individual provisions in different subjects. It is necessary to apply knowledge management technologies in order to easily adapt the obtained educational-methodical complexes to the conditions of activity of a certain educational institution and to the individual characteristics of students. In the context of the information revolution, the integration of disciplines is relevant for the successful management of knowledge. Integrated courses facilitate the management and assimilation of knowledge when organizing independent study of theoretical material, performing practical tasks, using common tools and laboratory facilities, describing common topics and specific situations for laboratory, design and other practical or creative work. In recent years, a new principle has been formed in the construction of learning systems: Learning is taken as a process of managing student knowledge. Necessary work is being done to develop "smart learning management systems" that are part of this approach. This is one of the directions of development - the creation of models of adaptive education systems that support an individual approach to learning. Such training systems play a special role in the development of new forms of learning. A model of the learning process based on knowledge management technologies allows a combination of different forms of learning using a distributed or virtual learning environment in which the student must go independently to achieve the learning objectives they face. In this situation, the task of teaching subjects in the new environment mainly involves the combination of the creative efforts of teachers in the process of setting and implementing learning objectives and programs - those who play the role of advisors. The system of knowledge management in the acquisition of new knowledge by each student in universities should be distinguished from the process of social scientific knowledge. Scientific knowledge, which is new to the whole society, differs from educational (pedagogical) knowledge. Social knowledge is always creative by nature (character) and its stages are determined by the degree of distance (distance) of the sought knowledge from the existing ones. It is impossible to jump over these stages. But at the same time, none of this is the goal. Educational knowledge is the acquisition of ready-made knowledge, which is planned for each stage that already exists, is expected as a result of the stage of cognition, and in fact is already assumed to end on its own. In a market economy, the main goal of any educational institution is the interaction of specialized and practice-oriented knowledge of educational subjects, the transformation of individual knowledge into a single knowledge, to help the higher education institution to survive in a competitive environment. The knowledge society is not only a society of knowledge, but also a society of increasing competition of individuals who constantly acquire it. In a knowledge-based society, people's chances of success increase when they acquire independent knowledge in a formal or informal education system. In general, public education policy should be aimed not only at providing all people with a minimum of knowledge, but also at creating a real opportunity for everyone to join the educational process to acquire new knowledge at any stage of their lives in accordance with their needs. Trends in the development of knowledge management processes in universities require a high level of professionalism from the subjects of educational practice, primarily teachers and managers. Each of them must have the competence to perform their duties, in order to be able to work in several related fields. They should be familiar with the skills of analysis, forecasting, group problem solving, financial accounting, and managing the activities of an autonomous group in terms of full or partial economic independence. Knowledge management should be based on four principles:

- 1) The basis of knowledge management is how knowledge is created, problem solving, their connection with cognition in technology and procedures;
- 2) It is necessary to study knowledge constantly.

- 3) it is necessary to assess knowledge for each job before, during and after the leave;
- 4) during the organization's entire existence, his knowledge of the need to manage all stages of innovation active.

For effective and systematic knowledge management, it is necessary to state four important elements of knowledge diagnostics:

- the impact of the quality of mental work of employees of the organization on its efficiency;
- Mechanism of personnel stimulation in the organization;
- the nature of the intellectual activity of the staff in the organization;
- making real alternative and collective management decisions.

Systematic knowledge exchange, practice meetings, conferences, exhibitions, collective decision-making, etc. are developing rapidly in the world practice. Knowledge management experts propose a management model as follows:

Ability to be involved in related processes:

- training;
- confirmation and transfer of knowledge;
- application of knowledge in current activities.

The training phase includes the following:

- "pre-training", is the study of information about any issue or problem that is open to the public;
- "learning in the process", is periodic study of the actions performed, self-reflection;
- "later learning", re-research, analysis and evaluation of results.

The stage of learning and transfer of knowledge include the formalization of the acquired knowledge in order to create opportunities for multiple application, as well as the testing of new knowledge gained in practice, their selection and application in practice. As part of the education-research process, knowledge management can take the form of intersectoral:

- Improving the quality of training programs - developing business and industry;
- determining the best production as an integral part of the universal and monitoring the results involved;
- increasing the speed of review of training - collegial selection of leaders,
- plans and updates;
- Improving administrative services based on professional competence, carrying out reforms in the field of education;
- propensity for modern technologies;
- increasing the level of efficiency through students;
- Possibility of interdisciplinary application;
- training programs;
- Boundaries between departments and educational institution.

The culture of knowledge management in terms of improving corporate quality includes:

- Improving the working conditions of teachers;
- Improving services for graduates and organizations;
- partner bases;
- increasing the level of interaction in advance;
- feeders, support staff,

- student services staff.

Knowledge management methods are presented at this level:

- integration of knowledge systems diversity;
- intersectoral integration in development;
- management policy;
- private initiative and scientific development.

The main methods of knowledge management are:

- functioning of the experimental community;
- creation of knowledge base;
- exchange of information in online forums;
- examination of databases;
- holding teleconferences;
- using of internet bulletin.

The use of knowledge management systems in educational institutions as part of corporate governance can significantly improve the quality of educational services and ensure the modern development of education. Knowledge management processes of the universities that want to get the best results, play a role in the context of the development of the students, is reflected in modern management concepts. Objectives of educational institutions In the context of the formation of a new management paradigm - system paradigm system management, both the system and employees (employees and students); cover the development of the system in relation to the external conditions of its existence and development, based on both organizational and organizational knowledge.

3. CONCLUSION

The main obstacles to the application of the knowledge management system in education are, first of all, the lack of full and high level of knowledge among both managers and employees of the organization and the lack of understanding of the knowledge management process. In addition, observations show that the majority of faculty and middle and senior managers of educational institutions from time to time during their professional activities use certain elements of knowledge management, knowledge exchange. However, their unintended use significantly reduces the organizational impact. Secondly, the corporate, organizational and technical culture of educational institutions, which hinder the exchange of information, are also factors that negatively affect this process. It should be noted that it is important to provide a knowledge management system that uses intellectual capital, the basic parameters of any educational organization, information and communication technologies, using the best, perfect, perspective practices, including teams and groups. Systematic knowledge management is one of the aspects of the main asset of the education system - systematic management, which can ensure the efficiency of intellectual capital, other types of capital, including the basis for recreation, self-development or personal life of the teacher or leader.

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THE KEY FACTORS IN THE FORMATION OF A NEW "OIL" REALITY

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ABSTRACT

The role of oil and gas in the global economy is undeniable. Changes in the oil sector as a result of changes in the global economy affect the economies of countries. At this stage, the world economy is developing rapidly, new industries are emerging and the importance of technologies that simplify human life is growing day by day. The impact of globalization and regionalization on the sustainability of economic development has been the subject of ongoing research by many leading scientists. The main goal of the study is to study the historical dynamics of the processes occurring in the world market of oil and oil products, to identify current aspects, as well as analyze the country's policy in this area and analyze the importance of our country's oil and gas strategy.

Keywords: *Oil, Oil reality, Gas strategy, Country's oil strategy, Global economy, Oil market*

1. INTRODUCTION

In the context of the formation and competitiveness of the global economy plays an important role global processes taking place in the modern world,. Strong energy potential contributes to the formation of a competitive economy, but also serves as a key factor in the well-being of society. Oil is the most consumed resource for energy use and in modern times the oil factor is considered as one of the major factors in the global economy. Thus, the quantity and price of oil have a huge impact on the global economy. There is no country in the world that does not use oil and oil products. For this reason, all countries are interested in the dynamics of the global oil market and has a significant impact on their economic situation. Therefore, these issues holds global importance from the point of view of global economic development, as changes in oil prices play a significant role in the incomes of producing countries and at the same time in consumers spending. Energy use is at the top of driving forces of social development in countries. Oil retains its popularity as the most important and indispensable raw material in our oil, energy and industrial products. Therefore, it is important to study the supply and demand factors that affect oil prices, oil market research, the impact of the country's socio-economic development on the world oil market and the welfare of the population. The oil and oil products market is a market that has its own characteristics. The stock markets on which these products are sold are considered to be located in the developed countries of the world. There are about 130 large stock markets in the world. Industrial goods contains for 30-40% of the goods traded on these stock markets, thus oil and oil products forms the basis of this. Despite low oil prices in recent years, oil prices continue to rise. However, there is still the possibility that prices will drop again in the near future due to the shock situation in the oil market. Analysts in the oil and gas industry believe that there are a number of key factors affecting the decline in black gold prices. Experts in this area argue that the essence of this Iranian factor could create a new tendency for falling oil prices.

It is not yet clear how quickly the Iranian side will increase its production and bring it to the world market, how unfavorable the balance between supply and demand in the market will be. The main reason for this situation on the market was the problem of lifting sanctions from Iran in recent years. This was followed by a statement that Iran had agreed with buyers not only in Europe but also in Asia and plans to sell 500 barrels per day. In addition, Iran has about 40 million barrels of oil. Analysts say that part of the European market is supplied by Saudi Arabia, despite sanctions against Iran, but Iran is trying to restore its old ties.

2. USED METHODS

Analysis and synthesis, deduction and induction, a systematic approach, logical generalization and statistical methods were used in the process of studying the problem. In addition, when evaluating the materials, methods of economic analysis, comparative analysis, generalization and analysis-synthesis were used.

3. ANALYSIS

According to Russian and foreign researchers, the global oil market is undergoing profound changes that affect current and future opportunities for the production and consumption of oil and oil products around the world. At the same time, the oil market is a global market and, moreover, it tends to turn into a bubble, and even countries that can independently satisfy their oil needs cannot be isolated from its consequences. In this context, radical changes in the world oil market affect the interests of large economic entities. Studying the nature and role of this process seems to be an urgent scientific and practical task for researchers. Changes in the oil market occur under the influence of a new set of fundamental factors, a new oil reality based on the emergence of a new economic reality for oil and gas production. These types of factors include:

- Formal formation of a new technological structure of the oil and gas industry, including the application of technologies for the rapid processing of large geological data sets, as well as the development of multi-stage processing of raw materials;
- A realistic view of the spread of energy-saving technologies and alternative fuels and reducing the cost of renewable energy sources;
- Dependence of oil prices both on supply and demand and on the price of financial instruments of other world markets;
- Deepening the imbalance between supply and demand in the growing oil market;
- Oil market volatility;
- Decrease in the share of oil in the overall energy balance due to competition between primary energy carriers (between fuels);
- Changing trends in world trade flows: increasing US energy independence, the growing importance of the Asia-Pacific region (APR) in international trade.

Various aspects of the problem of changing the global oil market have been the subject of research by a number of foreign experts having a scientific justification and methodological basis for a systematic assessment of the impact of world energy development and the development of energy markets on the economy and the energy sector. Four stages were determined in accordance with two criteria (energy and institutional) and characteristics of these stages were given. The modern oil market and its development prospects are in the focus of attention of the international economic community in terms of quantitative characteristics of fluctuations in a crisis or market. At the same time, in addition to quantitative assessments, it is important to characterize the qualitative component of the changes that will reveal the essence of changes in the global oil market and evaluate changes in the oil market from the point of view of the development and effectiveness of its mechanism.

Table 1: Oil production in the USA, Saudi Arabia and Russia in 2016–2035 (Million barrels per day)

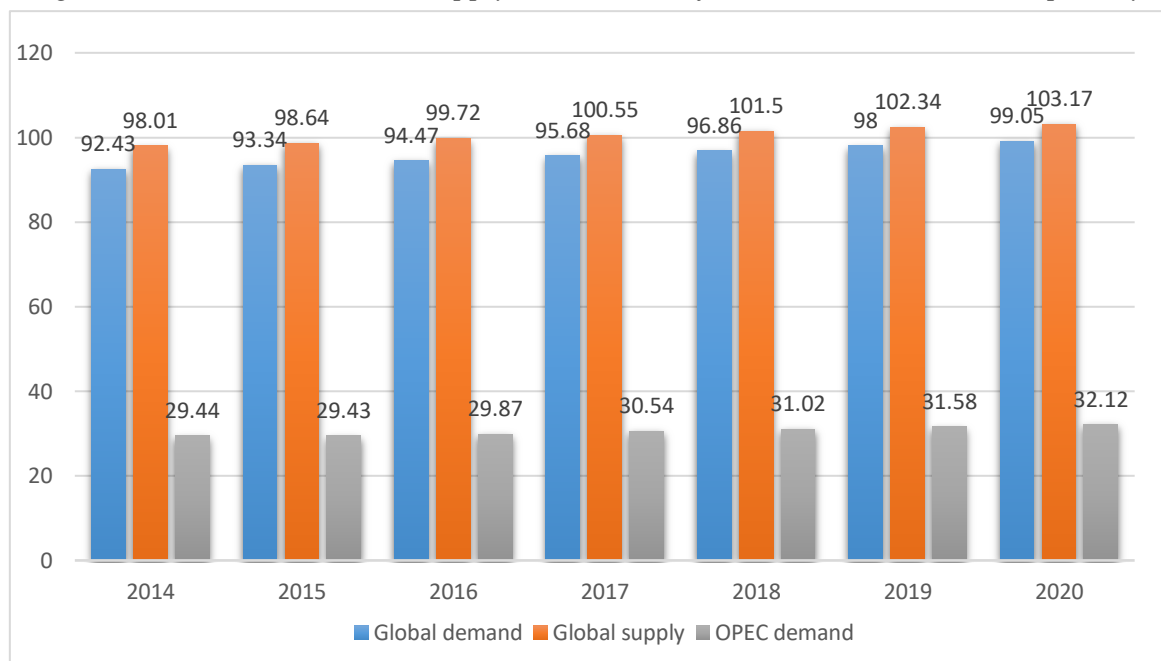
The largest oil producing countries	2016	2020	2035
USA	12.53	11.10	9.20
Saudi Arabia	10.25	10.60	12.30
Russia	11.17	10.00	9.00

Source: Salameh M.G. Impact of U.S. Shale Oil Revolution on the Global Oil Market, the Prize of Oil & Peak Oil / International Association for Energy Economics. Third Quarter, 2013; International Energy Agency (IEA). Oil Market Report. 14 June 2016.

Change the oil market to perfection in a competitive relationship. Current conditions of global competition stimulate the ever-increasing integration of the oil market in the system of institutional, economic and technological ties; its improvement determines the direction of further development of the competitive structure. Suppose that the new "oil" reality improves competition in the oil market and makes its mechanism more efficient, which indicates its desire to limit global oil consumption by the amount of resources needed to achieve a market equilibrium. The requirement of perfect competition applies to all market participants, forcing players to increase the level of rationality or leave the market. The logic of the development of the world oil market in this direction confirms the first fundamental theorem of the theory of social security, which is described as follows: if all people and firms pursue their interests and accept prices as data, then Pareto is optimal. The Pareto principle underlies the mechanism of relative restrictions on goods and supplies: if prices are lower than marginal costs, consumers are forced to spend money economically, which leads to increased demand and higher prices in the market. If prices are above marginal costs, consumption is artificially limited, which can often lead to slower economic growth and lower market prices. Under optimal conditions, prices are equal to the final unit cost of production. The movement of the world oil market in this direction is evidenced by:

- Firstly, low prices and low marginal and average costs under the influence of price pressure;
- Secondly, focusing on the strategy of "protecting market share", which sometimes becomes a strategy of expanding market share due to increased market competition and redistribution of markets;
- Thirdly, oil-producing countries, in fact, will not be able to achieve an agreed reduction in production in order to increase oil prices, and that if OPEC and Russia can achieve higher oil prices, shale oil producers in the United States will increase production. As a result, the gap between demand and supply in the oil market will widen, as foreign economists say that the "sharp" dynamics will continue by 2020 (Figure 1).

Figure following on the next page

Figure 1: Global imbalance in supply and demand of crude oil (million barrels per day)

Source: Developed by the author. Indicators: Medium-Term Oil Market Report 2015. OECD/IEA, 2015.

4. CONCLUSION

Achieving the competitiveness of the global oil market is a complex, long-term process, but in the face of increasing the efficiency of the global oil market, the prerequisites for this process are oil companies, oil and gas chemicals, equipment manufacturers, shale industry, ensure balanced and sometimes objectively balanced interest, compensate for losses and expand the scope of the contract in order to maximize the benefits of all participants in the modern stage of oil production and consumption around the world. In conclusion, it can be noted that the interpretation of the modern oil market in the direction of perfect competition allows us to overcome the “dramatic” feeling associated with the prospects of lower oil prices. Economic science believes that "in a monopoly and in a perfect competitive market it is very difficult to make a decision on prices, and there is no policy if there is no reason to make decisions." A comforting reward for the global community is the idea that a highly competitive market maximizes social welfare.

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PRIORITIES FOR THE DEVELOPMENT OF THE NATIONAL ECONOMY AND THE EFFICIENCY OF THE INVESTMENT CLIMATE

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ABSTRACT

Azerbaijan's national economy and its socially oriented economic development are at the same time sustainable and effective development of the economy, improvement of living standards, effective use of opportunities in the financial and banking system, harmonious balance formed by the state based on market relations and market mechanism elements, sustainable, dynamic. It is a planned economy, and the state has a special role in this system. Countries around the world pay special attention to cooperation to solve global problems. Thus, states cooperate in order to develop an effective and open international economic system that successfully solves the problems of environmental pollution, ensuring economic and sustainable development in all countries. The international prestige of Azerbaijan, which is building a secular state, is growing. It should be noted that at the end of the twentieth century, the methodology of human development changed and began to be based on the principle "People should serve the development of the economy, not the development of the economy." This principle is explained by the fact that in order to develop a modern economy, we need free, sane people with a certain intellectual level. Effective, purposeful reforms in all spheres of the economy of the Republic of Azerbaijan in recent years and a wide range of state care for socio-economic development of the regions. Sustainable and effective development of the country. Improving living standards and effective use of opportunities in the financial and banking system has created a great basis for rapid progress and high standing. It is necessary to analyze the current state of socio-economic development in Azerbaijan, to study it in terms of sustainable and sustainable development and to identify the factors and potential that ensure the transition to it. The role of investment factors in ensuring the sustainable and sustainable development of the national economy is great, and these factors are the theoretical and practical study of the main ways and mechanisms to improve the efficiency of their use. We hope that in the future, more decisive steps will be taken to ensure the sustainable and efficient development of the economy in the economic aspects of national interests, to improve the living standards of the population and the opportunities in the financial and banking system.

Keywords: *National economy, Economic development, Effective, Sustainable, Sustainable development, Socio-economic, Investment*

1. INTRODUCTION

In order to adapt to the new challenges posed by the current processes and minimize the impact of the current global economic crisis on Azerbaijan, the priorities of economic reforms in our country have been identified, as well as strategic goals, effective investment climate in all sectors of the economy. According to the new economic development strategy, Azerbaijan has entered the post-oil period, which is characterized by goal-oriented strategies and unique laws.

The strategy of developing the priorities of the national economy at a normal level, increasing international competitiveness, reducing dependence on imports, substantially increasing exports of non-oil products, achieving innovative investment in all sectors of the economy will be the main priorities of the new stage. The implementation of economic reforms in the country, the implementation of strategic programs will give impetus to the diversification and orientation of the national economy and the development of the non-oil sector. The strategic goal is to ensure the development of food, finance, agriculture, small and medium business, innovative investment environment, as well as other sectors, the creation of strong economic and social infrastructure, sustainable and dynamic development of the economy in the current, medium and long term. Improving the business environment in the process of consistent reforms in the economic sphere, the application of advanced technologies to increase the transparency of the financial environment is an integral part of the environment of economic development strategy. In order to improve the investment climate in the current situation in the country, the improvement of legislation is aimed at ensuring the rights of economic sectors, as well as forming the basis of reforms. In order to increase the efficiency and transparency of the investment climate in developed countries, including Azerbaijan, the organization of financial control, taking into account the new quality requirements, is of great importance in terms of solving national and global development problems. All this highlights the application of a system of control in accordance with the requirements of a market economy in the system of economic management in the economy. At present, the principle of development of the real sector, investment climate and expansion of entrepreneurial activity is of great socio-economic importance for the Republic of Azerbaijan. Improving investment efficiency, providing state support to priority areas of the national economy, expanding the business and competitive environment, developing industry, creating technology parks, improving regulatory and institutional safeguards, etc. brings new stimuli to development trends in this direction. In this regard, in order to ensure and increase the sustainability of socio-economic development in the country, more attention should be paid to increasing the efficiency of priority areas, diversifying the economic-innovative investment climate, increasing economic activity in the development of the real sector. Today there is an inflow of investment to our republic. Azerbaijan's rating in the international arena is gradually rising. Opportunities for cooperation with the West and Russia are expanding. The Azerbaijani state is recognized in the world as a state pursuing a well-thought-out, balanced policy. The Baku-Tbilisi-Ceyhan oil pipeline, the restoration of the ancient Silk Road and the implementation of the Baku-Tbilisi-Kars railway project are an effective factor for further deepening Azerbaijan's cooperation in Europe and the East, strengthening integration processes, and a reliable guarantor of its economic security. Even the modernization of transport infrastructure in accordance with modern world standards has laid a solid foundation for the rapid integration of the national transport and road system into the world communications space. [1] Efforts are being made to direct the country's domestic financial resources to the real sector of the economy, ensure financial stability and security in the securities market, and create conditions for the country's securities market integration into the world capital market. The State Programs, which envisage the socio-economic development of various sectors and regions of the national economy of the Republic of Azerbaijan, envisage further improvement of several issues of great importance for the population of the country:

- Ensuring balanced development of the country's economy and reducing dependence on oil;
- Efficient use of resources available to the regions;
- Restoration and strengthening of existing local production enterprises;
- Creation of new jobs;
- Further development of existing mechanisms of investment activity in the country;
- Production in the regions, construction of social infrastructure at the level of modern requirements, etc.

2. THE MAIN OBJECTIVES OF THE DEVELOPMENT PRIORITIES OF THE NATIONAL ECONOMY

One of the main issues attracting the attention of world scientists in the XXI century is to study the problem of sustainable development in the national economy, to continue the main priorities in this area, to achieve effective development of the investment climate. Radical qualitative change in the world has become a complex and dynamic system, and the impact of this system on the development of the national economy in almost every country has significantly increased. The modern concept of the mechanism of implementation of economic relations of our country with the world countries significantly substantiates the fact that our national economy is an integral part of the world economic system. In accordance with the Decree of the President of the Republic of Azerbaijan dated March 16, 2016 on the 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 road maps were prepared for 11 sectors of the national economy. The Strategic Roadmap for the National Economic Prospects consists of an action plan with an economic development strategy until 2020, a long-term vision for the period up to 2025 and 3 targets for the period after 2025, covering the short, medium and long term [2], the main goal here is to boost the achievements of economic development in the medium and long term, based on the selected priorities in the short term. The development and renewal of the structure of the national economy affects many areas, such as the development of entrepreneurship and the business environment, finance and credit, the agricultural sector, tourism, services, industry, etc. will pave the way for further development of the sector. Along with all this, it will be possible to expand access to foreign markets. The world's leading countries believe that a new economic system is functioning successfully in Azerbaijan, which creates normal conditions for free market relations, civilized human norms, and the implementation of the state's functions. The development of the Azerbaijani economy in recent years has been based on the effective implementation of transnational projects, diversification of the non-oil sector, development of the private sector, improvement of targeted social protection of the poor and other economic factors. It should be noted that effective development covers all areas of our lives. Thus, the development of various sectors of the economy creates ample opportunities for job creation, annual poverty reduction, employment, and further improvement of the welfare of the population. The main goal of the priority direction of Azerbaijan's economic development is to ensure the sustainability of dynamic socio-economic development in the country in the long run by increasing the competitiveness of the national economy and its effective integration into the world economic system. Let us take into account that the republic has recently achieved truly radical revolutionary results in the field of socio-economic development. As a result of large-scale measures implemented on the basis of specific programs, a modern state and modern society have been formed in Azerbaijan. Huge infrastructure projects covering roads, transport, utilities, science, education, health, information and communication technologies and finally all socio-economic, cultural and other spheres have been implemented in the country, Azerbaijan's energy security is complete and food security is largely ensured. The state programs, concept and strategic documents adopted in the country, their practical implementation are important as a mechanism for the implementation of this policy. Taking into account modern and perspective development trends, according to the newly adopted concept, the work done for the long-term development of Azerbaijan is conditioned as follows:

- Strengthening of the new wave of technological development and variability in the world economy, strengthening of the role of innovations in socio-economic development and reduction of the impact of many traditional growth factors, etc. makes it necessary to take into account factors;

- The growing effects of global competition should not only cover traditional commodity, capital, technology and labor markets, but also penetrate the development of human potential into the national governance and innovation system, leading to the qualitative perfection of Azerbaijan's unique socio-economic development model.

The development of recent years is also reflected in the formation of a new technological base of the economic system. It will also manifest itself in the more scientific fields of computer science, nanotechnology, health and economics. For this, the existence of scientific and technical, research potential and high-tech production emphasizes the importance of taking into account many conditions and creating appropriate conditions:

- Strengthening the position of participation in the markets of high-tech products and intellectual services in Azerbaijan;
- Creation of high-tech complexes, areas;
- Modernization of entities adapted to the emerging global and international markets at the expense of domestic financial sources and based on the perspective directions of development of traditional sectors of the economy, etc.

Many scientists viewed development primarily as a technical and economic growth, an increase in production and consumption. A.Sidman, an American female economist, wrote: "The goal of development is to achieve increased specialization and exchange aimed at improving the living standards of the population as quickly as possible, with limited financial resources, leading to higher productivity." Considering a broader interpretation of development, American researchers E.G.Stockwell and K.E.Leydley write: "The problem of development does not have any one-scale solution. On the contrary, it must be complex and take into account many aspects. Modernization is not a purely political, economic or cultural situation. It affects all elements of society"[3]. Determining the development trends of economics in Azerbaijan, which is on the path of economic development, in accordance with the modern realities of the republic, ensuring the organic unity of science and management, achieving profitability of funds allocated to this area are important tasks at a new stage. Against the background of the process of modernization, it is extremely important for our economists to work on their field and conduct research for the future [4].

3. INVESTMENT CONDITION IN THE DEVELOPMENT OF THE NATIONAL ECONOMY AND ITS IMPLEMENTATION

Along with all this, the role of the investment climate as a priority in the development of the national economy is great. At present, one of the important issues is to bring to the fore the legislative framework, as well as other economic mechanisms necessary for the formation and further development of the investment climate in Azerbaijan. It should be noted that in the context of the necessary transformation of the main mechanisms of the world economy, it is very important to increase the attractiveness and efficiency of the investment climate in each country. That is why states must improve their investment policy in accordance with the requirements of the innovative era and innovate, taking into account the strategic goals for the future. Creation and development of investment climate in Azerbaijan The law of the Republic of Azerbaijan "On protection of foreign investment" was adopted on January 15, 1992. [5] The mission of this law was to provide the legal and economic basis for foreign investment and to regulate the activities of foreign investors to invest in Azerbaijan, as well as to create a favorable environment for investors to come to Azerbaijan. The Law of the Republic of Azerbaijan "On Investment Activity" was adopted on January 13, 1995 [6] and this law reflected the expansion of investment activity in the country, as well as the effective development of the investment climate.

The law sets as an important issue the intensive attraction of investments in various sectors of the economy, the active use of investments in solving socio-economic problems. During these years, the country has developed, comprehensive measures have been taken to address the economic and organizational mechanisms of the investment climate. Taking into account the effective development and improvement of the investment climate in the country, on October 22, 2010 another law was adopted, the Law of the Republic of Azerbaijan “On Investment Funds.” [7] After the adoption of this law, the country has formed a strong legal basis for determining the legal and economic basis for the organization, management of investment funds, the regulation of issues related to the activities of investment funds. In order to achieve sustainable and sustainable economic development in the conditions of market relations, one of the main tasks is to direct investments to the priority sectors of the economy and increase the share of science-intensive sectors in the structure of the economy. Note that innovation-oriented investment is one of the important conditions for ensuring macroeconomic stability and economic growth. The increase in innovation-oriented investments leads to the rapid development of the economy and the improvement of living standards and welfare of the population. One of the important conditions in the near future is to pay attention to many issues in order to increase the efficiency of the investment climate in our country:

- Measures should be taken to improve the existing mechanisms of innovative investment activity in our country, as well as economic and organizational regulations should be carried out;
- Fundamental research should be conducted in the field of efficiency of the investment climate in the country, the principle of efficiency of innovative investment climate should be instilled in the regions;
- Measures should be taken to bring investors and innovative investment companies from around the world to various sectors of the economy, and most importantly to the non-oil sector, to develop programs to ensure investment activity, etc.

In modern economic practice, various forms of investment attract attention. There are many types of investments depending on the object of investment:

- Real investments (investments in physical assets);
- Financial investments (portfolio);
- Investments in intangible assets.

Investments are also noteworthy for their forms of ownership and income levels:

- Investments by forms of ownership - private, state, foreign and joint investments;
- According to the level of income, investments are divided into high-yield, medium-income, low-income and non-profitable investments.

The role of innovation-oriented investments in this area is also very large in the modern era of high-level development of science and technology, information and communication. In this regard, increasing investment can provide a large inflow of funds to the country. Although our country is new in this area, it has the financial capacity to implement relevant projects. Purposeful state policy is being implemented to make Azerbaijan a leading country in the region in the field of information and communication technologies. The creation of a modern information society in the XXI century, the involvement of the rich natural resources of the regions in economic turnover, the service of human capital can be considered the beginning of a qualitatively new era in terms of the formation of a high intellectual level. Nowadays, as a result of attention to the development of information and communication technologies as a new source of growth, a strong basis for the formation of effective economic relations has been created and the knowledge economy, which is the basis of the new economy, has been

strengthened. The existing political stability in the country, dynamic socio-economic development, further development of democratic processes in society have created favorable conditions for deepening integration into the world economy. The implementation of many major transport and energy projects, the acquisition of advanced experience, the application of modern information and communication technologies, the development of communications have allowed Azerbaijan to become one of the leading countries. The effective development of the investment climate in Azerbaijan and its achievements are reflected in other areas. Today, the development of the non-oil sector in Azerbaijan is one of the priorities. Note that one of the most important and important areas among the non-oil sector is the agricultural sector. As a result of reforms implemented by the President of Azerbaijan on the basis of flexible and efficient mechanisms, the legislative framework has been improved to develop the agro-industrial complex, improve food security, provide farmers with 50% of fuel and fertilizer costs, and provide subsidies for grain crops. , to improve technical support, began to lease equipment and fertilizers to producers on preferential terms. It is obvious that all spheres of the agrarian food complex, which is one of the most important strategic sectors of the economy, including agriculture, processing industry, as well as the social sphere of the village, are more investment-intensive. Therefore, stimulating the mass flow of investment in the agricultural sector should be the most important element of the state's agrarian policy strategy in modern conditions, and the expansion of investment activities in agriculture primarily serves the modernization and reconstruction of agricultural production. From this point of view, the support measures implemented by the state should be aimed at intensifying production through investment in innovation. Under market conditions, the state should take regulatory measures aimed at expanding investment processes, the main motive of which should be to increase the investment attractiveness of low-income sectors as well as agriculture.

4. CONCLUSION

Research shows that sustainable success in any field depends on financial security. In this sense, many areas can be indicated as financial and investment sources. It should be noted that in order to ensure sustainable development, first of all, to get more income at a lower cost can be considered as the main criterion for the efficient use of financial investment sources. That is, the funds should be used with maximum efficiency, more results should be spent on the use of funds, and this benefit should be reflected in the solution of various socio-economic goals of the country's development, on the one hand, and increased revenues as a result of the use of budget funds. can. In other words, the funds must also ensure socio-economic progress. The main source of financing for investments is the own funds of enterprises, and one of the most serious tools to stimulate economic growth, especially in the non-oil sector, is public investment. Considering that any investment in the development of the national economy often does not play a positive role. Therefore, investments in relatively promising sectors of the national economy should be linked to investments in promising sectors of the economy. It is also important to first determine which industry or product will be most beneficial to the development of the economy when making decisions about investing in the national economy. Thus, in order to stimulate the development of certain sectors in the country and create favorable conditions for it, a stable investment environment must be created and regulated. The inflow of foreign investment into the country's economy can be strong only if its return is strongly guaranteed and stimulated. Creating and stimulating a healthy investment climate in Azerbaijan prevents the flow of national capital to foreign countries and creates conditions for its use for the development of the national economy. In order to promote the reforms implemented in Azerbaijan to improve the investment climate at the global level, increase the country's prestige in international rankings, identify and eliminate existing problems in this area, as well as bring all this to the attention of foreign investors.

On additional measures to increase the suitability of the environment and further improve the position of our country in international rankings. The order states that the reduction of the economy's dependence on oil in the future, the development of a competitive economy based on the support of entrepreneurship, the continuation of activities aimed at developing the business and investment environment are classified as the main goals of the state. Thus, we can conclude that some work has been done to prioritize the development of the national economy and the development of the investment climate in Azerbaijan, and the successful continuation of this work will have a positive impact on socio-economic development in the country.

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IMPROVING THE SYSTEM OF FINANCING OF SMALL AND MEDIUM-SIZED BUSINESSES

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ABSTRACT

Entrepreneurship is one of the important structural components of the civilized market economy. Entrepreneurial activity is an independent initiative of all types of economic activities, including those for the production, sale and service activities that are not prohibited by law for the benefit of individuals and legal entities. Entrepreneurial activity, which is rich in content, types and forms, is a prerequisite for economic and social progress, and the entrepreneurs are the most initiative and agile layer of the society, which is willing to learn and apply into production the scientific-technical innovations. Financial security/provision is one of the most important factors in ensuring social and economic development in the condition of the market economy. In this system, the frontiers of financial relations go beyond the scope of social production and cover other areas of public life. Financial relationships that interfere with every aspect of public life and have their own unique characteristics are often manifested in the monetary position. It must also be admitted that the financial system in our daily real life is accompanied by the absolute cash flow of accepting the form of financial resources. Financial resources, herein, play the role of the financial security carrier.

Keywords: *Microfinance, Entrepreneurship, Government, Financial security*

1. INTRODUCTION

An entrepreneur, who is the main driving force of the market economy, is always trying to increase its existing competitive product, to be able to put forward its own proposals in the competitive market and, thus, achieve high returns. Thus, in order to form and develop the national economy, it is necessary to create a healthy business environment, to develop the entrepreneurial spirit, and to define the development directions of entrepreneurship. With deepening international division of labor and globalization of the global economy, small entrepreneurship is becoming a productive force of the innovative economy. This, in turn, implies that there is a demand for the development of new mechanisms that would support and stimulate innovative activities of the subjects of small entrepreneurship. The low level of financial provision of the most of the small businesses is related to the initial capital accumulation; so, the access to bank loans on special terms is particularly important for them. Thus, in modern economic conditions, commercial banks that offer different types of credit services to business should create conditions for the development of small businesses. The establishment of microfinance institutions should become the institutional basis of an organized credit system capable of sustaining the economic and financial development of the entire country. The combination of microfinance institutions operating on the principles of reciprocity will enhance the affordability of basic banking services for citizens, co-operatives, and individual entrepreneurs. The development of microfinance institutions can be a catalyst for the development of small and medium-sized businesses, including innovative businesses.

2. THE DEVELOPMENT OF SMALL AND MEDIUM-SIZED BUSINESSES AS ONE OF THE FACTORS IN THE DEVELOPMENT OF REGIONS, AS WELL AS THE COUNTRY'S ECONOMY AS A WHOLE

In the conditions of well-designed support on the state, regional and municipality level, the financial services by the credit unions and other non-banking credit organizations, which can

be more effective and productive are more desirable than one of the conventional banking. The goal is to unite all retail financial institutions that provide different types of credit services to the business in a single system. This might be possible only in the conditions of involving, compilation and effective re-allocation of its different elements - banks, micro-financial organizations, leasing companies, factoring companies, etc. that is directed to establish stable financial relations. Thus, the relevance of the topic is related to the solution of an important economic problem - the creation and enhancement of the effectiveness of small business financing in the context of economic modernization. Small and Medium-Sized Entrepreneurship is a sector of the economy that determines the pace, structure, and quality of the country's GDP and helps to address many socio-economic problems. Small and medium-sized businesses provide the necessary mobility in a market environment, creating deep expertise and cooperation that enables its high efficiency. In this sector of the market, there is a tendency for sustainable economic growth, which is due to the high turnover of assets. As a result, small and medium-sized businesses can easily pay interest payments and get an opportunity to get a quick profit. The development of small and medium-sized businesses is a very important element in the development of regions and the economy of the country as a whole. It is able to quickly and economically solve the problems of economic restructuring, formation and saturation of the consumer market in the conditions of limited financial resources. Small business lending system is a combination of elements of the credit process, organizational and economic technology of credit operations, and credit system infrastructure, providing the process of interaction between the lender and the borrower. The main institutions for the provision of services to small businesses are: commercial banks and other financial and credit institutions, microfinance institutions, state financial support institutions for small businesses. In developed and developing countries, support for small businesses is provided through a set of measures by government and, at the regional and local levels, as well. At the same time, activities are carried out differently, through selective support to certain priority areas of small entrepreneurship – youth and women micro-firms, high-tech micro-firms; to create conditions for retaining existing jobs and encouraging employers to create new jobs. State support for small and medium-sized businesses through state budget support mainly for small innovative companies developing and implementing innovative products; support the development of small companies' equipment leasing; supporting grants for start-up entrepreneurs and small business development municipal programs; creation of business incubators, industrial parks, technology parks, entrepreneurship centers, cluster development centers, design centers, collective access centers. A study of support for small businesses through the public administration system has proven that certain elements of its infrastructure are ineffective, which raises the issue of resolving problems in the SME system.

3. LENDING MODELS AND SOURCES OF INNOVATIVE FINANCING FOR SMALL AND MEDIUM-SIZED BUSINESSES

In recent years, the market for bank lending to small and medium-sized businesses has been developing. Two factors influence the market. On the one hand, the number of orders by banks to small and medium-sized businesses has significantly increased. On the other hand, the number of borrowers with a favorable financial position in the market is still insufficient to fully meet the banks' demand for liquidity. Banks have many factors that hinder the process of lending to small businesses - the poor transparency of small businesses, the lack of collateral and guarantees, well-educated business plans, and so on. Nevertheless, banks are actively involved in this process. However, only a few of them can protect themselves against the risk of non-repayment of loans to small businesses. Thus, reducing and eliminating the funding constraints for small businesses is impossible without government intervention. It is not about distributing budget funds to any entrepreneur.

On the other hand, it is not necessary that each micro-firm be transformed into a small, medium and large enterprise. However, the experience of economically developed countries proves that initial financial capital is one of the main conditions for expanding the size of a small enterprise. Involving domestic capital into promising businesses is a key to ensuring the optimal structure of the economy and the effective ratio of small and medium-sized enterprises. This issue is solved at the state level, with direct financial support from the state, as well as through the development of a mechanism for the transfer of free capital to small businesses. Today, the only major program for lending to small businesses, as well as individuals engaged in entrepreneurial activities without establishing a legal entity, is the European Bank for Reconstruction and Development. In Azerbaijan, this program has become a “small business support fund”. The EBRD provides long-term loans to commercial banks in Azerbaijan, and the loan agreement stipulates that the loan should be used exclusively for small businesses. Currently, the Bank cooperates with several commercial banks in Azerbaijan. Loans are restricted to only a few areas of entrepreneurship (mainly those engaged in the production of tobacco products, alcoholic beverages, securities (bonds, obligations) trading). The condition of securing bank loans is to intentionally exclude venture capital. Venture business owners generally do not receive bank loans because they do not have production facilities, equipment or personal property. But, in fact, these businesses need more loans than others. The activities of non-banking institutions that are already lending to small businesses are starting to work here. Acquiring bank loans is not an easy task. For this purpose, first and foremost, the creditworthiness of the enterprise must be high. High rates of this indicator are preferred not only in bank loans, but also in attracting new partners. When it comes to understanding the creditworthiness of an enterprise, it is investigating whether it is able to meet its obligations in a timely manner. The following can be considered as indicators of solvency:

- Business ability;
- Business reputation;
- Ability to generate income;
- Asset ownership rate;
- Economic situation.

The general provisions for measuring the risks of bank loans to small businesses are based on the Bank RCC's regulatory act called "Risk Management Standard". The purpose of this standard is to assist in the organization of risk management in banks and to define functions and procedures in accordance with current legislation and international best practices. Each bank shall apply the provisions of this Standard in accordance with the types, characteristics and extent of risks they face as a result of their activities, as well as a healthy control environment. A relatively new element of the small business lending system is microfinance. Microfinance in the country's economy addresses two of the most important issues: reducing the number of usurers, especially supporting small startups, and training entrepreneurs to work with legal money and banking systems; helps solve social problems. One of the most important features of microfinance programs is flexible policies, simplicity, speed, and individual approach to the provision of loans. Unlike banks, microfinance institutions (in most cases) are not bound by formal requirements for the availability and quality of collateral and have extensive experience in providing non-traditional forms of repayment of collateral. These include group and individual lending methods, debt security forms, borrowers' valuation approaches, and more. Another important direction of financing small business is leasing. This is supported not only by the increase in the number and activity of potential lessees and their confidence in the reliability and affordability of this financing mechanism, but also by the increased interest of the leasing companies in this segment of the market. According to the leasing companies, small business is not only promising but also quite reliable partner.

Thus, the prospects for further development of the SME lending system can be described as positive. Existing lending models can be successfully implemented in the future by increasing the efficiency of credit schemes and the ability of small borrowers to invest in credit resources in a feasible and profitable manner. Improvement of leasing as a method of financing small businesses will increase the pace of development of small businesses in all regions and make it an important tool for creating employment and social stability. One of the main sources of small business lending mentioned above is bank loans. Due to the transition to the market economy, there have been various changes in the forms of lending to enterprises. Such concepts as “seasonal and non-seasonal production crediting”, “commodity lending”, “partial lending” have ceased to exist. New terms in business loans are now being used. One and the most widespread is the notion of “credit line lending”. With the opening of a credit line, the bank opens a loan account for the client (credit line), depending on how much money they can use in the form of a loan for a specified period. The credit line is a legal confirmation of the bank's commitment to lend to a client within a specified period of time, within the agreed amount of time. As you can see, the main issue is to determine the maximum loan amount, that is the credit limit. At first glance, it is unclear how this type of lending differs from others. In its name, this form of crediting does not differ from other forms, on the contrary, and is considered a backward (out of date, not modern) form. In international practice, this type of lending is not accepted. For example, in the UK and France, this form is called “Overdraft”, in Germany “Contocurrent”. The most commonly used forms of lending in the world in recent years are credit facility-based lending and targeted lending. These are both short-term forms of lending. State support for the development of SMEs should be complex and systemic, using both direct and indirect impact mechanisms. If direct impact mechanisms are to be directly addressed to SMEs, indirect impacts should be to create favorable external conditions for small business development, support small businesses, primarily financial and credit institutions and hedge funds, education and consulting organizations, and other support infrastructure.

4. PROBLEMS OF REGULATION OF THE MICROFINANCE SECTOR

The development of the microfinance sector depends on the impact of external and internal factors. External factors include the legal framework and the methods of financial control over the activities of the researched sector's organizations. Internal development factors: The policy of minimizing financial risks and protection of profitability in the non-commercial sub-sector of microfinance, as well as the processes of financial self-regulation and self-regulation of microfinance entities. Non-banking institutions of the microfinance sector, unlike the banks, lack the marketable financial instruments, and, therefore, accept all the financial risk, as well as the management of these risks as a whole. In turn, the borrower's subsidiary responsibility will reduce the cost of using financial resources in the non-commercial sub-sector of microfinance. Since the core of the microfinance sector is non-profit microfinance institutions, their financial stability determines the development of the sector as a whole. First, the state should be not only a lender or sponsor of the microfinance sector, but also a financial regulator. The role of the state as a “generator” in the microfinance mechanism is constrained by interest subsidies. This should lead to the mobilization and activation of banking and other resources in the microfinance sector. The optimal form of this interaction is an agreement between government agencies and microfinance institutions on interest rate subsidies of bank loans. The problem of creating an effective taxation system for microfinance is still remains unsolved. The differentiation of taxation of banks from non-profit organizations of the microfinance sector gives the latter, on the one hand, a price advantage for savings services due to the difference in taxation of depositors' income, and on the other hand, provides a right to create losses reserve with the purpose to avoid possible losses due to income taxation.

Comprehensive study of all microfinance entities required that the microfinance sector be classified by the founder as follows:

- Established by state - public-law territorial bodies;
- Private - residents: established by individuals and legal entities (entities);
- Affiliated branches and representative offices of the foreign organization in the territory of Azerbaijan.

This classification of organizations is consistent with the international statistical classification of financial intermediaries into sub-sectors: state, national, private, and external organizations. It is also possible to have joint microfinance institutions. Foreign organizations have played a stimulating role in the development of microfinance in the transitional economy of the country. The national microfinance sector should be categorized by separating external controls by three criteria: founder (public or private sector of the economy), purposeful activity (commercial or non-commercial), and degree of legalization. The investigated sector can be divided into two separate sub-sectors of the economy, both public and private. Each sub-sector, depending on its purpose, is divided into two segments: commercial and non-profit organizations. Public sector's financial activity is almost fully formalized. For the private sector, however, it is characteristic of being both formal and shadow. Each sub-sector acts as an independent subsystem, while the microfinance sector itself is part of the economic "top system" - financial infrastructure. An important feature of the microfinance sector is that it has a single internal goal that identifies development trends and provides the relative stability of its sub-sectors and structures. The main form of microfinance commercial sub-sector organizations is credit institutions with a network of branches, as well as branches and representative offices of foreign banks. The involvement of credit institutions in the process of microfinance is characterized as the improvement of the financial market. Therefore, these organizations are an important element of the microfinance sector as part of the banking sector with significant financial resources. The state subsidies for financial support of businesses complement the financial services market independently, addressing unemployment, recession, and shadow economy, which are essential to the development of society. The main feature of the financial intermediation of state support funds is the provision of gratuitous help. Since the financial resources of these funds are owned by state, regional or local governments, the peculiarity of public sector organizations of the economy is the implementation of their financial function as "public financial assistance". Thus, the function of the state microfinance sub-sector was to produce personal welfare - the benefits of social financial services. Social welfare gained as a result of provision of financial services plays a role of social stability in the society. In the transitional period, the microfinance sub-sector has played an important role in building the financial infrastructure for small businesses. The sector is underdeveloped due to low budget financing. Therefore, the main volume of financial resources is provided by banking sector organizations and non-banking microfinance institutions, which are financial intermediaries of the private sector of the economy. The state, acting as a financial donor, provides direct financial support, and through the public sector provides financial services to SMEs, that is, through intermediary financial support. It has been identified the most important ways of direct and indirect financial impact of the state on microfinance institutions, such as financial instruments such as bank reserves, taxes and subsidies. Also, it has been proved that the tax impact on microfinance depends not only on the taxation of the profits and operations of microfinance institutions, but also on the nature of the taxation of the operations and economic benefits of other counterparties: borrowers, creditors, donors and competitors. The external development factor of the microfinance sector is external financial control.

There are three options to control the activities of microfinance institutions:

- 1) External control exercised by public authorities;
- 2) Internal control by the self-regulatory bodies of microfinance institutions (associations and unions);
- 3) Combination of two types of control, depending on the degree of integration and coordination of actions.

It is proposed to support the development of a third control option in the country. The majority of financial institutions offering credit services to small businesses are not separate units but separate entities. For financial institutions to be viewed as a unit, it is important to have stable financial relationships among their structural elements, which take into account the specifics of small business in the country, which provide for cash allocation, optimal reallocation, accumulation and attraction. Lending is currently the driving force of the economy. At the macro level, loans enable us to maintain demand, increase consumption, and, ultimately, promote the production of goods and services. Micro-loans help businesses and then businesses avoid bankruptcy and (micro-loans) acts as a means of increasing working capital, as well as a base for expanding business. The most important problem of almost all entrepreneurs is the search for funds to get started. Getting out of this situation is a credit, but in practice it is often the case that many banks only work with large enterprises. Orders and business plans are generally not sufficient to obtain a loan, as banks only provide loans to existing businesses and organizations. Besides, an essential prerequisite for obtaining a loan is the security of the client's property. This is the end of the relationship with the lenders if the client is unable to secure bail for any reason. Banks accept cars, equipment, and personal property as collateral. Another important point is the solvency of the business. The creditor can be assured of the solvency of the business with the help of an audit of the borrower's financial performance. However, the entrepreneur must first apply for a loan, specify the type of activity, type and term of the loan. It may take 3-15 days for loan terms (conditions) to be agreed, and then the bank will issue or refuse a loan. To obtain a long-term loan with a low interest rate you need to have a positive credit history as well as a high paying capacity. The maximum amount of lending depends directly on the sustainability and financial sustainability of the enterprise. Lending is a very specific type of activity because enterprises and individual entrepreneurs are insecure borrowers. A comprehensive and systematic approach is needed to address the problems of business lending. The main purpose of banks in lending terms is to increase the confidence of entrepreneurs in their banking products. The bank is also interested in the prosperity of small businesses, as the profitability of business lending operations will depend on it.

5. CONCLUSION

The following measures are considered appropriate for the creation of favorable conditions for small and medium-sized businesses:

- Increase the volume of funds for the development of guarantee funds in the state and district budgets, as the operation of guarantee mechanisms can significantly increase the volume of lending to small businesses. According to international practice, the most effective measure is indirect support for small businesses, including the repayment of loans provided by financial institutions. Due to the limited financial resources of the state, it is necessary to attract additional sources of funding, including international financial institutions and organizations;
- Increase the volume of funds for subsidizing interest rates on loans of various levels. According to the banking sector, as well as small and medium-sized businesses, the government should subsidize 60% of the bank's interest rate, banks - 20%, and entrepreneurs - 20%;

- Develop a system to encourage the establishment and development of entrepreneurship insurance units - a mutual insurance society. These types of organizations are successfully operating in several EU countries;
- Promote the establishment of specialized banks for lending to small and medium-sized businesses. The activities of such banks could be carried out both with their own funds and with the support of the state refinancing mechanism. Also, it is possible to carry out state refinancing with the help of selected banks;
- Development of cooperation of small and large banks with the aim of expanding bank lending to small businesses and reducing credit risks. For example, large banks could allocate credit lines to small and medium-sized businesses to finance their partners. Thus, small banks can provide the micro-credit business needs more efficiently, while larger banks can generate income without significant costs for lending to many small and medium-sized businesses;

At the same time, it is believed that it is advisable to make some changes to the legislation:

- Taxable base should not include income from loans to small businesses;
- Assistance in creation and development of credit bureaus network;
- The procedure for extraordinary write-off of funds to repay the loan and interest on the loan must be established;
- Loans to small businesses should be considered as secured by the guarantee and guarantee of regional SMEs.

In order to increase the number of clients in the process of lending to small and medium-sized businesses, as well as to generate stable returns from them, banks should act as partners with you and businesses.

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ON ONE APPROACH TO ASSESSING THE INTELLECTUAL CAPITAL OF A HIGHER EDUCATIONAL INSTITUTION

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ABSTRACT

A key element in the university's intellectual capital management model is the assessment of its level. The article presents the role and importance of intellectual capital in the innovative development of universities. The task is to quantify the qualitative category of "intellectual capital". An integral assessment of intellectual capital is proposed, a statistical model for its measurement based on normalized indicators is developed, and an example of the use of the proposed model is given.

Keywords: *Intellectual capital structure, Assessment model, Education market competition, Human assets*

1. INTRODUCTION

Currently, the effectiveness of universities is characterized by the quality of the educational process, participation in the methodological, scientific, innovative and business processes. The article is devoted to the studying the problem of assessing the higher educational institutions' intellectual capital. The relevance and importance of assessing the university's intellectual capital is explained by the following factors:

- The need to increase the completeness, transparency of educational institutions' reporting and its publicity;
- The need for rapprochement of the universities' ranking methodology with generally accepted standards for evaluating the university's activities on a single basis;
- The emergence and development of business relations between universities and industrial enterprises;
- The necessity of Azerbaijani universities' involvement in European and world research space.

The university's intellectual capital is a combination of its intangible assets, the effective use of which determines educational competitiveness. Such assets include market, human, infrastructure assets, and intellectual property. The entire body of data on results of the university's activities is highlighted in a representative sample of six quantitative indicators, measuring human, structural, and client capital. The methodology for a qualitative assessment of university's intellectual capital is considered on the example of Azerbaijan State University

of Economics' performance indicators. The main information based on quantitative indicators is annual reports on the university's results. The proposed methodology allows quickly assessing the level of a university's intellectual capital and choosing the optimal strategy for managing an educational institution to increase intellectual potential and competitiveness.

2. RESEARCH METHODOLOGY

An analysis of the definitions of the "intellectual capital" category shows that there is no universally accepted definition of this concept satisfying all participants in educational relations. The article presents such a wording of the term "intellectual capital", which has a managerial focus. The authors attempted to divide this concept into substantive elements with other categories of the subject area; the article indicates the direction to the development of a method for assessing the level of intellectual capital, presents a path for further research in this direction. Based on significant statistical data collected in a single methodological vein, the index of intellectual capital for a university is calculated. At the same time, such research methods as analysis, comparison, generalization, as well as a systematic approach are used.

3. ESSENCE OF INTELLECTUAL CAPITAL OF THE UNIVERSITY

The category of "intellectual capital" was updated at the informational stage of economic development as a result of the desire to more fully inventory of production's main factors. In 1969, Galbraith defined the term "intellectual capital" as something more than the "pure intelligence" of a person, including a certain intellectual activity (Galbraith, 1979). Since then, researchers have repeatedly corrected and supplemented the definition of intellectual capital. So, Brooking writes that "intellectual capital is a term for intangible assets without which a company cannot exist, enhancing competitive advantages" (Faskhiev, 2011).. The components of intellectual capital are: human assets, intellectual property, infrastructure and market assets. Human assets mean the totality of the collective knowledge of the enterprise's employees, their creative abilities, problem solving skills, leadership skills, entrepreneurial and managerial skills of employees" (Brooking, 2001). According to Inozemtsev (Inozemtsev, 1998) "intellectual capital is information and knowledge specific in nature and forms of participation in the production process". The components of intellectual capital, according to Inozemtsev's point of view: the first is human capital embodied in the company's employees in the form of their experience, knowledge, skills, and ability to innovate, as well as to the general culture, philosophy of the company, its internal values; the second is structural capital, including patents, licenses, trademarks, organizational structure, databases, electronic networks. One of the key features of educational organizations, as well as other knowledge-based companies (consulting, legal, audit, design), is the fundamental role of intellectual capital (IC) in their activities, so the assessment of the work of such organizations is largely determined by the assessment of their IC. In contrast to the widespread non-quantitative (qualitative) methods for assessing IC, quantitative methods are practically not used in relation to universities or have limited use. At the same time, the development of precisely methods of a quantitative approach will create a methodological basis for the formation of principles for assessing the higher education system in general and universities in particular, and will also expand the ability to evaluate the effectiveness of costs.

4. INTELLECTUAL CAPITAL AND UNIVERSITY RANKINGS. EMPIRICAL RESULTS

Intellectual capital consists of several structural elements and various factors influence its quantity. Integral assessment of intellectual capital is a difficult task. First, the optimal choice of assessment indicators must first be made.

For this, Stewart recommends using three pragmatic principles (Stewart, 2007):

- Not complicate the task; an objective assessment requires no more than three measured parameters of each type of intellectual capital and one indicator that characterizes the intellectual potential of the organization as a whole;
- Only what is of strategic importance for the company needs to be measured;
- Only activities that create intellectual wealth need to be measured.

The above literature analysis shows that for the efficient and rational use of intellectual capital the problem of determining this category remains very important. We accept the definition given to intellectual capital by L. Edvinsson, who considered it as “a combination of human, structural, and client capital, each of which can be borrowed or owned” (Edvinsson, 2000). Therefore, the most important part of the university’s intellectual capital is human capital. The basis of its formation is education, skills and experience, talent and motivation of the individual. In order for human capital to work, it is necessary to organize a system that includes research laboratories, knowledge and databases, centers for bringing research and development to a wide range of know-how. In relation to the university, human capital is a part of intellectual capital, including knowledge, professional competencies and creative abilities of university employees and students. In this case, human capital is formed by investing in education, health, developing the abilities of teachers and students, as well as by investing in scientific, cultural and sports events (Tolcheeva, 2017). Structural (organizational) capital is that part of the IC that is relevant to the university as a whole. These are managerial procedures, teaching technologies, management systems and implementation mechanisms, application of IT technologies, forms of interaction between organizational structures, scientific schools, recognized and advanced research results, the culture of relations between employees of the organization, methods and means of motivation and relations to contractual obligations. Structural capital is the organizational capabilities of a university. It is responsible for how human capital is used in organizational systems that transform the management information for decisions making. Organizational capital is the property of the university and can be a relatively independent object both to assess the innovative maturity of the university and the subject of market distribution. The combination of human and organizational capital into a single system makes up a work team that possesses knowledge and is focused on specific tasks. Client capital is a part of the university’s intellectual capital which includes stable relationships with consumers of educational services (schoolchildren, applicants and their parents), partners and other contractors (government agencies, the media, foreign universities), as well as individualization tools (logo), databases on graduate employment, business reputation, a portfolio of orders for educational and research work. The goals of managing the university’s client capital are specific; for example, capitalization and profitability are almost irrelevant for it; on the contrary, the goals of financing activities are very important. Given the specifics of university activities, the development of client capital is aimed at achieving the following goals: attracting material resources; improving the quality of education; improving the reputation of the university; motivation of employees and university students. Together, all three IC elements - human, structural and client capital - are used in the main business processes of the university and form the main result of the universities’ activities - a graduate, future specialist, bachelor, master, etc. (Pronina, 2008). From the totality of data on the results of the university’s activities, we will single out a representative sample of six quantitative indicators, which, in our opinion, largely characterize the intellectual capital of higher education institutions. It is proposed to use the following indicators:

- k1 – Number of teaching staff;
- k2 – Number of professors in the teaching staff;
- k3 – Number of university employees going abroad for research and training;

- k4 – Number of articles published in the Web of Science;
- k5 – Higher education enrolments;
- k6 – Number of graduates with honors.

Indicators k1, k2, are a measure of human capital, k3, k4 are a measure of structural capital, indicators k5, k6 are a measure of client capital. Let us consider, based on the example of actual performance indicators of UNEC for five years, a methodology for the qualitative assessing the level of intellectual capital. The main information base of quantitative indicators is annual reports on the results of university's self-examination. These indicators must be normalized: the value of the indicator corresponding to the maximum quantitative level for the study period will be taken as 10 points; the remaining values of indicators for years are calculated in fractions relative to ten. A weighted characteristic is defined as the product of the value of an indicator expressed in points by its weight coefficient. A weighted characteristic is defined as the product of the value of an indicator expressed in points by its weight coefficient (Bronnikova & Zuntova, 2015). The source data and the calculation of the indicators' values are shown in Table 1.

Table 1: Values of indicators of intellectual capital of the university

Name of indicator	Weight of coefficient	Characteristic of indicators	The value of the indicator for years				
			2015	2016	2017	2018	2019
k ₁ - Number of teaching staff	0,30	Quantitative, people	950	897	834	817	850
		Score	10,0	9,4	8,8	8,6	8,9
		Weighted	3,0	2,8	2,63	2,58	2,68
k ₂ - Number of professors in the teaching staff	0,15	Quantitative, people	81	83	81	81	80
		Score	9,8	10,0	9,8	9,8	9,6
		Weighted	1,46	1,50	1,46	1,46	1,45
k ₃ - Number of university employees going abroad for research and training	0,05	Quantitative, people	31,0 0	39,0 0	52,0 0	65,0 0	49,0 0
		Score	4,8	6,0	8,0	10,0	7,5
		Weighted	0,2	0,30	0,4	0,5	0,4
k ₄ - Number of articles published in the Web of Science	0,30	Quantitative, pcs	2	7	17	40	210
		Score	0,1	0,3	0,8	1,9	10,0
		Weighted	0,03	0,10	0,2	0,57	3,0
k ₅ - Higher education enrolments	0,10	Quantitative, people	4535	4469	4468	4745	4739
		Score	9,6	9,4	9,4	10,0	9,99
		Weighted	0,96	0,94	0,94	1,00	1,00
k ₆ – Number of graduates with honors	0,10	Quantitative, people	1501	1218	2004	2388	2617
		Score	5,7	4,7	7,7	9,1	10,0
		Weighted	0,57	0,47	0,77	0,91	1,00

Source: Authors' calculations

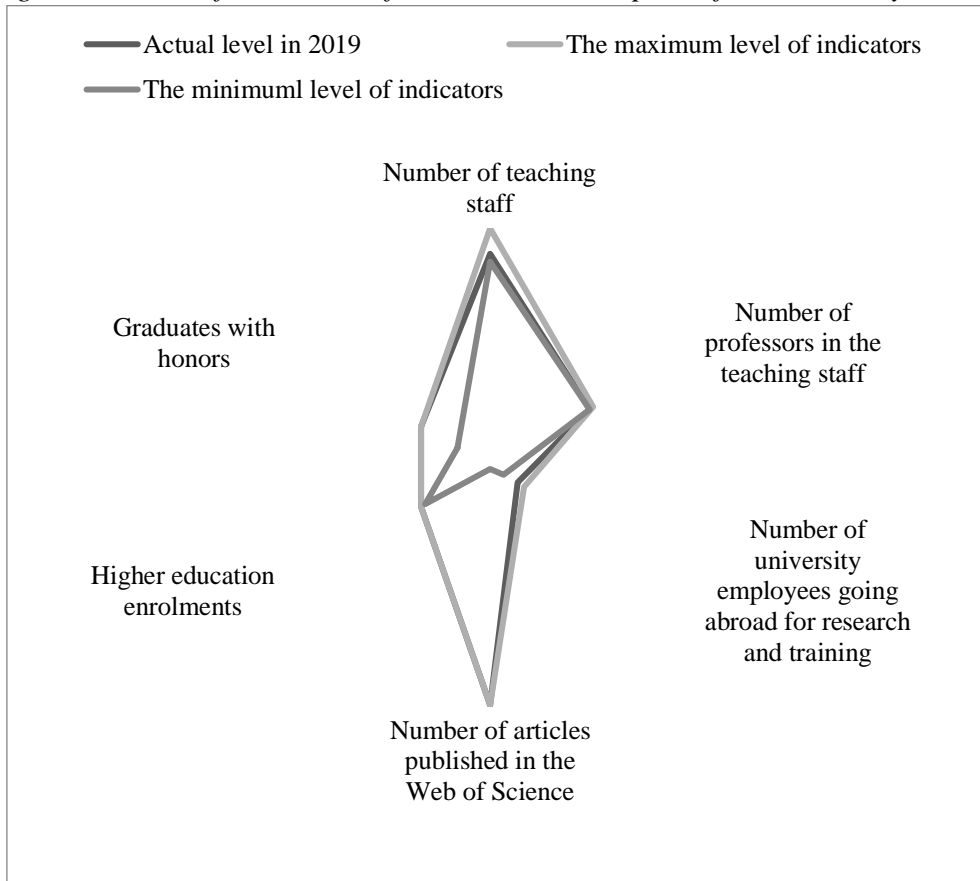
Using the data in Table 1, we will compile Table 2 from the indicators of the university's intellectual capital for 2019, indicators of the minimum level for five years and indicators of the highest possible level for these weighting factors of significance.

Table 2: Values of weighted indicators

Index	Indicator value		
	2019	Minimum	Maximum
k ₁	2,68	3,00	2,58
k ₂	1,45	1,50	1,45
k ₃	0,40	0,50	0,20
k ₄	3,00	3,00	0,03
k ₅	1,00	1,00	0,94
k ₆	1,00	1,00	0,47

Source: Authors' calculations

According to the data in Table 2, we construct radar diagrams (Fig.1). A graphical interpretation of the estimates reveals deviations of indicators from their maximum values. It is clearly seen that the strategies for increasing the number of publications in Web of Science (primarily by increasing the relevance and quality of publications) are relevant for the development of the university's intellectual capital.

Figure 1: Chart of indicators of the intellectual capital of the university in 2019*Source: Authors' calculations*

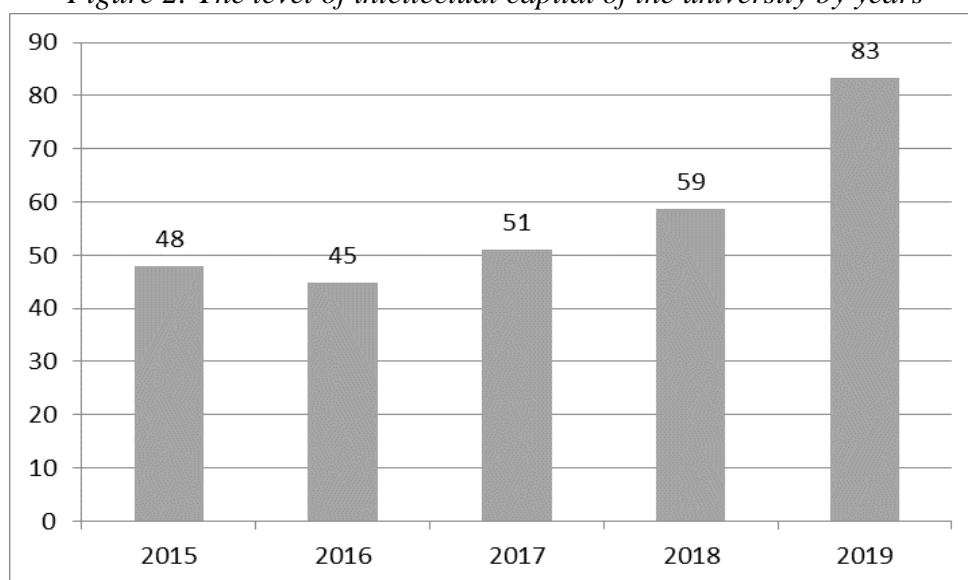
Having examined individual indicators we move to the integrated assessment of intellectual capital. To do this, using the calculation method is necessary. The model of intellectual capital is the area of the petal diagram in the Figure no. 1, the vertices of which are determined by the values of the weighted indicators of Table 1. The calculated values of the polygon areas by years are shown in Table 3.

Table 3: Values of integral indicators of assessment

Indicator	Year					The maximum possible value of the indicator (standard) (Zuntova, 2016)
	2015	2016	2017	2018	2019	
Area of radar diagram	3,06	2,86	3,26	3,76	5,32	6,39
Rate of IC, %	48	45	51	59	83	100

Source: Authors' calculations

Therefore, the annual assessment of the university's intellectual capital is the result of comparing the polygon area with a standard that reflects the area of the highest possible level. For example, the achieved level of UNEC intellectual capital in 2019 can be estimated as 83% of the maximum possible level.

Figure 2: The level of intellectual capital of the university by years*Source: Authors' calculations*

The visualization of the obtained data, shown in Figure no. 2, allows us to compare the achieved levels of the university's intellectual capital over five years. Assessment of the dynamics shows the IC growth. Of course, in order to draw serious conclusions from this, it is necessary, for example, to introduce additional informative indicators of intellectual capital into the assessment methodology and continue the observation for several more years. Unfortunately, the authors were not able to obtain publicly available data for the formation of a larger number of indicators with a large coverage of years.

5. DISCUSSION AND CONCLUSION

The relevance of the research topic stems from the fact that at present the success and development of national programs, commercial and non-profit educational organizations in a competitive environment increasingly depends on intellectual capital. Lack of attention to intellectual capital in many Azerbaijani universities currently does not allow increasing their competitiveness. This article confirms the findings of previous studies according to which for the development of a modern innovative economy the formation of a high level of intellectual capital of higher education institutions and the assessment of its use in the internal and external environment is extremely relevant.

In conditions of increasing competition in the educational services market, one of the central places in the university's management should be the effective management of intellectual assets. Also, great attention should be paid to the development of special management tools and methods with the aim of forming effective organizational and economic mechanisms for the accumulation and multiplication of intellectual capital by Azerbaijani universities. That is what will make it possible to increase the competitiveness of Azerbaijani universities in comparison with Western ones.

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OPPORTUNITIES AND PERSPECTIVES OF ECONOMIC EXPANSION OF AZERBAIJAN

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ABSTRACT

Azerbaijan has faced serious socio-economic problems at an early stage of the transition period as in all countries that are transforming to the new economic system. Approximately 60% reduction was observed in the economy of Azerbaijan from 1991 to 1995. On the one hand, the problem with the privatization of state property, the technological level of the privatized enterprises, and partly lack of investment in technological equipment the volume of products and services had sharply declined. Due to 20% of the territory of the country is occupied by Armenians, the resources in those areas have been out of economic turnover and the Azerbaijani economy has not grown, even has shrunk dramatically. Afterward successful socio-economic policies the country has been able to overcome this decline in a relatively short period of time and economic growth is beginning to follow. Initially, the formation of private entrepreneurship was accompanied by the economic revival. Liberalization of the economy in the country, determination of the limits of interference in the state economy, development of a favorable mechanism for foreign investment in the country (first of all, elaboration of the legislative framework) has served as the main source of economic expansion in Azerbaijan. The Contract of the Century which was signed with international oil companies (September 1994) was the largest (\$ 8 billion) investment to the Azerbaijani economy. Azerbaijan has gained more than \$ 150 billion revenue over the years of independence. These revenues served as the main source of investment in the development of other sectors of the country's economy. The development of other areas of entrepreneurship in the country also expanded the investment sources of the economy. More than \$ 250 billion has been invested in the country's economy through external and internal sources. As a result, Azerbaijan's economic boundaries have surpassed its geographical borders. The oil and gas pipelines connecting Azerbaijan with Europe, \$ 20 billion investment in the Turkish economy, about \$ 1.5 billion investment in the Russian economy, export level to European countries are key indicators of the country's economic expansion. In the long run, the development of the non-oil sector, reduction the specific weight of the able-bodied population in the agro-culture sector from 40% to 20%, economic diversification and development of science-intensive sectors will be key factors in Azerbaijan's economic expansion.

Keywords: *Economic expansion, Privatization, Diversification, Economic Liberalization*

1. INTRODUCTION

The economic expansion has been amongst the underrepresented challenges since the economy science has researched the economic growth and its qualitative and quantitative indicators. However, the economic expansion challenges have been superficially touched upon in certain economic literatures. For instance, “Essential of Economics” by Gregory Mankiw studies the “economic expansion” as one of the problems of macro-economy. The recently published Russian economic literatures also tried to explore some other qualitative indicators of the “economic expansion”. Even though economic expansion is identified as economic growth in most cases, we are assured that the economic expansion comprises far more expansive factors in itself. The economic expansion acts as the main source of economic growth. In comparison with economic expansion, the sources of the economic growth are more limited.

A rapid development of the globalized world in the last 100 years is more characterized with the economic expansion than the economic growth. The fact that the economic borders of the developed countries, USA and European states forge ahead their geographical borders is the significant condition characterizing the economic expansion of these countries. The economies of these countries could not have achieved today's development level with internal resources only. Accounting for nearly 30% of world products, the USA has achieved these not only by stimulating the economic growth within the national boundaries, but also by drawing other regions of the world in its interests. Although some countries that export capital in order to ensure their own high development do not achieve economic growth for a while, they expand their economic boundaries. Since the interest in capital is to bring in high profit, this cannot last longer. Gradually, the economic expansion turns to the fundamental factor of economic growth. Achieving the economic expansion is typical for every country that has preferred a course of an independent economic development.

2. PROBLEMS AND PERSPECTIVES OF ECONOMIC EXPANSION IN AZERBAIJAN

Azerbaijan utilizes all of its resources in order to manage economic expansion. With Azerbaijan restoring its independence, the geographical boundaries of the county had been identified. Subterranean and surface resources, air and water basin, economic potential fostered by the people's labor for years within these geographic boundaries turned into unexceptional property of Azerbaijan. At first glance, favorable condition emerged for the independent country to expand its economy. The collapse of administrative command economy allowed the independent country to expand its national economy in a scope in line with national interests by actively stimulating its whole economic potential. Like the other countries transforming into a new economic system, Azerbaijan faced rigorous socio-economic problems in the first stage of transition period as well. In the primary period of its independence, the GDP of the Azerbaijan fell by 60-70% of its GDP present in the last decade of when it was a part of USSR. This was sparked by a series of objective and subjective reasons. On the one hand, the privatization of the state property, low level and uncompetitiveness of technological capacity in the privatized enterprises led them to halt their operations. Moreover, the volume of production and service dropped dramatically since some of them did not possess investment to upgrade their technological equipment, which in turn required time to process. On the other hand, since 20% of the territories were occupied by Armenia, the resources of that area were out of economic cycle. Mostly due to these reasons, Azerbaijani economy had not expanded in that short-term period and even substantially scaled down. Successful socio-economic policy implemented in the county had prevented this downscaling in a short time and an economic expansion was observed. Primarily, private entrepreneurship was accompanied by economic revival. Liberalizing the economy, defining the limits of state intervention in the economy and developing an auspicious mechanism for a foreign investment (firstly, developing a legislation) became the main source of economic expansion in Azerbaijan. "The Contract of the Century" (September 1994) signed with foreign oil companies was the largest investment made into Azerbaijani economy in terms of its volume (about 8 billion USD). All the signed oil contracts caused Azerbaijan to gain a profit of over 150 billion USD during its independence. The development of oil sector, which is a driver for the economic expansion, is on focus along with the development of non-oil sector. The duration of co-working with the leading oil companies in Caspian Oil sector was extended. New contract of century (by 2050) envisages joint production of 500 million tons of oil in Azeri-Chirag and Gunashli oilfields. According to new "Contract of Century" 40 billion US dollars should be invested in oil sector in these years. SOCAR's share in the contract ascended to 25% from 11.6%. The share of Azerbaijan in the profit oil will be 75%.

Hydrocarbon is not able to turn into a factor of economic expansion for a long period, even though it gave an idea about the scope of national wealth to have the hydrocarbon reserves defined by the geologists. However, it has a decisive role in defining the capacities of economic expansion. Putting the semi-submersible drilling rig named after Heydar Aliyev into operation in 2017 allowed the oil drilling process at a depth of 1,000 meters of water and 12,000 meters of land, providing a condition for a new source of economic growth to get into an economic cycle. Production of associated petroleum gas, which was emitted to the atmosphere due to the application of new technology, damaging the environment rigorously, had become a source of both economic expansion and growth at no additional cost. The economic expansion stipulates economic growth not only in the country, but also in the regions. Ensuring macroeconomic stability was requiring to improve and effectively locate all forms of entrepreneurship that could form a new economic system. Since business entities assembled mostly in Baku and neighboring areas in the first period of independence of Azerbaijan, serious disproportion emerged in the use of labor and natural resources. Considering that almost half of the population and able-bodied population dwell in the regions and that regions are of quite powerful economic capacity, they possess resources enough for economic expansion. However, there is a huge need for government support since the regions go through more serious financial challenges in stimulating this economic capacity in comparison with big cities. Ensuring macroeconomic stability as of 1990s and rise in the oil profit allowed the country to gradually stimulate the entrepreneurial development in the regions and by doing so, to eliminate the economic disproportion between the capital and regions. Since then, the forms of entrepreneurship matching the economic capacity of the regions have been developed. The entrepreneurship in the agricultural production was prevailing in the regions. Even though favorable conditions were provided for the development of different entrepreneurial forms, the analyses indicate that disproportions between the regions still remain along with all the positive modifications, which in turn hinder the stable development to some extent. The differences in the socio-economic development of the regions are of quality and quantity. The reasons for the imbalance between the regions are interpreted and evaluated in various manners. This imbalance is reflected more between Baku and other economic regions. Since Baku is particularly home to an industrial production and other related infrastructural objects, this fact accelerates people's movement to Baku. However, these factors hamper the regional development of economy. Accordingly, it is worth noting that Baku accounted for 78% of gross production, 91% of industrial production and 61% of all the investments made in the fixed capital per country according to statistics data from 2008. Considering that the socio-economic problems of the regions were out of focus for certain period in the earlier times of macroeconomic stability, setting particular tools of regional policy in motion has been barely possible. Since each region is distinctive from others with its level of development, capacity of natural resources and specialization in production, the directions of the regional policy cannot be standard for all the regions. Additionally, based on the data of specific regions, the coordination of these directions is necessary. In order to resolve these problems, Azerbaijani government has endorsed deliberate programs such as "Strategic Road Map on National Economy Capacity of the Republic of Azerbaijan" and "State Programs on Socio-economic Development of the Regions of the Republic of Azerbaijan". These particularities have definitely been taken in account while drafting the programs on socio-economic development of the regions. Undoubtedly, use of the advanced expertise of the other countries would be beneficial. Most countries use two types of mechanisms: regional development programs centered on economic development agencies or municipal institutions; regional support schemes directly addressed to institutions. In the latter case, these supports are given as dotation, but usually as credit, grant, commercial loan or tax deduction. Gradually considering their characteristics, system for regional identification is applied. To this end, majority of countries accept the level of unemployment as the main indicator.

Certain elements of this experience are used in the agrarian sector of our country. In order to achieve the comprehensive regional development, four state programs were approved as of 2004 to accelerate the socio-economic development of the regions. Three of these programs have already been successfully completed, achieving their goals. The implementation of the fourth program, covering 2019-2023, has been started. As a part of deliberate policy, the IV State Program on Regional Development, covering 2019-2023, plays an exceptional role in ensuring macroeconomic stability of the country's economic development, diversification of the economy, balanced development of the national economic sectors, creating new enterprises and permanent jobs and elimination of disproportions between the regions as well as a drop in the poverty level. The application of modern technologies in realizing economic measures and use of advanced management experience have generally provided conditions for the increase in the economic power of the country. Accordingly, it is possible to achieve an economic expansion by increasing the level of macroeconomic indicators via the application of the last State Program on socio-economic development of the regions as well as an increase in the regions' shares in this ratio via the development of untraditional economic activities in the regions. The increase in the number of the employed persons and enterprises, expansion of tax system, development of various entrepreneurial forms (that are not typical for the regions) help to visualize the economic expansion in the regions. In the last decade, agriculture grew 1,4 times, non-oil industry 1,6 times and household consumption expenditures 4 times. It is not a coincidence that the gold exportation which usually regions account for have been ranked the second place in the export structure or tomato exportation that is traditional product of non-oil sector is in the first place. On the other hand, 3% increase in GDP, particularly 3% increase in the non-oil sector which is the main producer of necessary means of subsistence towards the end of the year, increase of over 15% in the non-oil sector and over 7% in agricultural production throughout 9 months of 2019 allow to visualize the economic expansion in the regions. The successful implementation of the planned measures led the level of population's welfare to grow. As a result, the economy expanded by 3,5 times and the incomes of the population ascended over 7 times. These profits have been the sources of investment in the development of the other agricultural fields. The development of other agricultural fields in the country expanded the sources of investment of the economy as well. The investment of over 250 billion USD has already been made in the economy, thanks to the external and internal investment sources. Subsequently, the economic boundaries of Azerbaijan have gone beyond its geographical boundaries. Oil and gas pipeline between Azerbaijan and Europe, regular expansion of its economic relations, its investment of 20 billion USD in Turkish economy, of nearly 1.5 billion USD in Russian economy, presence of more European partners in exportation are the main indicators of economic expansion in the country. A firm operating abroad with Azerbaijani capital is characterized by the expansion of the Azerbaijani economy as a result of the contribution of these firms, not by its contribution to economic expansion in the capital-importing country. This is not only the quality indicator of the firm, but also the measurable indicator of economic growth and expansion. The "Star" oil refinery factory put into operation in Izmir, Turkey in October, 2018 operates in 100% Azerbaijani capital. The 60% of its shares belong to Azerbaijan State Oil Company (SOCAR TURKEY Energy) and 40% to The Ministry of Economy of the Republic of Azerbaijan. In addition to treating Azerbaijani oil, this factory is the main provider raw materials for the "Petkim" factory that produces chemicals of Turkey. The Republic of Azerbaijan had a chance to benefit from the refine of the crude oil that belongs to itself and the finished product, by investing its capital in a foreign country. The Republic of Azerbaijan is forecasted to gain a profit of 864 million USD in the first five years of the "Star" oil refinery factory and 614 million USD in the next ten years, with its annual refining capacity of 10 million tons of crude oil. Although this factory is already beyond geographical territory of Azerbaijan, it is within its economic boundaries.

Our country gets a chance to participate in the generation of international value chain while Turkey sufficiently benefits from (particularly, in terms of employment) the investment of about 20 billion USD in the economy of Turkish Republic made by Azerbaijan (which is amongst the largest investors of the Republic of Turkey). So, the economic boundaries of our country extend. The increase in the quantity of economic subject within national boundaries, increase in the employed people in ratio to population growth, gradual involvement of economic capacity, which is unused in the economic cycle, and assembly production expands the country's economy. We believe that the economy expands not just to that extent, but further. As shown, the foreign capital invested in the country's economy that is amongst the necessary indicators of the expansion in Azerbaijani economy, and Azerbaijani capital becoming the source of investment in foreign economies are among the necessary factors characterizing the economic expansion nowadays. Azerbaijani economy has a capital of 4,5 billion USD Russian capital and Russia has a capital of nearly 1.2 billion USD Azerbaijani capital. Undoubtedly, these capitals account for certain percentage of GDP and GNP. However, in both cases, economic growth, increase in the employment level, savings and deposits cause an economic expansion. The acceleration of national industrialization, operation of "SOCAR-Carbomide" factory, with a total cost of about 1 billion euros, as of January 2019 are indicators of expansion of Azerbaijani economy. The considerable amount of its products is meant for export. Now, the economy is not limited to a geographic territory.

3. CONCLUSION

The economic expansion is able to benefit on a longer term while it is possible to observe benefits of the economic growth on a short term. So, what is observed is the increase in the portion that goes to consumption and savings as a result of annual GDP growth, or budget growth. However, it is not easy to estimate the benefits of 250 billion USD capital investment that has an exceptional role in the expansion of Azerbaijani economy. The increase in the entrepreneurial facilities and entities, the benefits they will bring in the long run, dissemination level of areas and regions with these objects, increase in the able-bodied and employed people in ratio to population growth and others are example to economic expansion. Azerbaijani Government has primarily allocated 1 billion USD to support economic entities in order to minimize the damage that might be caused to entrepreneurial subjects by COVID-19 pandemic that threatens the economic expansion. In order to ensure the use of this allocation on its reference, the economic sectors (tourism, transport, public establishments and other services) influenced more by COVID-19 have been defined. The following will turn to the main factors of economic expansion in Azerbaijan: change in the proportion of structural elements in favor of science-intensive areas provided that the economic growth will be ensured; increasing the share of innovative products and services; development of non-oil sector; reducing the share of the able-bodied people working in agriculture from 40% to 20% and directing them to other fields; increase in the entrepreneurial subjects, benefits they will bring in the long run, dissemination level of areas and regions with these objects; increase in the able-bodied and employed people in ratio to population growth; diversification of economy; developing science-intensive areas.

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INDUSTRIAL ENGINEERING LOGISTICS SYSTEM PERFORMANCE ANALYSIS AND EFFICIENCY IMPROVEMENT MEASURES DEVELOPMENT

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ABSTRACT

Recommendations have been developed to optimize the life cycle of an engineering product in terms of minimizing costs during the operation phase, and a project has been proposed for an integrated logistics support system. The study revealed that the timely provision of repair with parts, assemblies and mechanisms is the most important task of organizing the maintenance, and the presence of a spare parts fleet at the enterprise creates normal working conditions for production and repair and auxiliary workshops. It was determined that the entire system of organizing the preparation and conduct of repairs pursues the goal of the most complete use of the reserves for reducing equipment downtime. Achieving this goal is ensured by the extension of the overhaul periods (extensive direction) and the reduction in the duration of the repairs themselves (intensive direction). The latter seems to be especially important for achieving technological progress and introducing advanced manufacturing experience. It is concluded that the main directions and methods for improving the quality of repairs, reserves for reducing the time spent on their implementation and ensuring the reliability of the production equipment are: centralization and mechanization of repairs; widespread use of industrial repair methods; unification of parts and components of equipment; combination of professions and expansion of the functions of repair and maintenance personnel; uninterrupted and comprehensive maintenance of repairs with spare parts, materials, means of mechanization and tools; further improvement of repair planning, organization and remuneration of repair personnel. The whole system of organizing the preparation and conduct of repairs is aimed at the most complete use of reserves to reduce equipment downtime. Achieving this goal is ensured by the extension of the overhaul periods (extensive direction) and the reduction in the duration of the repairs themselves (intensive direction). The latter seems to be particularly important, technological progress and advanced manufacturing experience. The main directions and methods for improving the quality of repairs, reserves for reducing the time spent on their implementation and ensuring the reliability of the production equipment are: centralization and mechanization of repairs; widespread use of industrial repair methods; unification of parts and components of equipment; combination of professions and expansion of the functions of repair and maintenance personnel; uninterrupted and comprehensive maintenance of repairs with spare parts, materials, means of mechanization and tools; further improvement of repair planning, organization and remuneration of repair personnel. Timely provision of repair with parts, assemblies and mechanisms is the most important task of organizing maintenance and repair work. The presence at the enterprise of a fleet of spare parts creates normal working conditions for production and repair-auxiliary workshops.

Keywords: Logistic system, Operation, Mechanical engineering, Organization system, Technological progress, Industrial method, Industrial enterprise

1. INTRODUCTION

The problems of increasing the efficiency and competitiveness of industrial production in Azerbaijan against the background of an unstable economic and political situation on world markets require a radical revision of the existing paradigms of managing business entities at macro and microeconomic levels. The conceptual basis for updating the management system should be engineering economics - a concept that integrates the foundations of economic and engineering sciences in the methodology of organizational, economic and technical development of high-tech production. For enterprises producing complex high-tech products, including military and dual-use facilities, the engineering economy will ensure innovation and the introduction of new technologies, production efficiency and a competitive level of domestic products, taking into account international quality standards. Engineering economics is based on a comprehensive review and automation of life-cycle processes of high-tech products - development, design, production, supply, operation and disposal of high-tech products, their integration into a single information and logistics system [1]. Successful production activities require information interaction not only at the level of automated systems, but also between manufacturers and consumers of products, since the purpose of industrial production is to create products of the required level of reliability and maintainability, effective in operation and convenient to maintain. That is why the topic of this work is relevant and timely [2]. To achieve the goal of this work, it is necessary to solve the following tasks:

- Provide general information about the product;
- Give a description of the product life cycle;
- Analyze the possible types of failures, their consequences and criticality, taking into account the risk of sudden failures for the selected elements (components, assemblies, subsystems) of the product;
- Put forward a proposal and justification of various approaches to the formation of a maintenance and repair program;
- Analyze the resources needed to support the operational phase of the products.

Development of proposals for material and technical supply:

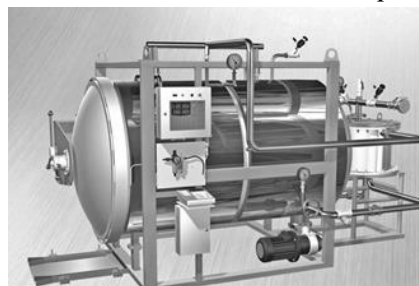
- Give an estimate of the cost of operating the product. Estimation of the planned cost of the product life cycle;
- Calculate the income of the enterprise from the production and delivery of spare parts to the customer;
- To analyze complex indicators of reliability and the indicator of logistic support.

The subject of the work is the construction of an integrated logistics system. The object of research is an AHB (Autoclave Horizontal with Basket) type autoclave made of stainless steel.

1.1. General product information

Horizontal two-basket autoclave with microprocessor control system (Figure 1).

Figure 1: Horizontal two-basket autoclave with microprocessor control system



An AHB stainless steel autoclave with a bayonet closure is designed to sterilize food and pharmaceutical products in various consumer containers with a temperature regime of up to 150°C at overpressure [3]. Uniform irrigation of containers during heating, sterilization and cooling is carried out by forced circulation and spraying through special nozzles. For the most efficient use of water and energy, a spiral heat exchanger is built into the device, which allows to reduce the irrevocable monthly discharge of water from the autoclave. The control system provides control of the sterilization process in accordance with the modes set by the technologist. The design of autoclaves should provide:

- Quick opening and closing of covers and sealing of their connection;
- Continuous drainage of condensate;
- Automatic control of the technological process of steaming;
- Remote control of the bayonet lock and opening - closing the lid of the autoclave;
- Fixing the cover in the open position;
- Overlapping along the entire length of the teeth of the flange of the lid and the flange of the housing (bayonet ring);

Technical characteristics are presented in Table 1.

Table 1: Specifications

Overall dimensions, mm	
- length with the closed cup	3 900
- length with the open cup	5 000
- width	2 020
- height	2 100
Case diameter (inner), mm	1 300
Weight with set of accessories, kg	2 520
Capacity of the autoclave, baskets, pcs.	2
Internal dimensions of the basket, mm	950 x 820 x 780
Maximum temperature, °C	150
Unevenness of the temperature field during the sterilization period	± 0,5
Working pressure, MPa	0,4
Pressure adjustment with accuracy, MPa	± 0,0049
Consumption per cycle:	
-cold water for cooling (18°C), cubic m	2,15
or	
-icy water for cooling (4°C), cubic m	1,5
- vapor, kg*	180
- compressed air, cubic m *	3
- electric power, kWh	5
Supply voltage	380V, 50Hz
Full specified service life of the autoclave, at least, years	15

- The difference of the gaps S between the tooth of the flange of the cover and the cavity of the housing (bayonet ring) for any two diametrically spaced teeth of engagement is not more than 3 mm;
- Freedom of axial temperature movement of the housing;
- The inability to open the covers of the autoclave under pressure;
- The impossibility of supplying steam to an open autoclave;
- Visual control of steam pressure.

The design of the autoclave should provide for continuous recording on paper tape of the following parameters:

- Steam temperature inside the autoclave;
- Steam pressure inside the autoclave;
- The temperature difference between the upper and lower generatrix of the housing in the central section.

The design of the autoclave should provide the ability to control during operation the following parameters:

- The presence of condensate;
- The speed of heating and cooling the housing;
- Values of thermal elongation of the housing;
- Steam pressure inside the autoclave;
- Overlapping along the entire length of the teeth of the flange of the lid and the flange of the housing (bayonet ring);
- The difference of the gaps between the teeth of the flange of the cover and the cavity of the flange of the housing (bayonet ring) for any two diametrically located teeth.

Distinctive features. Spiral double-circuit heat exchanger of an original design (in contrast to foreign plate or tubular analogues):

- Separates the sterile medium (water in the autoclave) from the non-sterile one (steam, process water used for cooling), which allows sterilization in any type of container to be carried out efficiently;
 - Avoids water treatment, which significantly reduces the total cost of operating costs; provides a higher quality of sterilization due to a more uniform temperature field in the plane of the autoclave;
 - Allows the use of chilled water in a closed cycle, which also leads to water savings;
 - Has the highest efficiency for steam-water media used in autoclaves;
 - Eliminates thermal shock, which is especially important when sterilizing glass containers.
- Nozzles: A special form of self-cleaning nozzles of the choking device allows you to convert part of the choking water into steam, which greatly improves heat transfer inside the autoclave. The autoclave does not require water treatment, it also does not need to prepare steam and air.
- Material: The autoclave, heat exchanger and binding lines are made of stainless steel. This increases the life of the autoclave up to 20 years.
- Operating principle: The AHB type autoclave is designed to sterilize products using the irrigation and showering method [4].

The principle of operation of a horizontal two-basket autoclave differs significantly from the sterilization process using standard vertical autoclaves with steam-air or water sterilization and consists in the following:

- The product requiring sterilization is placed in special baskets, which are placed in an autoclave. The technologist launches the sterilization program (microprocessor control system provides the execution of 20 programs). From the boiler room through the pipe, hot steam is supplied to the heat exchanger, and its flow is regulated by a steam valve. In the heat exchanger, steam gives off heat to the choking water, due to which the product is heated in the autoclave. Choking water with a pump moves in a closed circuit through a heat exchanger and is poured from top to bottom through nozzles of a choking device;

- Next, sterilization takes place directly. When the set temperature and pressure reach the desired value corresponding to the product in the autoclave, the valves close and the autoclave works according to the thermostat principle.
But, since the temperature gradually decreases under the influence of the environment and the pressure drops due to valve leaks, the steam valve opens when necessary;
- Then the cooling process takes place: steam stops feeding to the autoclave (if it was supplied to the heat exchanger). Instead of steam, cold water enters the heat exchanger, which begins to cool the choking water. In this case, the pressure is regulated by a relief valve, and the cooling rate is regulated by a cold water valve;
- Sterilization water is used in a closed cycle. Temperature, pressure and sterilization time are automatically controlled using a microprocessor control system [5];
- The water used for cooling does not come into contact with the container, since it is separated by the wall of the heat exchanger. Therefore, for cooling, you can use any process water that can be used in a closed loop in order to save.

Product Composition:

- 1) The autoclave assembly itself, mounted on a welded frame and consisting of:
 - Housings with bayonet lock flange,
 - Two collectors with self-cleaning nozzles;
 - Spiral heat exchanger;
 - Safety valve;
 - Circulation pump;
 - Instruments (pressure gauges, resistance thermometer, technical thermometer);
 - Autoclave communication.
- 2) Gaskets, baskets, trolleys, as well as the bottom of the baskets, automation of loading and unloading baskets.
- 3) The microprocessor control system includes:
 - A control device including a pneumatic module and temperature and pressure recorders, a connecting box;
 - Pneumatic-controlled valves for supplying steam, water, air and discharge control;
 - Pressure meter;
 - Temperature sensor;
 - Air preparation unit;
 - Set of mounting parts.

The microprocessor autoclave control system provides any of the specified sterilization modes from any raw material and in any container. The system stores in memory up to 20 sterilization programs.

2. DESCRIPTION OF THE PRODUCT LIFE CYCLE

Autoclave life cycle from development to disposal:

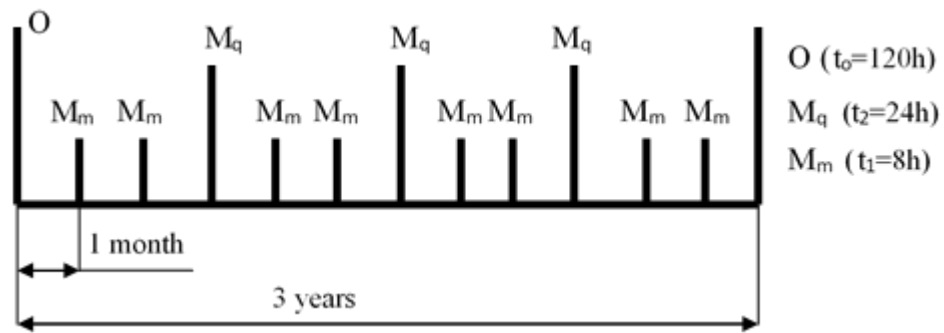
1. Development according to the technical specifications of the design documentation for the pressure vessel, software and autoclave control system;
2. Production of vessel under pressure according to design documentation, control system, software;
3. Supervising, testing of the autoclave units operation at the factory;
4. Supply of equipment to the customer;

5. Commissioning at the customer's enterprise with the subsequent provision of warranty service;
6. Service during the life of the autoclave.

3. PROPOSAL AND JUSTIFICATION OF VARIOUS APPROACHES TO THE FORMATION OF A PROGRAM OF MAINTENANCE AND REPAIR

The maintenance and repair system provides for the following types and repairs of equipment: routine overhaul maintenance, periodic inspections, audits, scheduled repairs. Scheduled repairs include inspection, partial disassembly of equipment, replacement of wearing parts, alignment of individual components, replacement of lubricant, checking clearances, fasteners. Overhauls include the dismantling of essentially all equipment, the replacement or correction or fixing of all worn parts, the subsequent installation, alignment and testing of all equipment as a whole. During repairs, design improvements to components and mechanisms, i.e. their modernization, ensuring their durability and performance [6]. Emergency repairs are primarily associated with unexpected malfunctions and breakdowns of equipment due to an increase in the load not provided for by the operating mode, due to interruption in the supply of lubricant, due to defective parts and assemblies. Therefore, emergency repairs cannot be planned in advance. The annual maintenance plan is compiled by the department of the chief mechanic of the enterprise for the current and major repairs of equipment of the main workshops for each workshop in the planned year. The schedule is drawn up on the basis of plans approved by the management of the parent company for repairs of the main technological equipment in the planned year, requests from workshops for conducting, as well as regulatory data on the frequency and duration of repairs specified by this regulation. One approved copy of the annual maintenance plan (or approved part of it) is sent by production workshops one at a time - to each of the specialized enterprises of the supply chain involved in repairs; one copy of the schedule remains in the Chief Engineering Department (CED) for accounting and control. The schedule provides for the recording of planned deadlines for the duration of equipment shutdowns for repairs, as well as notes on the actual repairs performed [7]. The schedule is signed by the chief mechanic, agreed with the chief power engineer and repair trust and approved by the management of the enterprise. The approved schedule should be brought to the shops no later than one month before the start of the planned year. Marks on the actual performance of repairs are made at the end of them: in the workshops - by the mechanic of the workshop, in the enterprise - by the responsible person of the bureau of scheduled repairs of CED equipment [8]. The monthly maintenance schedule is compiled by the production workshops in conjunction with the chief mechanic's department on the basis of the approved annual schedule of ongoing and overhauls of the enterprise's equipment [9]. When compiling a schedule, the start dates of repairs in the planned month and their duration are compiled. If necessary, repairs of equipment, the implementation of which is not provided for in the annual repair schedule, may be included in the monthly maintenance schedule. The approved monthly repair schedule should be transferred to the shops no later than 10 days before the start of the planned month. The monthly schedules provide for the recording of planned dates of equipment shutdowns for repairs and their duration, as well as marks on actually performed repairs, which correspond to two horizontal lines for each type of equipment. Marks on the actual implementation of repairs are made after they are completed: in workshops - by a workshop engineer, in CED - by a responsible person of the maintenance bureau. The complexity, frequency and duration of repairs of the autoclave are presented in Table 2. Using this table, we will draw up a structural graph of the repair cycle (Fig. 2), which clearly shows the contents of the repair cycle.

Figure 2: Maintenance schedule (yearly)



Mm - monthly maintenance, *Mq* - quarterly maintenance, *O* - overhaul once in a 3-year period, *tm* - monthly maintenance duration time, *tq* - quarterly maintenance duration time, *to* - overhaul duration time

We compile a Table 2, based on the above figure.

Table 2: Autoclave maintenance schedule (yearly)

№	Items	Indicators	
		Days	Hours
1	Calendar working time	365	8760
2	Nominal working time	358·1/3	8600
3	Total duration time of scheduled maintenances:	8·1/3	200
	- total duration time $8 \times t_m$ of monthly maintenances M_m	2·2/3	64
	- total duration time $4 \times t_q$ of quarterly maintenances M_q	4	96
	- total duration time $1/3 \times t_o$ of overhaul O	1·2/3	40
4	Scheduled working time t_s	350	8400
5	Downtime, not related to the technical condition of the equipment	5	120
6	Emergency repairs	1	24
7	Actual operating time t_a	344	8256

We determine the coefficient of extensive use of the autoclave:

$$K_x = t_a / t_s = 8256 / 8400 = 0,983$$

Thus, the autoclave in 2018 is used at 98.3%.

3.1. Analysis of the resources necessary to support the operational phase of the products

3.1.1. Development of proposals for logistics

To carry out technical repairs and maintenance of the autoclave, parts and consumables are presented, which are presented in Table 3.

Table 3: Logistics of the autoclave

№	Product name	Qty	Price per unit (manat)	Cost
1	Water pump	1	7520	7520
2	O-ring	64	370	23680
3	Filters	2	7668	15336
4	Oil pump	1	10272	10272
5	Adapters	1	992	992
6	Cleaning reagent, kg	17,5	90	1575
7	Gaskets	6	863	5178
	Total			64553

Thus, the total need for material and technical resources in the course of 1 year of operation of the autoclave is 64553 manats.

3.2. Estimated cost of operating the product

3.2.1. Estimation of the planned cost of the product life cycle (PLC)

The maintenance cost, taking into account the presence of various methods, is determined by the formula:

$$C = C_m + P + E_s + E_o + E_t + E_l$$

Where: C_m - cost of materials, P - total payroll, E_s - social expenses, E_o – overheads, E_t - transport expenses, E_l - storage and other logistic expenses.

To calculate cost of materials C_m see Table 3.

$$C_m = (7520 + 23680 + 15336 + 10272 + 992 + 1575 + 5178) \times 1.5 = 96829.5 \text{ (manat)}$$

- Overhaul working hours - 120 hours;
- Team management working hours - 35 hours;
- Excess fare for team management - 10%;
- Excess fare for night shift - 40%;
- Excess fare for evening work - 20%;
- Premium for high-quality work - 100%;
- Weighted average hourly payment is 29.63 manat;
- The number of people in the repair team needed to complete the overhaul is 8 people.

Define the basic payroll:

$$P_b = 29.63 \times 120 \times 8 + 29.63 \times 35 \times 0.1 + 29.63 \times 120 \times 1 + 29.63 \times 40 \times 8 \times 0.4 + 29.63 \times 40 \times 8 \times 0.2 = 37793.06 \text{ (manat)}$$

Determine the additional payroll:

$$P_+ = 37793.06 \times (154674.21 / 843881.47) = 6927.05 \text{ (manat)}$$

Determine the total payroll:

$$P = P_b + P_+ = 37793.06 + 6927.05 = 44720.11 \text{ (manat)}$$

We determine the deductions for social needs:

$$E_s = 44720.11 \times 0.26 = 11627.23 \text{ (manat)}$$

Determine the overhead:

$$E_o = 44720.11 \times 0.203 = 9078.18 \text{ (manat)}$$

We determine the transportation costs:

$$E_t = 96829.5 \times 0.05 = 4841.48 \text{ (manat)}$$

Determine the storage and other logistic costs:

$$El = 96829.5 \times 0.012 = 1161.95 \text{ (manat)}$$

We determine the maintenance cost:

$$C = 96829.5 + 44720.11 + 11627.23 + 9078.18 + 4841.48 + 1161.95 = 168258.45 \text{ (manat)}$$

3.2.2. The calculation of the income of the enterprise from the production and delivery of spare parts to the customer

For an approximate calculation of the company's income from production and delivery of spare parts to the customer, the following initial data are required:

- T_{op} - calendar duration of the final product operation before decommissioning (year);
- $\tau_{op i}$ - calendar duration of the i -th component operation (assigned resource) until replacement (year);
- k_i - number of i -th components in the final product (pcs);
- c_i - average selling price of the i -th component (excluding discount) (manat);
- I - total number of replaced components types (pcs);
- T_{rel} - calendar period of the final product release (year);
- n - average annual output of the final product (pcs/year).

The number of replacements of the i -th component during the T_{op} period (need for spare components):

$$z_i = \frac{T_{op}}{\tau_{op i}}$$

Revenue from the sale of the required number of replaced components for one final product for the entire period of operation:

$$C_z = \sum_{i=1}^I z_i k_i c_i = T_{op} \sum_{i=1}^I \frac{k_i c_i}{\tau_{op i}}$$

Revenue per one year (per product):

$$C_z^{year} = \frac{C_z}{T_{op}} = \sum_{i=1}^I \frac{k_i c_i}{\tau_{op i}}$$

If productivity is n pcs / year during the T_{rel} time and each product is decommissioned upon reaching the specified T_{op} period (periods associated with reaching the design output and gradually phasing out production are not considered for simplicity), the total service life of all released products: $T_{life} = T_{rel} + T_{op}$. The average number of products annually in operation during the TSL period under these conditions will be:

$$N_{av} = \frac{n T_{rel} T_{op}}{T_{rel} + T_{op}}$$

Then the total annual revenue from the manufacture and sale of components to be replaced will be (on average):

$$C_{av}^{year} = N_{av} C_z^{year} = \frac{n T_{rel} T_{op}}{T_{rel} + T_{op}} \sum_{i=1}^I \frac{k_i c_i}{\tau_{op i}}$$

From the Table 3 we determine (the operation of each resource is 1 year in average):

$$C^{year} = 1 \times 7520 + 64 \times 370 + 2 \times 7668 + 1 \times 10272 + 1 \times 992 + 17.5 \times 90 + 6 \times 863 = 64553 \text{ manats}$$

With a life of 15 years, the amount is:

$$C = 15 \times 64553 = 968295 \text{ manat.}$$

3.3. Analysis of complex indicators of reliability and indicator of logistic support

The logistic support index tasks is indicated by the term Supportability - "suitability for support". Supportability is a concept that determines the degree (measure) in which the structural properties of a product, the structure and properties of a support system for its technical operation, as well as planned or actually used logistics resources satisfy the requirements for its readiness in peacetime and wartime with certain cost restrictions [10]. The supportability indicator is a numerical assessment of support as a function of reliability (failure-free) parameters, maintainability, operational manufacturability, and also the costs associated with using the product for its intended purpose. The supportability indicator is a complex parameter that depends on technical and organizational factors, including:

- The reliability of the product and its components, measured by the mean time between failures or the average time between failures;
- The average time spent on repairs;
- The average recovery time (bringing into working condition) after a failure characterizing the maintainability of the product;
- The average time between services;
- The average time between replacements of units and assemblies;
- The required level of readiness;
- The required level of service, etc.

The supportability indicator can be estimated as the ratio of one of the comprehensive indicators of product reliability to the average annual cost of supporting the operation:

$$S = \frac{K}{Z_m} T$$

Where: K - a comprehensive indicator of the reliability of the product; T - the duration of the planned period of use of the product; Z_m - the average annual maintenance support costs (the costs of the operation of the technical maintenance system, which includes the costs associated with the maintenance and repair work, the costs of implementing diagnostic and monitoring systems, the costs of creating and storing inventories (materials), components and spare parts), as well as the costs associated with unscheduled repairs in the event of sudden failures, the costs of recovery from emergencies, the costs associated with downtime of the products (short profit), penalties, etc.) [9,10].

The main comprehensive indicators of reliability are given in Table 4. The choice of indicator should be carried out depending on the type and functional purpose of the product, for example, for weapons and military equipment - these are the combat readiness, operational readiness coefficients, for civilian equipment used for commercial purposes, this may be the technical utilization coefficient, for hydropower plants it may be the coefficient of the planned application etc.

Table 4: Comprehensive indicator of reliability

Comprehensive indicator of reliability	Characteristic	Calculation formula	Value
Availability factor	The probability of the object being in working condition at an arbitrary point in time, except for those planned periods during which the use of the object for its intended purpose is not provided.	$K_a = \frac{T_0}{T_0 + T_{rec}}$	0,97
Operative availability factor	The probability of the object being in working condition at an arbitrary point in time, except for the planned periods during which the use of the object for its intended purpose is not provided, and, starting from this point in time, the object will work faultlessly for a given interval t_{oa} .	$K_{oa} = K_a P(t_{oa})$	0,96
Downtime coefficient	The probability that the object will be inoperable at an arbitrary point in time.	$1 - K_a = \frac{T_{rec}}{T_0 + T_{rec}}$	0,04
Utilization rate	It characterizes the fraction of the time the object was in operable condition relative to the duration of the operation phase, containing all types of maintenance and repair.	$K_u = \frac{\overline{t_m}}{t_m + T_m}$	0,92
Coefficient of planned use	The fraction of the duration of the operation phase during which the facility should not be on the scheduled maintenance and repair process.	$K_{pu} = \frac{t_{op} - t_{pm}}{t_{op}}$	0,94
Efficiency retention rate	It characterizes the degree of influence of failure of product elements on the effectiveness of its intended use.	$K_E = \frac{E}{E_0}$	0,08
The effectiveness of the use of the facility for its intended purpose	The property of an object to create a useful result during the operational phase under certain operating conditions. It is an indicator of the quality of the object, characterizing the performance of its prescribed functions.	For various types of objects, there are their own analytical expressions for calculation; are given in GOST 27.003-89.	0,97

T_{rec} - average recovery time (as you can take the total downtime of the product)

T_0 - mean time between failures (time the product was in working condition)

t_p - mathematical expectation of operating time of the restored object

t_m - mathematical expectation of downtime intervals during scheduled and unscheduled maintenance and repair work

t_{op} - the duration of the operational phase declared in the technical documentation

t_{pm} - mathematical expectation of scheduled maintenance and repair work for the operation phase

E - efficiency for a certain period of operation of the facility

E_0 - the nominal value of the efficiency indicator E , calculated provided that there are no object failures for a certain period of operation

Azerbaijan's industrial enterprises, including ferrous metallurgy enterprises, have introduced a system of maintenance and repair, the most effective system for organizing the operation and systematic repair of equipment. This system represents a set of organizational and technical measures for the early preparation for repairs, technical maintenance, supervision and repair of equipment proper, carried out on schedule and ensuring the normal operation of the equipment. The measures are aimed at preventing a progressive increase in wear, preventing accidents and restoring the reliability, durability and accuracy of equipment lost during operation [10]. The maintenance and repair system provides for a clear alternation and regulation of the periods of rhythmic operation of the equipment in accordance with the established regime and preventive measures. In the conditions of a centralized form of organization of a repair facility, the MRO system ensures the performance of repair work of all kinds, including capital, in the shortest possible time with high quality and low cost. One of the main tasks in organizing repairs is to comprehensively reduce their labor intensity, which is achieved by using industrial methods, i.e. sub-unit, modular ways of replacing equipment, mechanization of repair work, and other measures. With the knot method, the failed parts are removed from the equipment together with the nodes, with the aggregate method - together with the entire unit. Instead of units and assemblies with defective parts, the same prefabricated and assembled units are installed, and units equipped with parts suitable for work. The necessary conditions for the use of industrial repair methods are the development of a progressive technology of repair work using multi-tiered and parallel maintenance, the equipment of special sections and sites for assembling units and assemblies, the organization of work of repair teams in a single outfit. The effectiveness of the sub-site method and the modular repair method is expressed in a significant reduction in its duration [3,7]. The acceleration of repairs and the reduction of their complexity also contribute to: the implementation of the maximum possible amount of repair work to stop the units; installation of structures with integrated nodes.

4. CONCLUSION

Timely provision of repair with parts, assemblies and mechanisms is the most important task of organizing maintenance and repair work. The presence at the enterprise of a fleet of spare parts creates normal working conditions for production and repair-auxiliary workshops. The whole system of organizing the preparation and conduct of repairs is aimed at the most complete use of reserves to reduce equipment downtime. Achieving this goal is ensured by the extension of the overhaul periods (extensive direction) and the reduction in the duration of the repairs themselves (intensive direction). The latter seems to be particularly important, technological progress and advanced manufacturing experience. The main directions and methods for improving the quality of repairs, reserves for reducing the time spent on their implementation and ensuring the reliability of the production equipment are: centralization and mechanization of repairs; widespread use of industrial repair methods; unification of parts and components of equipment; combination of professions and expansion of the functions of repair and maintenance personnel; uninterrupted and comprehensive maintenance of repairs with spare parts, materials, means of mechanization and tools; further improvement of repair planning, organization and remuneration of repair personnel.

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QUALITY FACTOR IN ENTERPRISES AND MODERN METHODS OF ITS PROVISION

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ABSTRACT

The rapid development of science and technology requires the application of newer-modern methods in order to ensure quality and comprehensive efficiency in enterprises, as in all areas of human activity. Thus, the longevity of any organization and enterprise directly depends on the high level of its economic efficiency. This, in turn, depends on the quality and affordability of its products. To date, many systems have been developed to ensure quality in enterprises, and have been tested and applied by enterprises with different production volumes in different parts of the world. And as a result, quality systems have been obtained, which are applied today and consist of modern methods that significantly improve quality, reduce production costs and losses, and obtain high-quality products with lower cost value. High quality of the product, its competitiveness and very easy access to foreign markets are achieved by implementing the requirements of such systems and international standards used in this field: ISO 9001, EQS, GMP, HACCP, QS 9000, etc. The use of international standards and quality management systems in is an effective factor in the competitiveness of goods and services that have entered the world market. These systems have their own requirements, and these requirements involve the management of internal and external factors that affect the enterprise. Also, quality management requires a written record of all work done, activities performed, and special control over those records. In general, the application of these systems is a comprehensive and extensive process that promises great economic benefits to the enterprise and a special place in the world market.

Keywords: *Enterprise, International standards, Quality, Quality system requirements*

1. INTRODUCTION

The idea of a quality management system is to minimize inconsistencies and traceability of products by creating the most operational system for making managerial decisions and the distribution of functions and responsibilities in order to avoid chaos. The idea of a security management system is to control, prevent and eliminate risks that can affect product safety and consumer health. In general, the main principle of the quality management system is the continuous improvement of product quality. Thus, an effectively organized quality management system provides the conditions for a stable organization of quality, as it provides control over each stage of the product life cycle. These systems include both process and system approaches, which are also considered useful for managing the enterprise as a whole.

2. THE MOST WIDE INTERNATIONAL QUALITY MANAGEMENT SYSTEMS

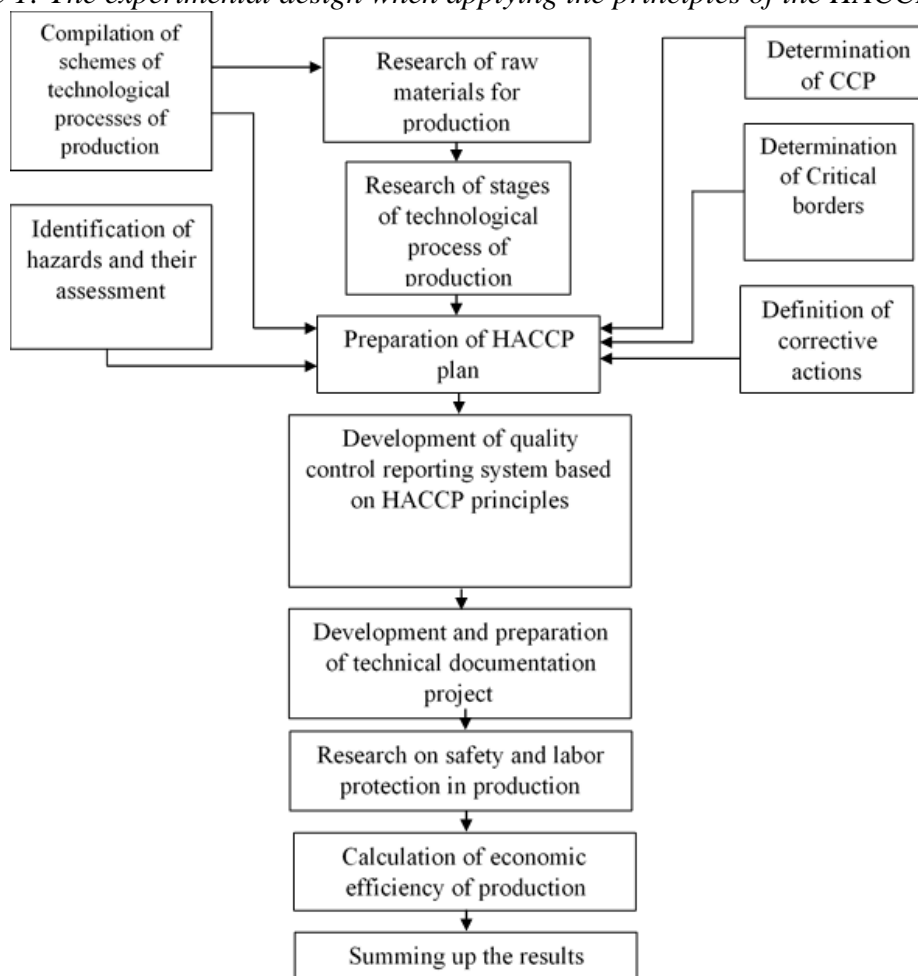
The most important condition for ensuring high quality is the organization of an effective Quality Management process. The most widely used effective quality management systems in the world are the HACCP (Hazard Analysis and Critical Control Points) system, TQM (Total Quality Management), ISO 9001 standard and Integrated Management Systems (IMS). These normative documents provide comprehensive control over the processes in the enterprise and

production in general. Each of them has been applied and tested many times by companies operating in different countries. The requirements for quality management are reflected in the structure of these systems, the rules of their application are indicated.

2.1. Application of HACCP system principles and impact on quality

This system provides quality control at any point in production activity by pre-assessing the risks and taking the necessary measures. The HACCP system is a quality system for food safety management, primarily a warning activity that systematically detects, evaluates and monitors potential hazards (biological, chemical and physical) that may arise during production. (GOST R 56671-2015)

Figure 1: The experimental design when applying the principles of the HACCP system



Source: <https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines>

The principles of the HACCP system are used only to manage the risks that may arise in the production of food products and, consequently, the quality. The application of this system in any enterprise is a very serious process and requires constant control. Any manufacturer sets a goal for the company. To achieve this goal, it is important to consider the risks that may affect the outcome, develop an appropriate action plan and apply it if necessary. For this purpose, activities such as establishing a risk management system in enterprises and thus identifying potential risks, assessing and taking into account existing risks, pre-preparation and application of precautionary and corrective measures are applied. The main goal of an effective risk management process in an enterprise is to minimize losses and maximize profits.

Risk implies the uncertainty of the outcome, including the positive (new opportunities) and negative (threat) consequences of actions or events. All activities to be carried out for the purpose of risk management in the normative and technical documents to be applied are aimed at the gradual reduction and minimization of the negative effects of risks (E. U. Putilina. Principles and Guidelines on Implementation. 2009).

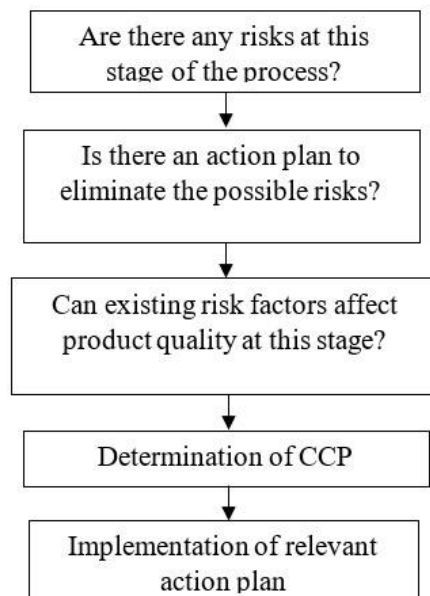
2.1.1. Basic principles of HACCP system

The application of the HACCP system in enterprises implies the implementation of the following principles in the appropriate sequence (<https://food.unl.edu/seven-principles-haccp>):

- 1) Carrying out a comprehensive risk analysis;
- 2) Identification of critical control points;
- 3) Defining critical boundaries for each control point;
- 4) Establishment of monitoring process of critical control points;
- 5) Development of corrective measures;
- 6) Establishment of registration and documentation procedures;
- 7) Determining the procedure for checking the set of documents to be kept in a permanent working condition.

As can be seen from the sequence, the main principle in the application of the HACCP system in the enterprise is to conduct a comprehensive analysis of risks and to identify critical control points in this regard.

Figure 2: Critical Control Points (CCP's) determination / decision-making sequences



Source: Turkova Elena Nikolayevna, 153, 2007

2.1.2. Procedure for application of HACCP system principles

When applying the principles of the HACCP system, it is necessary to pay attention to the following:

- 1) Sequence of consideration of each stage of the production process;
- 2) When making a decision as a result of the analysis, all the risks identified at each stage of the decision-making process must be taken into account;
- 3) The number of identified critical control points is not limited;
- 4) Important initial programs reduce the number of critical control points;

The next step is to take corrective actions, which include:

- Timeliness of product settings with parameters exceeding critical limits and verification of its safety;
- Transfer of non-responsive products to another production line for which these parameters correspond to the requirements;
- Recycling, destruction of products, if it is not possible to recycle due to inconsistencies with the requirements.

The application of the principles of the HACCP system allows to ensure comprehensive control over the quality and safety of products, processes and the enterprise in general. The application of the elements of the HACCP system allows to organize comprehensive control over the safety of the product, to ensure its competitive quality, transparency in relations with consumers and regulators (Figure 1). Any manufacturer that implements and maintains the HACCP system can avoid the following risks:

- Potential - application of a wide range of hazardous materials, substances;
- Each of the chemical, biological and physical risks;
- Endangering human health;
- Waste of financial resources;
- Losses that may occur as a result of improper production.

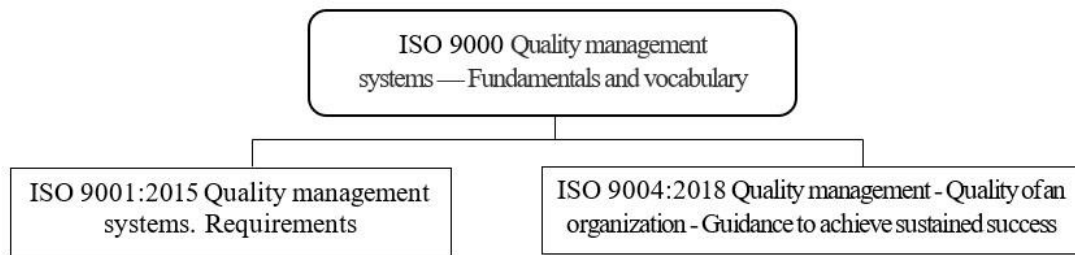
2.2. ISO 9000, most widespread modern quality standards

ISO standards developed by international standardization organizations cover all areas of human activity. Some of these standards can be applied to all areas because they reflect general principles and requirements. The requirements of iso standards include the results obtained by the world's leading enterprises and manufacturers and the experience gained based on them. The main purpose of the standard is to gradually reduce and minimize production costs, to implement each process in accordance with the relevant requirements, to increase the professional knowledge of staff, to provide a systematic approach to processes. The iso 9000 series of standard projects is currently the most widely used standard in the world of quality management. It is revised every five years, and its requirements are amended in accordance with the requirements of modern science and technology. The standard is based on eight Quality Management Principles (QMP) which are given below:

- QMP 1 – Customer focus;
- QMP 2 – Leadership;
- QMP 3 – Engagement of people;
- QMP 4 – Process approach;
- QMP 5 – Improvement;
- QMP 6 – Evidence-based decision making;
- QMP 7 – Relationship management.

Business leaders can use them to build or improve management systems in their enterprises or organizations. The ISO 9000 family of international standards can be represented by the diagram in Figure 3 (Shalimova Nina Mikhaylovna, 26).

Figure following on the next page

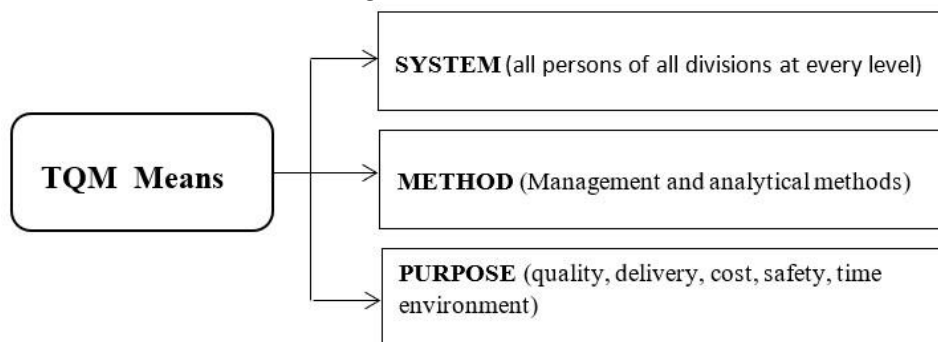
Figure 3: Structure of ISO 9000 series standards

Source: Shalimova Nina Mikhaylovna, 26

Features of the standard iso 9001 is that it makes requirements for a production management organization system, which affects the quality of the company's products and services (ISO 9000 - Quality management".ISO). The quality management system is part of the organization's entire management system and is aimed at satisfying all interested parties, especially consumers of the organization. The main requirements for the quality management system is the conformity of the quality of this product to the requirements of technical documents, ensuring a stable quality of production or service. The ISO 9001 standard is universal, as it is suitable for a company of any size operating in any area of the economy (<https://www.iso.org/home.html>.2018). The requirements of the ISO 9000 standard are comprehensive and production is profitable both materially and economically. At the same time, its application is based on the principle of voluntariness. On the other hand, the application of this standard allows the entrepreneur to take a better position in international trade, to obtain high quality products at lower cost.

2.3. TQM (total quality management)

Total Quality Management, which is both a concept and ideology involves the formation of the company through continuous improvement of the system of interrelated processes that need to be organized in such a way that the operation did not require constant intervention was based on the satisfaction of customers who fully interested in the quality of products. The basic philosophy of TQM is based on the principle that there is no limit to improvement. TQM is a continuous process by the management as well as employees of a specific organization to make sure future customer satisfaction: it's true that one satisfied customer brings ten new customers along with him. While one unsatisfied customer will spread bad word of mouth and harm the existed environment as well as potential customers.

Figure 4: TQM means

Source: <https://higherstudy.org/total-quality-management-tqm/>

Total Quality Management (TQM) is a management approach that is ensured long-term success through customer satisfaction. <https://higherstudy.org/total-quality-management-tqm/>

3. INTEGRATED QUALITY MANAGEMENT SYSTEMS (IMS)

An integrated management system is understood as Part of the general management system of an organization that meets the requirements of two or more international standards for management systems and functions as a whole. The feasibility of creating the most integrated management systems is beyond doubt. Creation of integrated management systems is carried out according to one of the following options:

- 1) Ccreation from additive models;
- 2) Creating fully integrated models.

In the first case, the requirements of systems such as HACCP, iso 22000, GMP, FSC are added to the models of quality management system. In this case, the time between the beginning of the implementation of one system and the implementation of another can be from half a year to several years. in the second case, all management systems are combined into a single complex, and fully integrated quality management system models are formed. The introduction of an integrated quality management system allows the following:

- To introduce a unified management system based on the requirements of different standards;
- To reduce the volume of documentation due to the formation of documents common to different standards;
- To build a unified system of workflow and reporting based on the same principles;
- Ensure compliance and consistency between different standards within the enterprise, optimizing management processes;
- Significantly reduce up to about 30% the costs of developing and implementing one integrated system compared to the development and implementation of the same systems, but separately (Zelenskaya Anastasia Sergeevna, 140. Moscow. 2011.).

Creation of an integrated system is a complex innovative project aimed at increasing the effectiveness of the overall management of the organization. The expected effectiveness of the creation of the system can be achieved only if the project is properly managed (Zelenskaya Anastasia Sergeevna, Moscow, 2011).

4. CONCLUSION

An analysis of the literature data allowed us to establish that the problem of providing consumers with safe and high-quality products remains relevant and in solving this problem with significant potential for improving the overall health of the nation, the financial success of the enterprise by reducing costs caused by the production of inappropriate products. Currently, the most acceptable way to solve this problem is the development and implementation of integrated safety and product quality management systems at enterprises based on the principles of standards through the implementation of a process and system approach. Satisfying customer requirements is a priority for any organization and introducing methods to identify consumer preferences into the quality management system is relevant. Thus, ensuring high quality, which is the main requirement, requires the selection of a quality management system, its implementation in compliance with the requirements of the relevant application rules, constant improvement and control.

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THE IMPACT OF THE CORONAVIRUS ON THE SUSTAINABLE DEVELOPMENT OF THE GLOBAL ECONOMY

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ABSTRACT

The sustainable development of the global economy is affected by the spread of coronavirus infection. This creates threat to the economy and the functioning of financial markets. Recently, there has been a fall in markets (especially the oil market), which could lead to the onset of the Great crisis. The spread of the pandemic affects almost all states and the entire economic system because today's world economies are highly interconnected and very dependent on each other. We think that the global economy will slow down, and the economic growth will decline. The gradual spread of the virus around the world will be negatively affected to investors. The situation is getting more complicated as most of the big investors have made very large investments before the start of the pandemic. Clearly, the epidemic causes significant problems in existing economic life and it will continue for a long time. Damage caused by this epidemic could lead to a decline in GDP growth and even a sharp increase in bankruptcies of countries. In some countries, the post-coronavirus period will lead to a severe crisis and even economic disaster. Despite all this, the epidemic does not affect the demand for physical goods (rather, it even increases it); does not affect production capacity; does not affect labour resources (the percentage of dying people of working age is much less than the percentage of dying elderly people). As a result of quarantine measures, transport companies, hotels and travel agencies will suffer losses. Moreover, the spread of coronavirus infection negatively affects the stability of the banking system. The spread of the virus affects not only the export, but also the local demand. Enterprises that provide catering services (in turn, home delivery of meal and food) will benefit from spread of virus. The economy is mainly based on emotions. People's distrust and fear caused by virus, also means that high precaution can continue even after official prohibitions and restrictions are already lifted. In the medium term, the effect of the virus will depend on how far it spreads and how long it takes until a vaccine is found and the situation normalizes.

Keywords: *Coronavirus, Crisis, Economic growth, Epidemic, Sustainability, Unemployment, World economy*

1. INTRODUCTION

The global spread of coronavirus is a human tragedy unfolding around the world. The impact of coronavirus on the global economy has become a backbone event. The development of the spread of coronavirus can bring down the growth rate of the global economy. The world market is losing profits due to the shutdown of Chinese production and a decrease in the activity of people in general: people go shopping less; the whole chain from the store to the producers of raw materials suffers now. Sustainable development of the global economy will depend on the duration and dynamics of the spread of coronavirus [1, c.65]. We hope for the best, but we must be prepared for the worst.

2. IMPACT OF CORONAVIRUS ON SUSTAINABLE DEVELOPMENT OF GLOBAL ECONOMY

During the spread of coronavirus in many countries of the world there is an economic and financial crisis, alongside a stagnation in the stock market. As a result of the spread of

coronavirus, there has been a sharp decline in prices in all major stock markets (USA, Europe, Japan). Stock prices plummeted and there was also some pressure on bond prices, which probably reflects the fear of potential losses. In general, the spread of coronavirus by its nature negatively affects the world economy, including the economy of Azerbaijan. The economy of Azerbaijan and its national currency is significantly dependent on oil. The price of oil in the world market is falling. To increase commodity prices, the OPEC countries (the largest oil producers) agree to reduce production volumes. The economy of Azerbaijan has received a serious blow due to low oil prices in the world market. The spread of coronavirus reduced the demand for oil in the world market by 30%, which led to a decrease in the prices. President of the Republic of Azerbaijan, Ilham Aliyev, said that the country should "work and live as if we live in the post-oil era." But in 2014, the fall in oil prices in the world market led to a decrease in economic growth, the bankruptcy of several commercial banks, and the devaluation of the national currency in Azerbaijan. In recent years, the Central Bank of Azerbaijan has reduced the risk of new devaluation and bank failures due to lending in foreign currency. The spread of coronavirus can affect the sustainable development of the global economy through the following ways:

- Decrease in external demand for products due to the slowdown in global economic growth. The development of an epidemic into a pandemic intensified its effect. Thus, the slowdown in global economic growth has reduced the consumption of commodities and has led to a significant reduction in their prices. Oil prices plummeted;
- Problems with the supply of imported goods. The shutdown of production in many countries, including China, has led to a deterioration in the work of suppliers and extended lead times;
- Deterioration of financial markets;
- Restrictive measures: cancellation of public events, restriction of movement, quarantine, closure of shopping centres, restriction of work of most of the services, limited movement of citizens within the city, etc;
- Impact on public finances. A fall in commodity prices and a slowdown in global economic growth have a negative effect on budget revenues.

However, no matter how significant the economic impact of the coronavirus is, one can only expect a protracted exit of the global economy from recession.

2.1. Coronavirus Control Measures for the Sustainable World Economy

In the context of the spread of coronavirus, it is necessary to apply measures to minimize the negative impact on economic growth, ensure macroeconomic stability of the economy, and increase its stability. To help maintain the global economy, it will also be necessary to take measures to ensure stability in the monetary and financial sectors. Such a sudden and sharp tightening of financial conditions acts as a brake on the economy, as companies defer investment decisions and people defer consumption expenditures because they feel financially insecure. The IMF is taking all necessary measures to assist its member countries in overcoming the spread of coronavirus. But let us hope that it will be ending.

Supporting measures for ensuring sustainable development of the global economy, has three main goals:

- 1) To save jobs in enterprises;
- 2) To ensure the sustainability of commercial activities;
- 3) To support additional investment in product development and expansion of production capacity.

Entrepreneurs, the public sector, and banks are working to save jobs. In order to ensure macroeconomic stability, it is also necessary to develop proposals to protect the possible negative impact of the pandemic on the country's banking sector.

2.1.1. The effect of coronavirus on individual segments and sectors of the economy

The spread of coronavirus will have a negative impact especially on consumption-oriented sectors, such as:

- 1) Small and medium-sized businesses in almost any industry; These enterprises are less able to manage such risks compared to large companies. Mass bankruptcy awaits them. They will have neither money for wages, nor taxes and settlements with suppliers;
- 2) Automakers and car dealers; The automotive industry is facing tough times. Lower revenues will put automakers and car dealerships at risk. If quarantine measures continue for a long time, dealers, distributors, and manufacturers will go bankrupt;
- 3) The transport industry; Reducing the share of travel will put the entire transport industry in a difficult position;
- 4) Metallurgy; The decrease in demand for cars, planes, wagons will cause a decline in the metallurgical sector. Demand recovery in these sectors of the economy will be much slower;
- 5) Oil production and oil refining; In this industry, because of coronavirus and quarantine, demand for crude oil and oil products has fallen sharply, resulting in an imbalance in supply and demand. The world economy has not yet encountered such a significant imbalance in this industry since the Second World War;
- 6) Entertainment, restaurants, tourism; The companies that were closed during the crisis and were unable to sell goods and provide services will have the hardest time. Gyms, cinemas may not return to the pre-crisis situation for a long time. This may be due to the fact that many during this time began to use online cinemas, online training, or bought home theatres. The restaurant and tourism sectors will also be pressured by the fact that after the end of the pandemic, most people will have no savings. In many countries of the world, tourism is a vital sector. As a result of the coronavirus pandemic, the crisis in the tourism sector will greatly affect the economies of these countries;
- 7) Organization of events; The world is on the verge of rejecting mass events, such as conferences, congresses, forums, concerts, festivals, and other mass entertainment events. These changes will hit the hotel industry, air carriers, and event organizers;
- 8) Banking; Hard times await the banking industry: in times of crisis, banks will exercise caution in issuing loans. This situation closes the possibility of bank lending. This will mainly be due to a decrease in consumer demand because of the bans on entry and exit from the city, the shutdown of all enterprises and organizations introduced to combat the outbreak of coronavirus, and weak wage growth.

3. CONSEQUENCES OF CORONAVIRUS ON THE SUSTAINABLE DEVELOPMENT OF THE WORLD ECONOMY

No country, international organization, individual, or humanity as a whole was actually ready for the current outbreak of coronavirus infection. Despite international efforts, the international community is still not ready for an adequate response to the pandemic. It cannot be said that the world community did nothing at all to increase the level of preparedness. Relevant programs were developed within the framework of such specialized organizations as the World Health Organization, the World Organization of Animal Health, and other international organizations and initiatives. However, given the globalization of world processes, the issue of biosafety management and counteracting the spread of outbreaks of infectious diseases are becoming transnational and global, and therefore require global governance in this area. This process is multidimensional and multilevel because it includes the international level, the level of national

states, non-governmental organizations, public-private partnerships, etc. In order to move further towards global biosafety, the world must recognize that biosafety policies need a global, comprehensive assessment of bio risk and management in the area of biological threat reduction. Thus, the need to implement the concept of global governance in the field of biosafety is being updated. Global governance includes activities at the national, international, and global levels. Global governance includes not only states, but also non-governmental organizations, multinational corporations, as well as public-private partnerships (like the global fund to fight AIDS, tuberculosis, and malaria), etc. The impact of globalization on biosafety requires the introduction of global governance mechanisms in this industry. To achieve sustainable biosafety, it is necessary to develop global governance mechanisms in this area. The outbreak of the infectious disease COVID-19 revealed a modern technological civilization. In the post-coronavirus period, a severe crisis is expected in the world economy, as after the end of World War II. The collapse of the global economy will be the largest in 100 years since the Great Depression. Many countries expect lower per capita incomes. Throughout the world, unemployment and poverty will increase, the difference between rich and poor will grow even greater. This will be the highest unemployment rate since the Great Depression. So the way out of the crisis will not be easy. Countries will come out of it at different speeds and with different losses. This crisis is caused by economic halt simultaneously in many countries. In the economic policy of all countries, this is logical: everything for the front, everything for victory. There is no external enemy, no physical destruction, but all efforts are aimed at saving the economy, business, and population. In the post-coronavirus period, a change will occur. The reason for future changes will be that during the quarantine period people's consumption patterns will change. The quarantine has demonstrated without which goods and services we can exist. And this awareness will have an impact on the economy as a whole. Due to lower incomes, consumption will decline.

4. CONCLUSION

Global cooperation should be given high priority in order to synchronize monetary policy measures. Under these conditions, if the pressure in the area of liquidity threatens the functioning of markets, then central banks may be required to intervene and provide liquidity. And if the economic and financial conditions continue to deteriorate, then the intervention of state authorities will be necessary. The quarantine will change people's habits. After quarantine ends, delivery will become one of the leading business lines. We can expect further growth in electronic sales. All businesses involved in automation will develop in big steps. The proliferation of coronavirus is facilitated by closer economic ties between countries. The main blow for the entire global economy happens in the first half of 2020. The next blow for the economy is an increase in the financial burden on the budget due to the costs of preventing the spread and elimination of the virus. The negative impact of coronavirus can be mitigated by the degree of preparedness to fight the epidemic. Developed countries with a predominant share of services in the structure of the economy will face a larger recession than less developed economies. Quarantine measures can increase the decline in economic activity in the industry.

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TURNOVER REGULATION OF ENVIRONMENTALLY PURE FOOD PRODUCTS

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ABSTRACT

The agrarian sector, as one of the most significant components of the national economy, is of great importance both in the provision and security of the healthy food of the country and also in the socio-economic development of the regions. In this regard, the effective use of the existing potential opportunities in the agrarian sector, and the attraction of natural and economic resources of the agrarian purpose in optimum agriculture turnover are of particular relevance. A characteristic feature of food security in our modern world is that the quality aspect is at the forefront, while the number of malnourished people in the world is not decreasing. Certainly, the organic unity of the quantity and quality aspects has always been a priority in the food supply of the population. However, this priority has not been possible to realize always and everywhere. In many cases, the quantitative factor in the provision of low-income population with foodstuffs has been preferred, and the quality, including the environmental aspect, remains in the background. The aforementioned has made it an objective necessity to explore environmentally turnover of agricultural and food products in various aspects. Important factors that attributed to conditioned this necessity include, above all, organizational identity at most stages of environmental agriculture and food products turnover, more sensitive momentsto external influences of ecological farming's economic mechanism, undergoing to quantitative and qualitative changes in the movement of environmental agriculture and food products to the end consumer, etc. The article investigates the economic mechanism of environmental farming more susceptible to external impacts compared to traditional farming, and its impact on the country's food security in general. The impact of strict requirements for the production, storage and transportation of ecologically pure products on the volume and structure of expenses has been described.

Keywords: *food security, environmental agriculture, ecological food products, turnover, regulation*

1. INTRODUCTION

The population growth rate decisively determines the growth rate of demand for food, on the other hand this demand significantly improves, changes and updates every year. In order to increase the productivity of agricultural production in most countries of the world, scientific research is regularly conducted, the use of new techniques and technologies in agricultural production, innovation, genetic engineering and genetically modified microorganisms, various chemicals, food additives, substitutes, etc. use is currently widespread. Naturally, these tools and scientific and technical achievements not only play an important role in increasing production volumes, but sometimes food products create certain health risks when used incorrectly. The growth rate of demand leads to the fact that poor-quality food products appear on the consumer market, which can pose a danger to human health. Such important factors as organizational identity at most stages of the circulation of environmentally friendly food products, more sensitive to external influences economic mechanisms of environmental management, the achievement of quantitative and qualitative changes in the movement of

environmentally friendly food products to bring it to the final consumer, make it an objective necessity to study this area in a variety of aspects.

2. FACTORS AFFECTING THE TURNOVER OF ORGANIC FOOD

The economic mechanism of ecological agriculture, which combines the processes of production, transportation, processing, packaging, storage, sale and direct consumption of organic food, is more sensitive to external influences than the traditional economy. Thus, the environmental hazard, which sometimes seems unrealistic for other agricultural producers, is on the agenda as a vital issue for ecological agriculture. As you know, the ecological system is a combination of vegetation (flora), wildlife, soil, water basins and rivers, mineral resources, air and energy sources, which form an integral part of the interacting environment. An environmental hazard is a situation that threatens the vital interests of man and society, the environment as a result of anthropogenic and natural influences " [1, P. 16-17]. This situation raises awareness of sensitive issues that violate the ecological and economic balance. In the early 90-ies of the last century, the territories of independent states that emerged in the Post-Soviet space also experienced environmentally dangerous situations, which affected the turnover of agricultural products. In the period of the formation of market relations, people's distrust of food and agricultural products in general grew. Large-scale production of genetically modified products was not accompanied by obtaining the necessary effectiveness of the mechanism to prevent their entry into the markets of Post-Soviet countries. We would like to note that the rapid development of the economy of Azerbaijan in connection with the transition to a market economy has made the solution of environmental problems in agriculture even more relevant. For this reason, the law of the Republic of Azerbaijan on organic agriculture (Baku, June 13, 2008) adopted to regulate the production and use of environmentally friendly food and other agricultural products, has played a crucial role. Thus, the said law provides support for activities aimed at the production of environmentally friendly, high-quality agricultural and food products and their safety for human health. Along with other tasks, including improving the environment, rational use of natural resources, and providing alternative activities for sustainable economic development in rural areas, the relevant legal environment should ensure that the demand for environmentally friendly agricultural and food products in the market is met and competition is generated in this area.

3. LOSSES DURING THE TRANSPORTATION OF ORGANIC FOOD

Various aspects of meeting the demand for organic food and setting competition priorities, including economic, legal and social aspects, should be explored. The fact is that stricter environmental requirements lead to additional costs for production and maintenance. In these costs, the restoration of soil fertility and purification of water is a great weight. Financing investments in restoring soil fertility and cleaning up reservoirs in environmentally friendly agriculture, mainly from the state budget, can reduce the specific impact on prices for these products. The high probability of undesirable quantitative and qualitative changes in the movement of organic food before delivery to the end consumer is a reality of the modern era. As a result unwanted quantitative and qualitative changes in delivery of organic food to the final consumer, there may be increased loss of product, reduce its portability, reduced shelf-life. Economic experience shows that an acceptable level of detail in quantitative and qualitative changes in product movement can be achieved when allowable losses are accepted as the difference between a potential cultivable and final product consumption. As a result of the influence of the main factors causing losses during the movement of organic food, we can show the following. The difference between potential and yield in ecological crop production, in other words, "loss", is mainly associated with non-compliance with agricultural requirements and the imperfection of the material and technical base.

The amount of losses during harvesting, at first glance, depends on the efficiency of the harvesting process. However, these losses are also strongly influenced by factors determining the difference between potential and harvested crops. In other words, the measures that need to be taken to reduce the difference (loss) between the amount of potential, biological and accumulated product should have a broader range. The difference in the amount of product collected, transported and stored from the fields, in other words, losses that occur at the junction of the listed stages of an environmentally friendly product, should be characterized both in quantity and quality. This increases the cost of circulation of organic food, reduces their attractiveness and, therefore, supply. In a word, regulation of the turnover of organic food is relevant both from an environmental, and from an economic and organizational point of view. We believe that we need to focus on the latter aspect. First of all, it should be noted that various organizational elements are used to increase consumer interest in organic food products offered at higher prices than conventional products. As these elements, special attention should be paid to the environmental control of organic food and direct, joint, local and group certification. “The certification body evaluates a farm or company in accordance with certain procedures and declares in writing that it (that is, the body applying for certification) does comply with environmental standards. The inspector sends his notes in writing to the certification body” [2, p.353]. One of the main criteria for improving organizational support for the turnover of organic food products is the elimination of consumer distrust in organic food products and agricultural products in general. The expansion of the production of genetically modified food products, the ineffectiveness of measures to prevent their access to the market of any country is an important factor that enhances people's distrust of organic food and agricultural products in general. Of course, the determination of the ecological purity of a food or other agricultural product cannot be left to the discretion of a particular consumer. For this, it is necessary to conduct a comprehensive study and assessment, which in the current realities are largely within the capabilities of the state. The movement of agricultural products is a complex and in some cases controversial process. The contradiction of the process under consideration is due to the condition of a conflict of economic and environmental interests in the economy.

4. THE MAIN ELEMENTS OF ORGANIC FOOD TURNOVER AND FOOD SECURITY

The nature and sequence of the main stages of the process of delivering organic food to the final consumer depends on the origin and composition of the product produced in a particular agricultural sector, on the characteristics and possibilities of consumption. To explain the main stages of the movement of agricultural products, it is necessary to differentiate the products consumed after natural processing. Suppose that the vast majority of fruits can be eaten raw, and most vegetables can be consumed after processing. The direct orientation of the producer's supply and marketing activities to the market determines the vectors for introducing agricultural products. Marketing and distribution channels should also be identified as important factors that should be taken into account when determining the main stages of promoting agricultural products. The choice of the optimal scheme of product delivery from the manufacturer to the consumer consists in its physical implementation, that is, in its movement, as well as in the complex marketing of the stages of after-sales customer service, or rather in a number of its components. Naturally, the continuity of marketing research should also be ensured if the production and sales processes are continuous. The main stages of the movement of introduced food products consumed in natural form are implemented in the following sequence: production-collection – sorting – primary packaging-storage – transportation – storage-sale-consumption. The main stages of the introduction process of food consumed after processing are carried out in the following sequence: production – collection – sorting – primary processing – transportation – packaging – transportation – storage – sale – consumption.

It should be noted that when interpreting the main stages of the product movement process, the minimum number of repetitions of the transportation and storage process was taken into account. In the process of movement of environmentally friendly agricultural products, the implementation of environmental control is considered at each of the above stages. As specified in the law of the Republic of Azerbaijan on organic agriculture ", special attention should be paid to marketing, labeling, storage, transportation, sale on the domestic market, import and export of environmentally friendly agricultural and food products as the main elements of circulation. From these elements, we will try to identify those that are particularly characteristic of environmentally friendly agriculture and food turnover. The sale of environmentally friendly agricultural and food products and their movement from the producer to the final consumer is due to the formation and implementation of an effective marketing strategy. The information base for the formation of this strategy consists of the quantity of the product produced, the shelf life of the products in the initial (in-kind) condition, the distance to the sales markets, storage, transportation and direct sales costs, etc.,. The certificate confirming the ecological purity of agricultural and food products defines the legal basis for their implementation. In other words, a legal entity or individual who has the appropriate certificate can introduce these products into the turnover of environmentally friendly products. To express a reasonable attitude to the turnover of ecological agricultural products, it is necessary to study the main aspects of implementing priorities for meeting demand for these products and creating competition. Naturally, in this case, it should be taken into account that quite serious environmental requirements lead to additional costs for production and maintenance, it is necessary to ensure uniformity of elements of the control mechanism for restoring soil fertility and work on cleaning reservoirs. The effectiveness of the food safety control system offered to the public has now become a key factor in determining the effectiveness of environmental marketing. Along with all the basic information about the origin of a particular product, as an important component of ecological farming and food control, food security indicators should be considered as an important factor. One of the principles that form the conceptual basis of environmental control is to ensure the real interest of the manufacturer in disseminating information about the origin of the product and in ensuring further transparency of the relevant production process. At the same time, as an important condition for environmental control (inspection) of food production, information protection for a long time and the certification body should be in the spotlight. All written and documented reports must be preserved so that the certification body can verify the origin and quantity of all raw materials used and the use of such materials. In addition, written and documented reports should be kept to monitor the source, quantity, and shipment of all agricultural products sold at any time. It would be good if the amount of products sold directly to the consumer was based on daily calculations " [2, p. 357]. The aggravation of the environmental situation increased the buyer's interest in the origin of food products, which led to a unified review of food safety and environmental safety indicators. In this regard, as the principles of national food security and the policy of food quality control in our country in recent years, first of all, the following should be noted:

- the national food safety and control policy should be based on an integrated approach that takes into account all aspects of the food chain, all stages of product turnover in a stable and interconnected sequence;
- increasing the responsibility of people involved in food processing and the food business for ensuring food security;
- ensure the organic unity of the economic and environmental criteria of any activity carried out by persons engaged in the food business, direct this activity to protect the health and interests of consumers;
- be based on adequate principles in measures taken to neutralize the effects of hazardous factors in managing food safety and to prevent or reduce them to an acceptable level;

- in the development and implementation of measures to ensure food security, priority should be given to measures and actions to prevent dangerous factors, not to control measures in the first place, etc. [3, p. 44].

Improving the quality of agricultural and food products and ensuring their compliance with environmental standards, as already mentioned, is accompanied by additional and significantly higher costs than traditional agriculture.

5. CONCLUSIONS

The organization of control over the circulation of organic food products requires comprehensive improvement, taking into account environmental changes, especially in the economic sphere, the creation of an adequate database for the development of marketing strategies, optimal storage and transportation of products by type, the formation of quantitative indicators of the similarity of substitute products with environmentally friendly products on at one or another stage of the movement of environmentally friendly products from production to the final consumer, control mechanism production, transportation, processing, storage, packaging and sale of the products in question. In the ecological economy, the creation of an information base for targeted continuous monitoring of the origin, composition and quantity of raw materials and products imported to and exported from production facilities, as well as allowing the detailed determination of the process of issuing and recalling environmental certificates, play an important role in preventing the use of genetically modified organisms and their derivatives in production from business entities in this area. Labeling is a special and important step in regulating the turnover of organic food. Labeling is carried out by the relevant certification body. In this case, the transitional period and the end of this period differ in organic agricultural enterprises. If the environmental requirements are met during the processing of an organic food product, the final product is labeled as an organic product. Otherwise, the ecological purity of the obtained product is not confirmed. The process of storage and transportation of agricultural products in accordance with the biochemical composition is accompanied by high costs. Additional and rather serious requirements for the storage and transportation of environmentally friendly products cannot do without any influence on the volume and structure of these costs. Thus, organic agricultural products should not be stored together with products obtained by traditional methods in warehouses and refrigerators, and the storage location should provide environmental monitoring without exception. In other words, a new restriction is created on the implementation of economies of scale in the logistics system. The trends of foreign trade liberalization cannot be ignored when studying the issues of regulating the domestic turnover of ecological agriculture and food products in the process of globalization. In other words, the issues of regulating the turnover of environmentally friendly agricultural and food products and improving the control over the turnover of these products should be resolved taking into account the aspects of their import and export. As you know, organic agricultural and food products can be imported into the country for sale if their quality meets the requirements of current standards (national and international), as well as with obtaining certificates of conformity, quality and phytosanitary.

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ORGANIZING PRODUCTION INNOVATION IN AZERBAIJAN AND RESEARCHING MODERN DEVELOPMENT TRENDS

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ABSTRACT

New management technologies that increase the competitiveness are required for the normal activities and sustainable development of the socio-economic development of the Azerbaijani regions. New management technologies are based on the knowledge and the latest developments in science. On this basis, there is a demand for innovation production organization in the regions. Due to the demand for the organization of innovation production in the regions in the modern age, the modern trends of its development are examined. The favorable natural and climatic conditions of Azerbaijan caused the development of agriculture. Azerbaijan has been farming, animal husbandry, silkworm, fruit growing, animal husbandry, etc. since ancient times. It is a region that operates widely in fields. In the Modern period, our country has a multifaceted, more advanced agriculture. Thus, in recent years, various plant species in Azerbaijan (grain, cotton, tobacco, grapes, fruits, vegetables etc.) are produced. The article concludes that by summarizing the views on the concept of innovation in modern conditions, the final result of innovation can be understood under innovation production in the regions. In this context, it is considered that innovation production in the regions is a process aimed at obtaining a real picture of the scientific research and development results of a new or improved agricultural product sold on the market or an advanced technological process used in practical activities. In case of a suitable economic environment, the state makes some suggestions for the implementation of the production of innovation agricultural products in the regions of our country.

Keywords: *region, innovation, production, economy, modern conditions, country, product*

1. INTRODUCTION

In modern terms, the world economy is characterized by a transformation into a globalized economic system and the intensification of economic and trade relations between countries. In every country, in order to meet domestic needs and to ensure the efficient replacement of goods in the world economy system, efforts are being made to produce industrial products at a higher quality and with higher competitiveness. A series of countries that have an advantage in raw materials, materials and services, natural, economic, technical, professional and etc. stands for comparative advantages. In order to organize innovation production and develop industries with comparative advantage, they can not only meet their demands but also participate in effective product (commodity) exchange in the global market. At the same time, Azerbaijan has strong production resources, highly productive agriculture and animal husbandry, advanced processing industry based on innovation technologies, qualified personnel working in the field of national agriculture, and modern infrastructure. New management technologies that increase the competitiveness are required for the normal activities and sustainable development of the socio-economic development of the Azerbaijani regions. New management technologies are based on the knowledge and the latest developments in science. On this basis, the modern trends of Azerbaijan's development are examined because of the demand for the organization of innovation production in the regions in the modern period.

2. THE ESSENCE OF INNOVATION TECHNOLOGIES IN THE REGIONS

The favorable natural and climatic conditions of Azerbaijan caused the development of agriculture. Azerbaijan since ancient times Agriculture, Animal Husbandry, silkworm, fruit farming, livestock etc. it is a region that operates widely in areas. In the Modern period, our country has a multifaceted, more advanced agriculture. Thus, in recent years, various plant species in Azerbaijan (grain, cotton, tobacco, grapes, fruits, vegetables etc.) are produced. And also in the fields of livestock (cattle breeding, sheep breeding, poultry farming, horse breeding, beekeeping, etc.) There's been an important development. Dated 24 November 2003 "in the Republic of Azerbaijan socio-economic development measures to accelerate the" development and implementation of comprehensive measures with the relevant decree of the region's socio-economic development of the acceleration, in connection with scientific and pedagogical collectives of universities and research institutes played important task [1]. From this perspective, one of the main tools for implementing the country's strategic development plan is the development and implementation of the development programs of the regions, as evidenced by international practices. Organization and infrastructure improvements are reflected here. Government programs for the socio-economic development of the country's regions (2004-2008, 2009-2013 and 2014-2018) created wide opportunities for infrastructure development. Thus, President of Azerbaijan Mr. Ilham Aliyev once again stated that on the basis of the conference on the implementation of the state program for the socio-economic development of the regions, the agricultural field now has the opportunity to improve product quality and enter foreign markets. At the same time, there is a traditionally operating and a certain level of developed processing industry based on local agricultural raw materials in the country. That is, fruits and vegetables canned and fruit juices, tomatoes, vegetable oils, beer, wine products, tea, meat products, milk and dairy products, refined grain products (Flour, semolina, spheres such as primary processing of raw materials such as bread and pasta), cotton, wool, lamb and gene-leather, and production of fermented tobacco are developing rapidly. In addition, it should be noted that there is the possibility of producing a significant increase in the production of valuable ethereal, fatty foods, perfumes and natural dyes (roses, olives, pumpkin seeds, and saffron), the development, production and processing of floristry. In order to effectively integrate our country into the world economic system as an independent organization of the world community, first of all, the competitive advantages we have in the world markets are evaluated. With the instruction of the Country President, the development of agriculture, the processing industry is built on the basis of the latest innovative technologies, therefore, the specific weight of quality products, which is the main advantage of the manufactured products, increases every year, thereby increasing the possibility of entering foreign markets. During the state program (2004-2008), on average, half of the basic cost of certain fuels, motor oil and mineral fertilizers used by agricultural producers began to be paid by the state. As a result, 21.4% in grain production, 17.4% in vegetable production, 14.3% in melon production, 40.1% in potato production, 78.1% in grape production, and 24 in fruit and berry production. 6% growth was achieved in 2003-2008. Also, compared to 2003, due to the revival and development promotion projects in the livestock sector in 2008, live meat production increased by 30.6%, milk production by 18.3%, and egg production by 47.9%. In the Aran economic area, agriculture is one of the main sectors of the economy. All major areas of crop production and animal husbandry are developed here. Among the many measures taken in the field of grain development, institutional innovations have played a key role, and initial steps have been taken to create conditions for cluster development. Karabakh Grain LLC, established during the implementation of the State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan in 2009-2013, is an indicator of this in the Agjabadi administrative district, which belongs to the economic region. In fact, this LLC is intended as a pilot project, but the initial results, as well as quality and productivity, business activity have confirmed the

efficiency of this enterprise, as well as the expediency of its continued operation. When we look at the fulfillment status of the “socio-economic development state program of the regions of the Republic of Azerbaijan 2014-2018”, we witness a series of successful measures. [2] Thus, in the protocol of the Cabinet of Ministers of the Republic of Azerbaijan dated 9 March 2013, 29 regions numbered 10/4 PR-14 were determined as targets for the creation of a large grain agriculture (Sabirabad, Salyan, Bilasuvar, Hacıgabal, İmişli, Saatlı, Ucar, Kürdamir, Ağdam, Zardab, Goychay, Gabala, Oğuz, Shamkir, Tovuz, Goygol, Samux, Goranboy, Shabran, Siyazan, Xachmaz, Xızı, Ağjabadi, Beylegan, Ağstafa, Neftçala region and Yevlax, Sheki cities). In the solution of problems related to the functions of the Ministry of Agriculture of the Republic of Azerbaijan, necessary measures have been taken towards gradual participation up to 200.0 thousand hectares in the crop rotation of the relevant lands owned by the state. During 2014-2016, machinery, installations and equipment for agricultural purposes were renewed, and European-made technical means were brought to the country. During the three years of implementation of the State Program for Socio-Economic Dynamic Development of the Regions for 2014-2018, 240,000 tons of mineral fertilizers and pesticides and 11,000 units of agricultural machinery were imported to the country. At the same time, efforts for the establishment of large milk and meat farms continued, and in August and September 2014, a tender including 7100 Highly Productive Holstein-frieze and Simmental breeding animals was made to our country. Consulting services were provided to farmers by placing animals brought through leasing on large farms and for the storage, feeding, breeding and reproduction of these animals. In 2016, there was an increase in exports of most crop products, including an increase of 25% in cotton yarn exports, 41% in vegetable exports and 11% in fruit exports. The country exported hazelnuts worth 90 million manat in 2015, and a total of 105 million manat in 2016 to 25 countries, including Germany and Italy. The main role in the increase was played by the preferential loans provided by the state to hazelnut producers (in the amount of 10 million manat). In consideration of the foregoing, rural areas of socio-economic development of the country, including the success of the region and the further development of production and processing of agricultural products in the Azerbaijan Republic” strategic roadmap 9.1.4. “State program for socio-economic development of regions of Azerbaijan Republic for the years 2019-2023” was developed in order to ensure the implementation of the article. The main purpose is to transform the agricultural sector into an innovative foundation, including the establishment of agricultural parks. According to the President's instructions, 51 agricultural lands, including 17 modern breeding complexes and 34 large crop farms, are currently being built on an area of 258.3 thousand hectares in 33 districts. At the same time, the President of the Republic of Azerbaijan has approved the development of traditional agricultural programs such as cotton cultivation, silkworm cultivation, silk-tobacco production, nuts, citrus fruits, grapes and winemaking programs, as well as increasing production and export capacity. It has provided significant support to increase the level of employment in related areas. As a result, creating favorable conditions, implementing green economy for development, achievements, scientific and technological progress, increasing activities, developing businesses, area, new, innovation production industry products and services all rings chain values, along with the creation of the country, in the green economy regions for development to create favorable conditions for the oil industry, the non-oil sector for sustainable development, success, growth, export and non-oil sector, in particular, the rural population is expected to increase opportunities for good employment and deception income, increase social welfare, and ensure sustainable and balanced development of regions.

3. THE NEED TO CREATE AN UNDERSTANDING OF INNOVATION IN MODERN ENVIRONMENTS

The transformation of tangible assets and economic potential into the development of human capital contributes to the development of innovation in the country's infrastructure. The areas covering this section are quite large. Science, education, protection of intellectual property, new technologies, health services, health facilities, sports tourism complexes, culture, protection of historical monuments, etc. This aspect of scientific research studies is an area that serves the human factor and requires very powerful financial tools. Innovation - is an English word used in the sense of innovation. Australian scientist I. Schumpeter thinks that five signs are acceptable in the innovation process: the use of new techniques, the provision of a new technological process, or production with a new market (purchase and sale); a product with new features; use of new raw materials; presence of changes in production organization, logistic support; the emergence of a new sales market [3]. KV Pivovarov from the Russian Academy of Economics, named after GV Plekhanov, clarifies the terms of innovation and gives a detailed explanation of the need for innovation in innovation; meeting market demand and should bring profits to the manufacturer [4]. The USA and Japan chose innovation path 30-40 years before European countries. In the European countries since the 80-90s of the century, innovation problems were of state importance. Innovation has become a primary focus of economic development, thanks to the protection of state intellectual property, the provision of services to research work for the creation of new technologies, and the strict and indirect promotion of manufacturing industries' compliance with innovation requirements. Since there was not enough staff in the early days, job, accommodation and high wages were provided to those who met these requirements. Science, education and vocational training are focused on the demands of the innovation industries. In that period, innovation turned into a business area where small and medium-sized companies and wealthy businessmen («Business Angels») invested. The contribution of the funds to human capital has also shown its effectiveness. Leading countries prefer, together with the trade of goods and materials, the production of production vehicles, the trade of machinery, machinery, equipment and finished modules. Leading Western and European countries specializing in the field of technology, scientific and technical information, engineering and technical services, specializing in innovation by organizing an exhibition and sales on the territory of the respective States, attract the attention of states and businessmen [5, 6, 7]. Companies undertake the construction of the factory to sell new technologies, follow-up services, training of local experts, and contractually provide employees with a high-pay job. In world practice, companies apply scientific and technological innovations, new technologies in their countries, ultimately test and sell. Innovation intellectual technology works in the form of new cooperation in the world economic system by exporting to foreign countries to seek more favorable production conditions. [8, 9] Innovation technologies are based on the need to work efficiently internationally, cheap local raw materials, cheap materials, cheap labor and sufficient infrastructure and state support. New technology operating in different countries causes the establishment of an international economic system. Thus, investing in one country creates a second economy on the territory of another country. The USA ranks first among the world countries in terms of the second economy. By summarizing the views on the concept of innovation in modern conditions, we come to the conclusion that the final result of innovation can be understood under innovation production in the regions. In this context, we believe that innovation production in the regions is a process aimed at obtaining a true picture of the scientific research and development results of a new or improved agricultural product sold on the market, or an advanced technological process used in practical activities. In the agricultural policy of our country, which has gained independence, the establishment of an AIC (agro-industrial complex) based on an innovative economy has been prioritized. To do this, regions strengthen the logistics and technical base of schools provided by smart pedagogical staff.

Institutions are moving to a flexible education system, creating a mobile scientific and production complex. On the basis of the balanced, integrated socio-economic development program implemented in Azerbaijan, the innovation and finance sector, whose infrastructure is under state control, is actively developing. Financial funds invested in the development of the human factor contribute to the rapid reduction of poverty, unemployment in the country, the increase of the monetary income of the population, the increase of health, the solution of the demographic situation and the growth of the country's economy as a whole.

4. ADVANTAGES AND EFFICIENCY OF PRODUCTION INNOVATION IN THE REGIONS

It is no coincidence that the quality factor has been transformed into an innovative infrastructure in the modern period of globalization of economic relations. First of all, innovation paves the way for new techniques, technologies and new, higher quality products. The production of new products expands its position in the sales infrastructure, such as domestic and foreign markets. Since the quality of food products is closely linked to human health, quality is under state control and public consumption is a matter of regulation. After all, the quality of food products determines the level of economic development, dominates the market and conquers world markets. It takes an objective position in determining the value of goods and materials. Quality is the object of national security in the strategic plan. Despite the promotion and sale of foreign goods in the country's domestic market infrastructure, as in all other countries, the independent Azerbaijan Republic has state control over the safety of food imported from abroad for people. Food products differ from each other with their physical, chemical properties and other components. The different substances that make up each of these determine the nutritional value of this product, the importance of digestion, taste, color, and odor, suitability for food, the product's storage resistance, transportation conditions, product structure and generally the quality of the product. Substances with a sharp unpleasant odor as a result of the breakdown of the organic substances they contain when storing or transporting food under unfavorable conditions - ammonia, sulfuric gas, indole, volatile acids, etc. Taken. Food products in which such a division occurs are not suitable for food. The limited land and production resources, the continuous increase in inflation, mainstream and working capital prices encourage peasant farms to take a dominant position in the domestic and foreign markets, which primarily produce quality products and increase production efficiency. This innovation-driven development based on state support is primarily related to the introduction of more efficient cereals, potatoes and other plant seeds and the development of seed growing. Innovation process in accordance with the concept of agricultural development, reducing the number of local low-yield animals and developing high-yield breeding livestock, for this purpose, goods imported from abroad are financed by the state, while reduced sales to farms below 50% of the cost shows an increase in interest in innovation technologies. Breeding cows from the Netherlands in recent years have been placed in Zagatala, Sheki, Lankaran and other regions. Practically, these cows adapt quickly to local conditions and yield 8 to 10 times more milk than local cows. Such innovation technologies are widely used in milk processing, fruit juice production, vegetable oil production, sugar production, fruit and vegetable production and long-term storage. Sandora brand juice, which is exported to our country from abroad, is mainly produced from raw materials such as orange, pineapple, tangerine, banana puree, canned lemon juice with sugar. Juice enriched with vitamins has a market in Russia, Central Asia, Caucasus countries. "Gilan Holding" - Gabala canning factory "SAF MMC" - Guba, Masalli and Khachmaz canning factory produced on the basis of local raw materials shows its advantage in competing with the fruit juices brought from abroad. Now these juices are exported to the USA, Germany, Russia, Georgia, Central Asian Republics and other countries. It was one of the modern development trends that led to the organization of production innovation in Azerbaijan, the fruit and

vegetable products of Azerbaijan were demonstrated at the International Fruit Logistica 2019 international fruits and vegetables fair held in Berlin on 6-8 February. 14 Azerbaijani companies operating in the field of fruit and vegetable production exhibited their products in the "Made in Azerbaijan" common country stand by the support of the Ministry of Economy and by the organization of the Azerbaijan Export and Investment Promotion Foundation (AZPROMO). The common country stand "Made in Azerbaijan" of special design was welcomed by the visitors. Within the framework of the exhibition discussions were held on the export of Azerbaijani products, and preliminary agreements were reached. "Gilan FMCG" has signed a contract for the export of tomatoes to Germany. Azerbaijan's "Mars FK" reached agreement on pomegranate export to England, "Balkhurma" company on dried dates export to Germany, and "D Fruits" company on the export of their products to the United Arab Emirates. "Bina Agro" held talks on export of products to Russia and Sudan and joint production of Dutch companies with Azerbaijan. It should also be noted that, the volume of fruits and vegetables exported from Azerbaijan dropped by 20.4 percent year-on-year in the period of January-February, Azerbaijani State Statistics Committee has reported. Thus, in January-February 2020, Azerbaijan exported 62.966 thousand tons of fruit and vegetables worth \$75.5 million. Fruits and vegetables produced by the country also dropped in value by 0.5 percent. However, tomato paste exports increased both in volume (25.1 percent) and in value (38.8 percent) year-on-year in January-February 2020. Some 19.112 thousand tons of tomato paste worth \$24.7 million were exported in the reported period. According to the State Statistics Committee, the country also exported the following products in the period of January-February 2020:

- Hazelnut – 3.734 thousand tons (decrease by 21.9 percent) worth \$ 22 million 576.44 thousand (decrease by 10 percent),
- apple – 15.438 thousand tons (decrease by 33.86 percent) worth \$6 million 617.48 thousand (decrease by 32.4 percent),
- persimmon – 17.909 thousand tons (decrease by 22.3 percent) worth \$14 million 109 thousand (decrease by 19.3 percent).

According to Azerbaijani State Customs Committee's report in 2019, Azerbaijan exported 628,509.58 tons of fruit and vegetables worth \$605,815.86 to foreign countries. In 2019, the value of fruit and vegetable export of Azerbaijan decreased by 8.2 percent, while the volume decreased by 1.2 percent in comparison to 2018. Note that in 2019, fruits and vegetables exported from Azerbaijan were mainly tomato paste (174.5 thousand tons), hazelnut (22.6 thousand tons), apple (96.8 thousand tons) and persimmon (146,000 tons). It is worth to mention that agriculture is the fastest growing non-oil sector in the Azerbaijani economy. The ongoing reforms in the agricultural sector have had a serious impact on the development of Azerbaijan's economy, efficient use of land and property, improvement of the structure of the agricultural sphere and entrepreneurship. Azerbaijan is mostly self-sufficient in the production of agricultural products, while vegetables and fruits are produced in abundance. In addition, if natural milk, sour cream, sugar, olive oil, soybean produced in our country are based, these food products will compete with foreign products domestically. It is known that milk and dairy products, olive oil, soy composition is rich in fully dissolved proteins, fats, minerals, biologically active trace elements, vitamins and is important for a healthy human life. Currently, tourism infrastructure is developing in the country's economy. In accordance with the requirements of this new sector of the economy, agricultural tourism in the country, that is, the production of higher quality National Agri-food products that are pleasing to tourist groups is needed. Non-traditional technologies for food production are also developed and put into production in accordance with the requirements of the physical and mental pressure of the abundance of modern knowledge. In terms of innovation technologies, creating a series of food complexes enriched with proteins, easy to digest minerals, selected vitamins that can

revolutionize the regions becomes the daily work of biotechnologists. Genetically modified agricultural crops are resistant to pests, diseases, yields are high, they can be stored for a long time. Apple, tomato, pumpkin, cucumber, salad plants, soybean, wheat, rice, sunflower, tobacco, cotton, etc. The yield and nutritional quality of genetically modified plants are very high in their premises. Currently, this work is carried out on more than 100 plants, genetically modified products are produced and sold in 130 countries. The main reason for the delay in the development of the production and processing of agricultural products based on innovation technologies is the low level of this real sector of the economy due to the weak development of agricultural enterprises in the field of agriculture, poor agricultural business development, non-production agricultural production prices. Agricultural enterprises are developing rapidly in our country. The vocational education and intellectual level of the farmers' managers was formed at the technology level of the farmers' Soviet era. In order to close this gap, it is preferred to develop specialties focused on innovation production in all higher and middle private education institutions of the Republic. More than 700 students are currently studying in foreign institutions. Information about scientific and technological innovations, financial, industrial relations and other innovations, it is possible to improve the education system. For example, farmers of European Union countries can easily get the information they are interested in from the innovation Internet Technologies site. Finally, the above planning of the agricultural production and financial economy infrastructure has been firmly in the minds of people, in accordance with the central provision of logistics and technical tools in the past 70 years. This is a fact and we will feel its effects for a few more years. Therefore, as seen in the developed countries of the world and our own experience, the state cares about the application of innovation technologies.

5. CONCLUSION

The article concludes that by summarizing the views on the concept of innovation in modern conditions, the ultimate outcome of innovation can be understood under innovation production in the regions. In this context, it is considered that innovation production in the regions is a process aimed at obtaining a real picture of the scientific research and development results of a new or improved agricultural product sold on the market or an advanced technological process used in practical activities. As a result, in the conditions of the establishment of a suitable economic environment, the state should provide the following favorable conditions for the implementation of innovative policies for the production of agricultural products in the regions of our country:

- In the face of the abundance of the same product, there should be a monopolistic competitive environment in the market infrastructure.
- The quality management of the proposed products should be provided by state control.
- Investments need to be increased for the environmental conditions of production to be healthy.
- Mineral and energy resources should be increased on the basis of innovation technologies.
- Systematization of incoming ideas, new product ideas preparation.
- Analysis of the economic efficiency of the same product, marketing program preparation.
- Development of new products.
- Testing in the market.
- Deciding on the introduction of a new product in production.

Thus, the ultimate goal of the innovation process is to increase the commercial viability of the new product and the organization of mass production.

With the introduction of innovative production, we can achieve the following results:

- Product range is updated, competitiveness increases, helps to meet the needs of the population.
- Production efficiency increases, limited resources are used sparingly, and profits increase as production costs decrease.
- Innovations are characterized by social consequences.

However, organizing an innovative business is not so easy. First of all, it requires a lot of money. For this reason, Azerbaijan, which has increased its investments outside this area after the fluctuation and decline in oil prices, has initiated intensive works especially for the development of the agricultural sector in recent years. The Azerbaijan administration, which decided to implement different reform and incentive programs in the sector, first determined to provide domestic demand for agricultural products, to increase efficiency, to apply scientific approaches in the sector and to expand export opportunities. The president signed a series of decisions on the forehead. While the state started to give incentive premium to cotton, tobacco, sugar beet, wheat, rice and silk cocoon producers to expand agricultural activities, fuel support was implemented to the farmer. With this support, besides the traditional agricultural production, tropical fruits are grown in the southern region of Azerbaijan. In Lenkeran and Masalli, the cream of the cream of the South American continent, the kiwi of East Asian origin, and the decompone, which are considered among the most expensive and unusual fruits in the world, are also grown. At the same time, we can say that the development of non-oil economies is among the priorities of the state policy, the agriculture sector is also one of the non-oil sectors, and they always operate with the principles of proper management and application of innovative technologies, alongside farmers and peasants. In addition, "Thanks to the special attention paid by President Ilham Aliyev, the agricultural sector has gained a new momentum in recent years. Our land and water resources are relatively limited. With the development of the sector, it is aimed to improve the welfare level of the farmers and to ensure the food security of the country."

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DIGITAL MARKETING AS A NEW METHOD OF MODERN MARKETING

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ABSTRACT

The development of market relations and integration of country economy to the world economy caused to establishment of buyers' market and aggravation of competition struggle for sales market. In such condition, only enterprises, which learn the need, conduct and purchase motive of market and consumers, produce a product conforming to them and implement their sale with high effect, can obtain the priority of competition in the market and win the market success. The application of marketing principles in production and sale activity of enterprises gives an opportunity to identify the need of consumers and to get high profit by providing these needs more fully for producing enterprises. In other words, marketing provides the needs between producer and consumer, coordination of activity of enterprises to these needs: creates a condition for consumers to provide needs more fully, to get a product giving an opportunity to solve the problem with higher effect and creates a condition for producers to make product providing the increase of the activity's effectiveness and maximization of profit. Marketing methods change every day and new strategies emerge. While determination of marketing strategies, new methods, acts and processes run. The basis of marketing and sale is communication. If a firm wants to put a new product into the market, it must analyze the pulse of society attentively. The desire and need of society shows distinction for territory of location. As we know, besides marketing and sale methods, recently modern marketing strategies are started to be applied. Modern Marketing Methods cover traditional marketing models and digital marketing models. Clients started to be active in interactive mutual activity with increase of internet use. The connection of producing firms with client increased. When firms make new product, they started to act according to their initiatives. Ideas are gotten from client about new product by methods such as inquiry and message for new products, their needs and demands are investigated and new products are started to be produced.

Keywords: *traditional marketing, modern marketing methods, digital marketing, network marketing, market share*

1. INTRODUCTION

Increase of the number of internet user and taking of sectors the platforms in economic area exerts direct influence to marketing sector. The processes occurred in each area of technology exerted great influence to marketing sector and entirely the economy. Since the existence of the humanity, they are the oldest methods. This marketing model, which has been founded with Henry Ford, is really the impact of industrial revolution. People tried to sell products they made with extraordinary market deficiency emerged with realized industrial revolution. The developed technology and increased competition terms made a way to develop marketing concept. It is tried to pass on from a product to many clients with this marketing model. When the first steps are made in the field of modern marketing, firms started to make products and to take into consideration the tastes of clients. Branding policy roused interest in all companies for making of specific products.

2. MODERN MARKETING METHODS

This principle constitutes the basis of each types of activity oriented to provision of marketing conception and in general, needs of consumers or consumer groups. So, the enterprise conducts marketing not for the sake of provision of buyer's and consumer's need or solution of their problem free of charge and rendering an assistance to them free of charge, but for the sake of achieving to its aim. Provision of consumer need is the best efficient, effective and shortest way for achieving of enterprise to its aim. As a result of marketing activity, the interest of consumer and enterprise is provided. It is expressed figuratively by K. Tateisi, the founder and leader of OMRON Corporation of Japan: «the mutual relation of enterprise, profit and society bears resemblance to bee, hone and pollination relation in the nature. Bee perches from flower to flower and tries to collect nectar (juice) effortlessly to produce honey. Flowers give their juice to bee to achieve to pollination. Exactly as the enterprise uses of society to get profit. The society gives an opportunity to enterprise to get the profit it desires and hereby it gives an opportunity for enterprise to serve to its interest» [1]. New types of marketing started to be formed with establishment of new and modern digital technology. One of them is mobile marketing. Mobile marketing combines several special marketing measures in itself and it is oriented to presentation of several products by means of mobile connection. The most important factors influenced to the activity of marketing in modern period are associated with development of technology, increase of its use and individualization. It gives an opportunity to compete with competitors not only in the borders of the country, but also outside the borders of the country. All of these request from marketing specialists to be more attentive in struggle with new competitors and to realize counter-moves unlike them. Expansion of competition and acceleration of technological development gives an opportunity to consider the clients not as segment, but as separate individual. By considering these processes, it may be said that, marketing made a step to the stage of "individualization". The development of technology gives an opportunity to collect the detailed information about individual characteristics of clients and to investigate them, it extends the production of product and service providing the individual needs. It is necessary to note that, marketing has several new types and they develop rapidly. For example, multi-level marketing and network marketing. Besides their own incomes, marketing agents get many awards in these marketing activities for sales of agents attracted by them to the company. The information technologies to be used in this case include computer programs, programs for static analysis and CRM (Customer Relationship Management) systems that will cover client relations [2]. Marketing especially plays an important role in management of production and economic activity of enterprises. The capacity of market is fixed with volume, number and size of commodities sold by trading intermediaries and producing enterprises which put their products into market as seller. In this case, the enterprise is characterized with type, market share, assortment and sale volume of product produced. The volume of sale is reflected with capacity of sale of propduced product, goods turnover of wholesale intermediaries, goods turnover of wholesale consumers and retail goods turnover. One of the main directions of markets research is determination of the place of separate community markets in general market and determination of existing ands perspective condition of structure and volume of demand with different types. In comparison with January-August 2018, the volume of trade turnover in January-August 2019 increased by 3,2% and amounted to 13,141.4 million manat. In comparison with the relevant period of the previous year, the value of food products, drinks and tobacco products sold in the trade network increased by 3,6%, amounted to 5918,1 million manat, and the volume of non-food products increased by 3,0% and amounted to 7223,3 million manat. 28,3% of consumer products were sold at legal entities, 45,5% at retail facilities belonging to private owners, and 26,2% at the product markets of the capital.

The majority of buyers is very interested not only in the commodity itself, but also under what conditions they are sold, service forms of the trade, the location of the trading enterprises, its architectural attractiveness, vehicles, time spent on their purchase and so on. It requires, in its turn, the organization and normal activity of high-level service.

3. DATA-DRIVEN MARKETING

As the technology-driven world of our day evolves, condition for formation of new and technology-driven professions creates. One of these professions is data analytics. In data analysis, data are collected, analyzed and interpreted to settle a wide range of business problems. Data-driven marketing has transformed from an innovative approach to a fundamental part of advertising and business strategy. Data-driven marketing refers to strategies built on insights pulled from the analysis of “big data”, to form predictions about future behaviors. Both businesses and consumers can gain a lot from taking a data-driven approach to marketing. Data-driven marketing significantly reduces problems in the product. Thus, it provides assistance to companies in order to better recognize the target mass and to market a product suitable to them. The future for data-driven marketing continues to be very bright. Along with predictive and artificial intelligence marketing, data-driven solutions are becoming an essential part of successful marketing campaigns. The world is moving rapidly towards the digital world. In our modern age, the role of smart phones, computers, e-books and other electronic devices is increasing day by day. Whereas in the past people were more interested in newspapers and magazines, TV and radio, social media platforms are becoming more and more popular today. Digital marketing can be considered a modern part or future form of traditional marketing. As we live in the widespread use of the Internet and mobile devices, the younger generation considers the digital marketing as better quality and more affordable than traditional marketing. Internet sites, blog posts, e-books, social media platforms, e-mail marketing, mobile marketing, and other areas of activity can relate to the major forms of digital marketing. “Search engine optimization” (SEO), “search engine marketing” (SEM), content and influencer marketing, e-commerce marketing, e-books, and “social media marketing” (SMM) are key areas of digital marketing. Companies that select the service of SEM get results quickly and through “Pay Per Click” (PPC) service, advertiser can be found in the first rows by making payment only after access to the advertising. Another difference between SEM and SEO is that SEO focuses on the overall product, and SEM can focus on a particular campaign along with overall product. Just as digital marketing is an important area today, Social Media Marketing is also an important concept and service as digital marketing. Digital marketing and social media marketing are much interconnected to each other. Companies considering the fact that people spend more time on social networks are interested in promoting and advertising their products and services through social media. Digital marketing is a form of the organization of traditional marketing over the Internet. Companies use opportunities given by the digital marketing in order to save time and money, develop newly-created start-ups and business projects and carry out marketing strategy. It is considered more effective and efficient. At present, many companies spend a part of budgets for digital marketing. One of the benefits of digital marketing is that it is possible to gain a larger audience by spending less money compared to traditional marketing.

4. CONCLUSION

It is necessary to give importance to consumer values, not product specifications in all marketing relations. It is only possible if we understand the perspectives of customers. It is necessary to ensure that everyone, not just the “marketing department”, is involved in the marketing process. Understanding the market, competitors, and customers' changing needs is an important issue for the enterprise as a whole and everyone should be involved in the broader

marketing process. The analysis for the organization of the marketing activity shows that in most cases, the application of marketing has absolutely a formal character in the enterprises and is limited to naming of the enterprise's sales department as the marketing department. One of its main reasons is to not understand the essence of modern marketing conception and to improperly estimate its opportunities.

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ECONOMETRIC ANALYSIS OF THE IMPACT OF FOREIGN TRADE ON THE DEVELOPMENT OF THE ECONOMY OF AZERBAIJAN

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ABSTRACT

The country's economic growth has a number of factors, both internal and external. Export, import and investment are some of the most important external factors of economic growth. Export is one of the most important factors of economic growth, but this factor is especially important for countries with small economies, as it enables entrepreneurs to produce even more products using economies of scale, which leads to economic growth. With economic growth, governments in developing countries see export promotion as their main economic policy. Since the country's resources are limited, the country may not produce and export all goods. Basically, economic theories insist that a country can achieve the highest efficiency by stimulating the export of such goods in which it has perfect, comparative or competitive advantages. As for the mechanism of the influence of imports on economic growth, firstly, it must be taken into account that, thanks to imports, goods that cannot or cannot be produced domestically are introduced into the country. Thus, resources introduced into inefficient sectors of the country are freed up and can be used in more efficient sectors. As for the import of the latest technologies, we can state the fact that their import, of course, leads to economic growth. The introduction of new technologies leads to economic growth. A number of economists believe that not only the import of new technologies, but also the import of intermediate goods and semi-finished products also leads to economic growth. The paper analyzes the impact of indicators of the foreign trade sector on GDP growth in Azerbaijan. The purpose of the work is to assess the degree of influence of exports, oil prices and terms of trade on the economic growth rate, as well as the direction of this influence on the basis of cointegration analysis. The literature discusses various options for linking these indicators: a positive unidirectional relationship from export growth and improved terms of trade to economic growth (export-led growth), feedback from economic growth to export growth and the mutual influence of indicators, and also analyzes the negative effects of exports on economic growth. For analysis, firstly, a statistical overview of the dynamics of foreign trade indicators over the past decade is presented, and an indicator of the terms of trade is calculated. Secondly, an econometric analysis of the interdependence of indicators: GDP growth, export volume, terms of trade and oil prices in the framework of the vector error correction model (VECM). Two model specifications for quarterly and annual data are considered. A causal relationship between time series has been verified. As a result of testing the hypothesis about the dependence of GDP growth on other factors, a positive short-term and long-term dependence of the indicator on export, the oil price index, and also a long-term dependence on the terms of trade were revealed. The reverse causality from foreign trade to GDP growth has not been identified. The results confirm the high dependence of the country's economy on the external sector and the export growth hypothesis.

Thus, export and foreign trade as a whole are a source of economic growth for the country; the external sector is important to consider when building forecasts of economic growth and modeling the country's economic policy.

Keywords: cointegration, export, economic growth, globalization, import substitution, import, regression analysis, stimulating export

1. INTRODUCTION

In the context of globalization, despite the increasing differentiation of international economic relations, international trade remains their predominant form. The question of choosing a foreign trade policy that leads to economic growth has been studied by economists for a long time. The contribution of the external sector to economic growth is estimated ambiguously: on the one hand, most developing countries pursue a strategy of economic growth based on exports, on the other hand, economists note that orientation to foreign trade can negatively affect domestic production. Supporters of export-oriented growth note that such a policy leads to specialization of the economy and a positive economies of scale (Helpman, Krugman, 1985), in addition, the export sector must be effective in order to compete in foreign markets: create a market for highly skilled workers, develop and disseminate technology, borrow technology abroad (Grossman, Helpman, 1991), also highlight the role of export in access to foreign currency. The theory of international trade suggests that export growth has a positive effect on economic growth (export-led growth). It is also important to note that the opposite effect is noted in the literature - the effect of output on export volume (Ghartley, 1993; Dutt, Ghosh, 1996). The authors note that GDP growth implies productivity growth and cost savings, which makes exports more efficient. As a result of rising prices for resources and their production volumes, the number of countries where natural resources make up a significant national economy has increased significantly. In 1995, there were 58 resource-dependent countries, and they accounted for 18% of global GNP. By 2015, there were already 81 such countries, with a share in world GNP of 26%. McKinsey uses the following criteria for determining resource economies:

- natural resources comprise more than 20% of a country's exports;
- natural resources account for more than 20% of financial income;
- resource rent is more than 10% of GNP (Kondratyeva V.B, 2016).

Among the theories highlighting the negative role of foreign trade, let us single out the theory of the “resource curse” or the Dutch disease. The theory suggests that constant export of resources leads to depletion of stocks in the leading sector, and an increase in the exchange rate causes a decrease in the efficiency of other types of export of goods. There is a negative impact of exports on the country's output (Sachs, Warner, 2001). There are different econometric approaches to assessing the effect of foreign trade on economic growth, among them are cross-country studies that are based on the assessment of spatial correlation and regressions based on spatial data (Balssa, 1978, Feder, 1982), another group of researchers work with time series (Ghartley, 1993, Dutt, Gosh, 1996). The disadvantages of the first approach include the fact that it does not take into account the specific characteristics of countries. Using time series avoids this problem. Among the difficulties of working with time series, one can single out the choice of lag length, the choice of a method for determining causality, as well as sensitivity to model specifications (Hatemi-J, Irandoust, 2000). In this paper, we analyze the mutual influence of the external sector on economic growth and vice versa using time series. In particular, we use the method of vector error correction model (VECM), which is based on the use of cointegration relations between variables, the question of the length of the lags and the determination of causality according to Granger will be solved within the framework of this model.

2. LITERATURE SUMMARY

The study of the theoretical and practical aspects of foreign trade as a factor of economic growth was carried out by representatives of a number of schools and areas of economic thought. International trade policy is closely connected with many other aspects of economic policy and this complicates the determination of the degree of influence of international trade and other areas of economic policy on economic growth. Without questioning the empirical literature on international trade, which establishes a significant positive relationship between trade and growth, one must still be cautious, concluding that the statistically significant positive relationship between trade and growth is also economically significant. When clarifying this issue in 2000, the Dollar and Krai conducted an analysis among the countries of the world, dividing them into 3 groups: high-income countries, developing countries and developing countries. As a result, the authors showed that in the 1960s, economic growth was high in high-income countries, that is, in those countries that have already introduced a free trade policy in this period. In the 1970s, economic growth was almost the same in all countries, but in the 1980-1990s in developing countries that introduced free trade policies, economic growth rates were much higher than in other developing countries that have not yet mastered freedom of trade, also higher than in high-income countries (Dollar D., Kraay A, 2004). Thus, we can state the fact that free trade has a positive effect on the country's economic growth. As the results of analyzes of different authors show, for some time, free trade leads to an influx of foreign direct investment, and also positively affects the country's economic growth (Wacziarg R. and K. Horn Welch. 2008). Thus, freedom of trade attracts foreign investors to the country, and this adds to the demand for high-quality labor, which leads to an increase in investment in education. And this, of course, affects not only the development of the economy, but also the welfare of the people. Thus, it should be noted that the impact of foreign direct investment on economic growth is much higher in countries that have introduced a free trade policy. The work of some economists shows that with an increase in the share of foreign direct investment in GDP by 1%, economic growth increases by 0.3% (De Long J., Summers L. 1991). As world experience shows, in countries with high economic growth, the investment / GDP index is in the range of 22–41.3% (22% in Taiwan and 41.3 in Singapore). As for countries with low economic growth, this index ranges from 15.4% to 21.8%, that is, on average in countries with high economic growth this index is 31%, and in countries with low economic growth - almost in two lower (19%). Thus, it can be said that countries in the world devote about 20% of their GDP to capital investment (Krugman P. 1994). According to WTO forecasts, the process of creating free trade zones on a global scale will end in 2020 (Shumilov V. M. 2001). In his writings, Dan Ben-David showed that free trade reduces the difference between household incomes (Ben-David D., 1993). A professor at Harvard University offers a different model of economic growth. In his opinion, the state policy of the countries should stimulate the development of strategic sectors of the economy, the internationalization of local corporations, should help increase export opportunities, as a result of which new jobs will be opened, the influx of foreign currency into the state budget will increase, and it will also increase GDP volume (Reich R.1991). The French economist M. Pebro believes that free trade is more effective for developed countries, but developing countries cannot fully implement the policy of free trade. He believes that if a country adopts a free trade policy before adopting a high pace of development, it will lead to the fact that sooner or later it will become a colony of some developed state (Pebro M., 1994). On the other hand, R. Arend, an employee of the OECD Economic Department, believes that under appropriate economic and political conditions, large reserves of natural resources will not necessarily act as a factor hampering economic development. Since changes in the structure of the economy are slow, countries relying on the exploitation of natural resources will remain resource-dependent for a rather long time. At the same time, the resource orientation of the economy can become the driving force behind its modernization (Arend R. 2006).

Resource-oriented countries are doomed to slow or underdevelopment. According to these views, unforeseen income (the so-called “windfall”) associated with abundant resources introduces social political and economic constraints on economic development (Sachs J.D., Warner A.M., 1995). This concept was accompanied by an analysis of statistics for a fairly large number of countries, which showed, in many cases, a negative correlation between resource intensity and indicators of economic development, such as growth, investment and human capital (Van der Ploeg, 2011). Foreign trade contributes to the economic development of the country as a whole through the expansion and deepening of specialization and concentration of production, integration into the world economic system (Kovalchuk, V.V., 2014). The impact of trade openness on the overarching nature of growth is less obvious. For example, some empirical analysis results show that increasing trade openness does not have a significant effect on inequality. Nevertheless, it has been shown that trade, contributing to higher growth, leads to higher incomes, which contribute to poverty reduction (Aslam A, Novta N, Rodrigues-Bastos F, 2017) and narrowing wage gaps in the country (Council of Economic Advisers 2015).

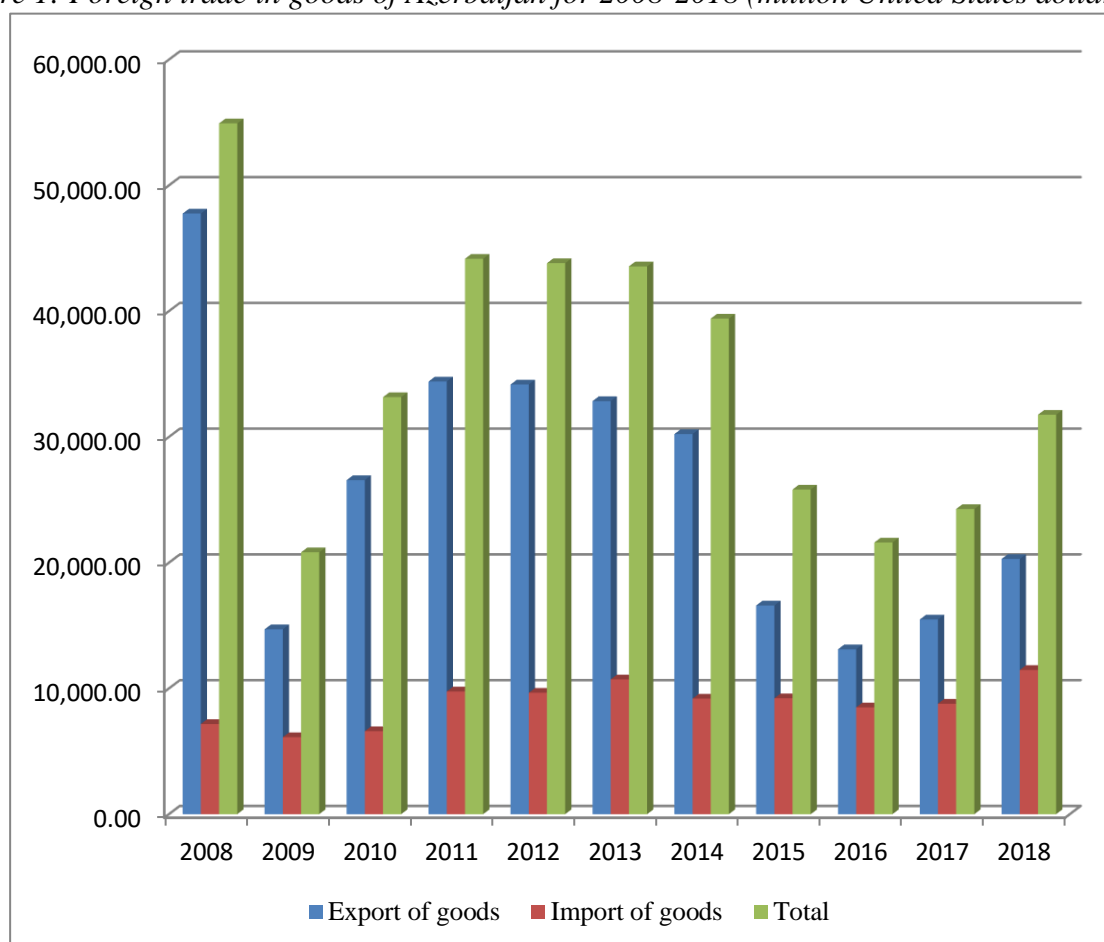
3. METHODOLOGY

The expansion of foreign economic relations is a key factor in the development of the national economy. It is the country's active participation in foreign trade that expands the opportunities for Azerbaijani companies to use advanced technologies and financial resources, ensures extensive economic growth of the national economy, and saturates the domestic market with high-quality investment and consumer goods. In the course of the study, the following hypotheses were formed on the relationship between foreign trade and economic growth. Hypothesis H_1^1 : in the state in the current period, there is a direct linear relationship between the magnitude of exports, oil prices, terms of trade and economic growth, all other things being equal. Accordingly, the converse hypothesis is H_0^1 : in the state in the current period, there is no direct linear relationship between the magnitude of exports, oil prices, terms of trade and economic growth, all other things being equal. Hypothesis H_1^2 : ceteris paribus in the state, import volumes in the previous year positively affect economic growth in the current year, and there is a linear relationship between them. Accordingly, the converse hypothesis is H_0^2 : ceteris paribus in the state, import volumes in the previous year do not affect economic growth in the current year, and there is no linear relationship between them. General scientific methods were used to test hypotheses: on the basis of scientific abstraction, a retrospective analysis of the main indicators of the dynamics of development of foreign trade cooperation of Azerbaijan was carried out; in addition, correlation-regression analysis, a data comparison method were used; through a graphical interpretation of the data and the method of grouping them, the dynamics and structure of the main indicators characterizing modern trends in the development of foreign economic relations of the state, as well as econometric approaches to assessing the effect of foreign trade on economic growth are described. The purpose of this article is to assess the degree of influence of exports, oil prices and terms of trade on economic growth and the formation of effective models for analyzing Azerbaijan's GDP and its relationships with macroeconomic indicators. In the first part, a statistical analysis of the export sector in the Azerbaijan economy is carried out, the main trends are analyzed; in the second part, an econometric analysis of the relationships between the growth rate of GDP, exports, terms of trade and prices of exported goods is carried out. A discussion of the results of the study is presented in the conclusion.

4. DESCRIPTIVE ANALYSIS OF MODERN CONDITIONS OF FOREIGN TRADE OF AZERBAIJAN

The growing global economic recovery provides countries in the Middle East, as well as the Caucasus and Central Asia, a significant opportunity to boost exports and economic growth. Illustrative calculations show that achieving greater trade openness coupled with increased participation in global value chains, improved export diversification, or improved product quality can increase revenue by about 5-10 percent over the next fifty years. The Azerbaijan economy has experienced rapid growth over the past decade amid a thriving commodity sector and rising global oil and gas prices. Assessing the overall picture of Azerbaijan's foreign trade in goods for 2008-2018, it can be clearly seen that the maximum volume of real exports of Azerbaijan was in 2008. (47 756.0 million US dollars), and the minimum volume was 2016 (13 107.5 million US dollars). This is due to many factors (oil prices, restrained monetary policy, a reduction in real income, etc.)

Figure 1: Foreign trade in goods of Azerbaijan for 2008-2018 (million United States dollar)

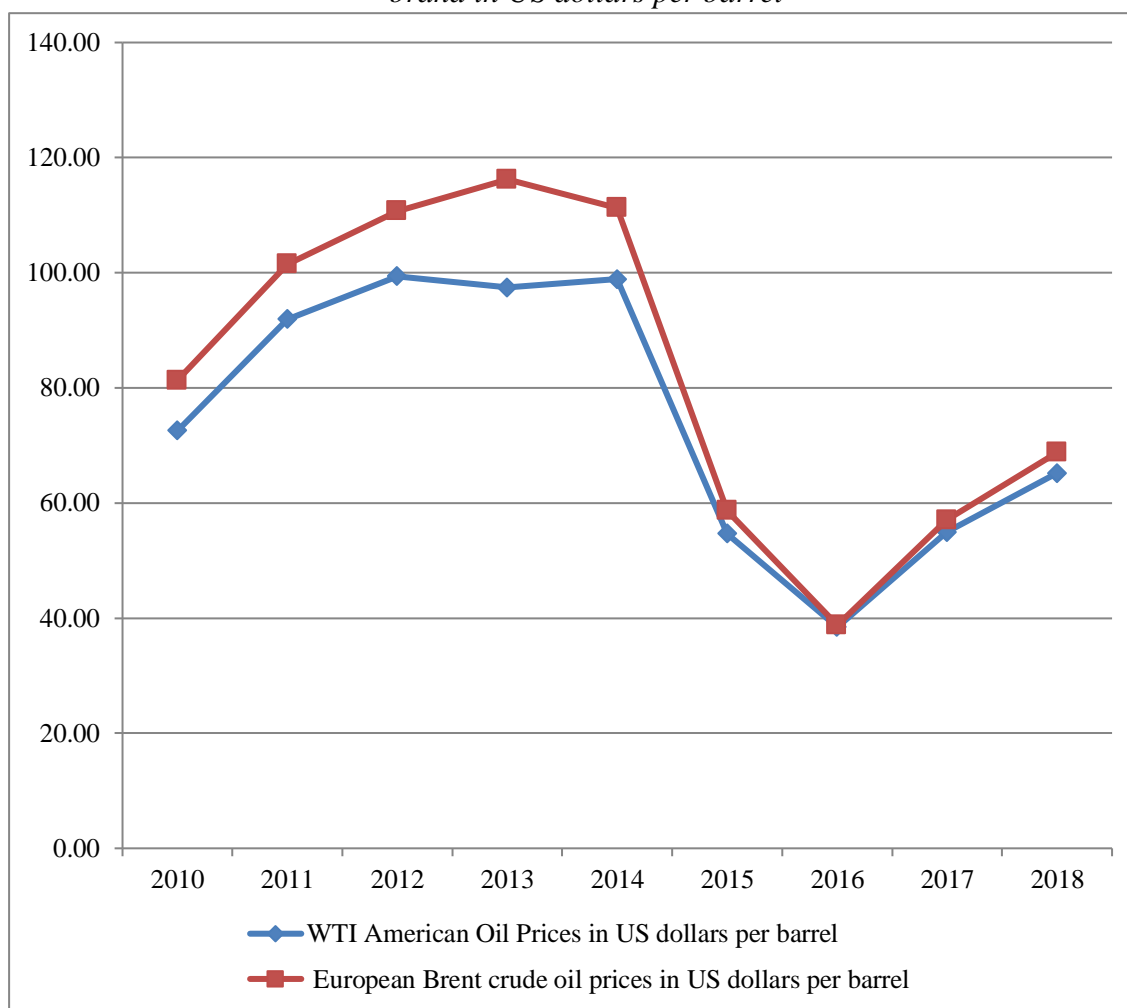


Source: <https://www.stat.gov.az/>, The State Statistical Committee of the Republic of Azerbaijan,

The basis of Azerbaijan exports over the past decade is mainly fuel and energy products, as prices for fuel and energy products, in particular oil, have a significant impact on the dynamics of balance of payments indicators. The oil industry of Azerbaijan plays a significant role in the development of the domestic economy. Over the past decade, the proportions of the physical volumes of goods in the overall export structure have changed, however, the export of mineral products, including oil and oil products, was one of the main ones (according to the State Statistical Committee of the Republic of Azerbaijan 2018, more than 91.9% (17874,6 million

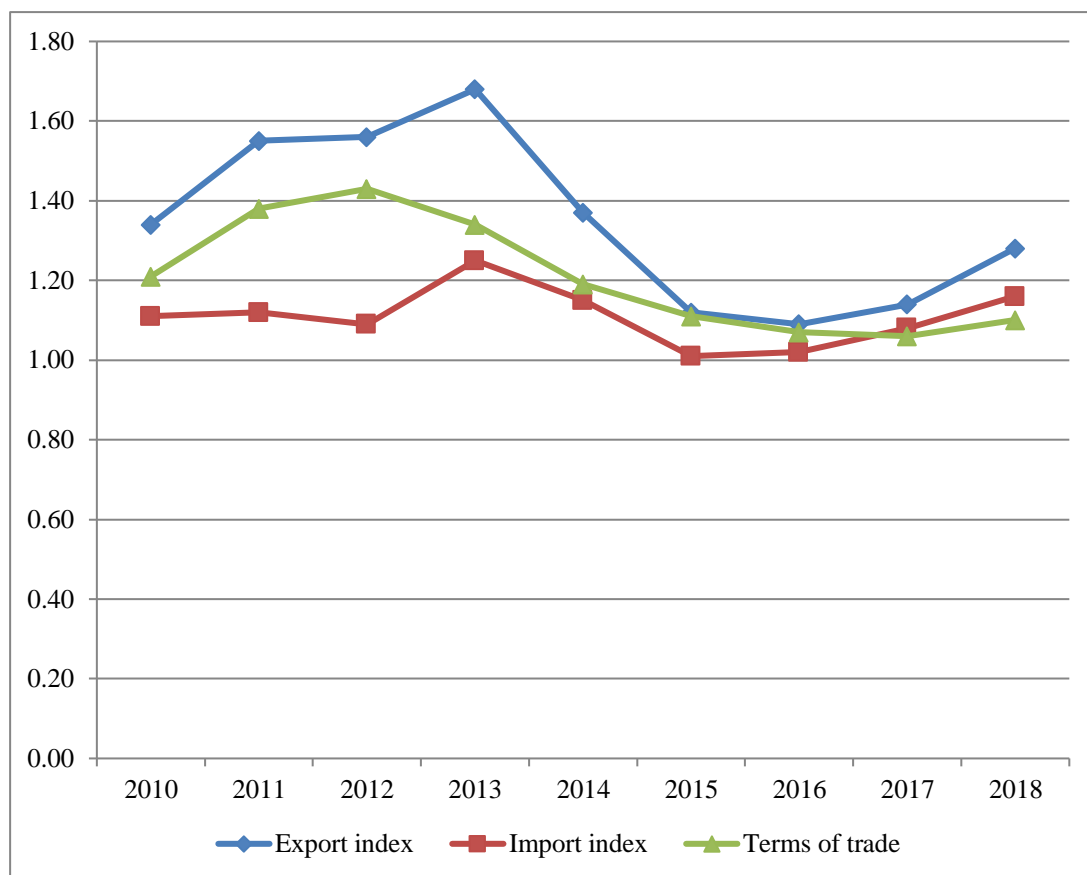
US dollars) of total exports. Recently, the decline in exports due to reduced demand from international partners is a priority factor. Demand, in turn, is associated with the dynamics of commodity prices - during high prices, consumption Energy changes are influenced by many factors, such as the number of explored and involved deposits, the emergence of new technologies and changes in the cost of oil production and others, which leads to annual fluctuations (Figure 2).

Figure 2: Average annual oil prices of the American WTI brand and the European Brent brand in US dollars per barrel



Source: <https://market-prices.com/>

In addition to the prices of exported goods themselves, for the analysis of the formation of the country's trade balance, the ratio of export and import prices is important. Terms of Trade (TT) are calculated as the ratio of the cost of a basket of main exported goods to the value of a basket of main imported goods. The calculation of this indicator was performed using data from the State Statistics Committee of the Republic of Azerbaijan on average import and export prices for basic goods. The dynamics of the terms of trade in the Azerbaijan economy is presented in Figure 3. A change in this index serves as an indicator of a country's place in world trade. With an increase, the welfare of the nation grows, since a country can purchase more imported goods by 1 unit of export, and vice versa. This indicator should be more than 1, then the terms of trade will be favorable. Consequently, the country benefits more from foreign trade. A strong decrease in this index in 2015 occurred against the background of lower prices on world markets of exported Azerbaijan goods and an increase in imported goods.

Figure 3: Dynamics of indicators of the terms of trade

Source: <https://www.stat.gov.az/>, State Statistical Committee of the Republic of Azerbaijan, authors' own calculations

At the same time, the rate of economic growth (Gross domestic product (according to the previous year, per cent), 2005-126,4%; 2010-105,0%; 2011-100,1%; 2012-102,2%; 2014-101,1%; 2015-101,1%; 2016-96,9%; 2017-100,2%; 2018-101,4%) partially repeats both the dynamics of oil prices and the dynamics of the terms of trade. This is not surprising, since the share of exports in GDP changed during the period under review from 62,5% in 2010 to almost 25% in 2018 (according to the State Statistical Committee of the Republic of Azerbaijan). Summing up the analyzed statistics, it is worth mentioning the important role of the foreign trade, and in particular the oil industry for the Azerbaijan economy. Thus, income volatility in this industry is a serious problem for the economy. In the next part of the work, we will consider what contribution the dynamics of export and oil prices make to the country's GDP growth. The purpose of the practical part of the study will be the analysis and testing of the short- and long-term dependence of GDP on exports, as well as energy prices.

5. ECONOMETRIC ANALYSIS OF INTERNATIONAL TRADE AND ECONOMIC GROWTH

In modern domestic and foreign literature, the basic theoretical foundations of free trade and its role in ensuring economic growth are adequately and systematically covered. One of the problems of the theory of international trade is to assess the effect of the development of free trade. Studies based on standard models of partial and general equilibrium showed an increase in the well-being of the population from the development of trade not more than 1-2% of GDP. The impact of commodity exports, especially in resource-dependent countries, can manifest itself in different ways.

Net exports have a mixed effect on economic growth. Against the backdrop of favorable external conditions, the contribution of exports to the country of exporters of energy goods will increase. Works based on Granger causality analysis allow us to evaluate the direction of dependence between indicators and the degree of their influence. The Granger test is to test the causal relationship between time series. The idea of the test is that changes in one time series that causes changes in another time series should precede changes in this time series, and in addition, they should make a significant contribution to the forecast of its values. Based on a test in Works for the USA, it was shown that economic simplicity leads to increased exports (Ghartley, 1993; Dutt, Ghosh, 1996). The interdependence of exports and GDP growth is shown for Canada (Zestos, Tao, 2002), for Japan (Ghartley, 1993). In addition to the importance of exports for testing the role of foreign trade, the authors also include imports in the model (Zestos and Tao, 2002; Akbay, 2011), terms of trade, prices of the main goods traded, and industrial production index (Awokuse, 2004). It should be noted that no empirical studies using these methods on testing Azerbaijan were found. This explains the choice of methodology for this study and makes the work especially relevant. The test can be carried out in the framework of the vector model of regression residual correction (VECM), which is an error-corrected model of vector autoregression (VAR). By analogy with the work considered above, we include the following variables in the model: growth rate of real GDP, export, oil price index, terms of trade. For all variables except the last, we use quarterly data for the period from 2008-2018. Due to the fact that information on export prices was presented at the State Statistical Committee of the Republic of Azerbaijan in an annual format, while quarterly data are available for other variables, it was decided to evaluate two regression models (GDP and export were taken in logarithmic form):

- 1) Quarterly model: $\Delta \log \text{GDP} + \Delta \log \text{EX} + \Delta \text{Indoil} + \text{Const} + \varepsilon$
- 2) Annual data model: $\Delta \log \text{GDP} + \Delta \text{TT} + \text{Const} + \varepsilon$

The following hypotheses will be evaluated:

- A positive long-term relationship between GDP growth and other variables (EX, Indoil, TT);
- The long-term impact of variables (EX, Indoil, TT) on the GDP growth rate;
- The long-term impact of GDP growth on the analyzed indicators (EX, Indoil, TT);
- Short-term dependence of GDP on variables (EX, Indoil, TT);
- Short-term influence of GDP growth rate on the analyzed indicators (EX, Indoil, TT).

The VECM model involves working with non-stationary rows in levels and stationary in the first differences. To check the data, we used the Dickey Fuller test for the presence of a unit root. The verification results are shown in table 1.

Table 1: Dickey-Fuller unit root test

Variables	ADF Test Statistics	T stat.	Prob.	Results
LGDP	-3.0145113	-2.455577	0.1101	Not stationary
LEX	-4.213076	-3.347550	0.2134	Not stationary
LIndoil	-2.341245	-3.236045	0.2922	Not stationary
dLGDP	-4.35654**	-3.843567	0.0012	Stationary
dLEX	-3.98767**	-2.621110	0.0121	Stationary
dLIndoil	-3.4273**	-3.896574	0.0122	Stationary

H_0 : time series are not stationary, there is a unit root

** - 5% significance level

The variables correspond to our assumptions, the hypothesis of the absence of a unit root in the first differences is not rejected. The number of lags is determined by referring to the Akaike's Information Criterion and Likelihood Ratio Test. The results are shown in table 2, the optimal number of lags in the model is one.

Table 2: Determination of the number of lag periods by the Akaik criterion

Number of lags	1	2	3	5
The value of the Akaik criterion	-2.607	-2.918	-3.735	-5.578

To work with non-stationary rows, Dickey Fuller tests and the Johansen method are used to determine cointegration between rows. With cointegration, it is already easier to work with series, studying the relationship between them and making a forecast for the future. Cointegration is a property of several non-stationary (integrated) time series, which consists in the existence of some stationary linear combination of them. Also, to work with the model, it is necessary to conduct tests for the presence of cointegration between variables. Building a VAR model is only possible if the variables are co-integrated.

Table 3: Johansen cointegration assessment

Hypothesis	Value	λ_{trace}	5% significance level	λ_{max}	5% significance level
$r = 0$	0.8366	44.112	27.707	34.678	31.145
$r \leq 1$	0.3822	22.404	18.543	23.233	12.305
$r \leq 2$	0.0512	3.202**	4.899	3.780**	4.509

H_0 : time series are not stationary, there is a unit root

** - significant at 5% significance level

Johansen's methodology is a generalization of the Dickey-Fuller test. The method consists in using two likelihood criteria, λ_{trace} and λ_{max} to determine the hypothesis of the number of cointegration vectors (r). According to the results of Table 3, there are 2 cointegration vectors. However, only one of them will be tested, due to the fact that the second vector does not include the effect of export volume on other variables. The cointegration vector $VEC_1(\theta_t)$, is obtained, in which the considered variables are taken into account (t-statistics are indicated in square brackets):

$$VEC_1(\theta_{t-1}): 0.876 \cdot LGDP - 0,396549 \cdot LEX + 1,1876058 \cdot LIndoil - 4,345027 \\ [-21,5433] [1,56756]$$

The results show that the export variable is characterized by a negative sign in the cointegration vector, which puts it in direct long-term dependence on GDP. The coefficient of the oil price index has a positive sign, the coefficients are almost the same in magnitude. Both variables are significant at the 5% significance level. At the same time, the coefficient during export is significant at the 5% significance level, and the coefficient at the price index is not significant. Based on the obtained cointegration relation, we construct a vector model of error correction. It is a system of equations for each endogenous variable, i.e. a system of three equations. The left-hand side of the equation contains the logarithmic first differences of each variable, the right-hand side contains the lagged values of the differences of all variables and the lagged cointegration vector θ_{t-1} , which represents the deviation of the system from the long-term relationship ($VEC_1(\theta_t)$).

$$\Delta LGDP_t = \alpha_1 + \alpha_{LGDP} \theta_{t-1} + \sum_{i=1}^r \alpha_{1i} \Delta LGDP_{t-1} + \sum_{i=1}^{\delta} \beta_{1i} \Delta LEX_{t-1} + \sum_{i=1}^k \gamma_{1i} \Delta LINDOIL_{t-1} + \varepsilon_{1t}$$

$$\Delta LEX_t = \beta_2 + \beta_{LEX} \theta_{t-1} + \sum_{i=1}^r \alpha_{2i} \Delta LGDP_{t-1} + \sum_{i=1}^{\delta} \beta_{2i} \Delta LEX_{t-1} + \sum_{i=1}^k \gamma_{2i} \Delta LINDOIL_{t-1} + \varepsilon_{2t}$$

$$\Delta LIdoli_t = \gamma_3 + \gamma_{LGDP} \theta_{t-1} + \sum_{i=1}^r \gamma_{3i} \Delta LGDP_{t-1} + \sum_{i=1}^{\delta} \beta_{2i} \Delta LEX_{t-1} + \sum_{i=1}^k \gamma_{3i} \Delta LINDOIL_{t-1} + \varepsilon_{3t}$$

The indices α_{ti} , β_{ti} , γ_{ti} are the coefficients facing the endogenous variables of the system, which are estimated in the model, ε_t -shocks in equations. The evaluation results are presented in table 4.

Table 4: The results of the evaluation of the system of equations

$\Delta LGDP$				
	Coefficient	Std. Error	t-statistic	Prob.
$\alpha \theta_{t-1}$	-1.121114	0.130344	-4.468793	0.0011
α_{1i}	0.566723	0.064522	2.223567	0.0003
β_{1i}	-0.255675	0.088145	2.340045	0.0221
γ_{1i}	0.788076	0.132234	8.230975	0.0038
α_1	0.231987	0.011197	4.036796	0.2012
ΔLEX				
$\beta \theta_{t-1}$	0.114568	0.343306	0.506221	0.3245
α_{2i}	-3.234568	0.234847	-0.431084	0.0246
β_{2i}	0.156345	0.226696	0.967233	0.0032
γ_{2i}	-2.352357	0.252945	4.326624	0.0102
β_2	1.024834	0.048244	2.443662	0.1037
$\Delta LINDOIL$				
$\gamma \theta_{t-1}$	-0.134568	0.361421	1.088538	0.7898
α_{3i}	-0.344467	0.567338	-1.457869	0.0214
β_{3i}	-0.000236	0.123385	2.628345	0.7404
γ_{3i}	-0.677098	0.193788	-1.788322	0.0409
γ_3	0.035624	0.002034	0.277844	0.5688

Analyzing the coefficients of the solution of the model, we can draw the following conclusions:

- 1) There is a long-term dependence of GDP growth on other variables, the indicator seeks long-term equilibrium;
- 2) The variable GDP growth rate does not affect anything;
- 3) The short-term dependence of GDP on exports is determined;
- 4) There is a short-term dependence of GDP on the price index;
- 5) There is a short-term dependence of exports on oil prices;
- 6) The influence of other factors on the price index has not been identified.

Accordingly, at this stage of the analysis, according to quarterly data, we conclude that the short-term and long-term effects of exports on the formation of the GDP growth rate, which can be said to be expected. The reverse causality from GDP to export has not been identified. Prices showed no dependence with variables, which can also be explained by the fact that prices should not be predictable.

For econometric analysis of the data, it is necessary to perform an algorithm for testing the first regression. To check the time series for stationarity, we use the Dickey-Fuller test. Firstly, tests were performed for the presence of a single root, the results are presented in table 5.

Table 5: Dickey-Fuller unit root test

Variables	ADF Test Statistics	T stat.	Prob.	Results
LGDP	-0,53236	-3,3045	0,6007	Not stationary
TT	-3,88763	3,0986	0,2337	Not stationary
dLGDP	-1,8653*	-1,9876	0.0023	Stationary
TT	-5, 6572**	-2,1435	0.0031	Stationary

H_0 : time series are not stationary, there is a unit root

** - 5% significance level

* - 10% significance level

As can be seen from the results, the null hypothesis of a unit root is not rejected for variables in levels. However, testing of three variables confirmed their stationarity in the first difference. Further, the number of lags in the model is also determined by the Akaike's criterion. The criterion for choosing the best of several statistical models built on the same data set uses the Akaike information criterion. The criterion is not statistical, but informational, because it is based on the assessment of information loss with a decrease in the number of model parameters. The criterion allows us to find a compromise between the complexity of the model (the number of parameters) and its accuracy. The optimal number of lags by criterion is 2. The Johansen cointegration test reveals the presence of stationary linear combinations of time series that are first-order integrated and is one of the systems assessment methods using the method maximum likelihood in relation to vector autoregressive models. Note that the main assumptions of this test are the assumptions that the variables included in the vector autoregressive model are first-order integrated processes and errors are independently and normally distributed.

Table 6: Johansen cointegration assessment

Hypothesis	Value	λ_{trace}	5% significance level	λ_{max}	5% significance level
$r = 0$	0.845602	16.04509	15.45673	13.00565	12.33903
$r \leq 1$	0.303567	2.96743**	4.56705	3.09676**	5.65894

** - significantly at 5% significance level

In accordance with the results of the Johansen test, Table 6 contains at least one cointegration ratio, its assessment is presented below (t-statistics are indicated in square brackets).

$$VEC_2(\theta_{t-1}): 1,0234 \cdot LGDP - 0,51601 \cdot TT - 8,098345 \\ [-6.21378]$$

According to the results, the GDP growth rate is positively related to the terms of trade. The terms of trade ratio is significant at the 1% significance level. The solution to the VEC model will be a system of 2 equations in the first differences.

$$\Delta LGDP_t = \alpha_1 + \alpha_{LGDP} \theta_{t-1} + \sum_{i=1}^r \alpha_{1i} \Delta LGDP_{t-1} + \sum_{i=1}^{\delta} \beta_{1i} TT_{t-1} + \varepsilon_{1t}$$

$$TT_t = \beta_2 + \beta_{TT} \theta_{t-1} + \sum_{i=1}^r \alpha_{2i} \Delta LGDP_{t-1} + \sum_{i=1}^{\delta} \beta_{2i} TT_{t-1} + \varepsilon_{2t}$$

According to the results of testing the system of two equations, short-term and long-term relationships between variables at a 5% significance level were not found.

This suggests that there is no direct effect of the terms of trade on GDP on the data. Such results can be explained by the fact that annual data were used for the second regression, and the influence of the variable terms of trade can be observed within a year. Unfortunately, official data on the prices of export and import goods are not presented on the websites of state statistics. Considering that in testing on quarterly data, the dependence of GDP on exports with a lag of 1 quarter was obtained, it can be assumed that annual data to identify the relationship between GDP and terms of trade is not enough. The model is statistically significant and accurate, therefore, the conclusions obtained as a result of the analysis are recommended for practical use.

6. DISCUSSION AND CONCLUSION

Discussions about the prospects of the domestic economy and methods of economic growth have always been of great interest among the public, the media and scientific literature. Azerbaijan has large reserves of natural resources, it is the resource sectors that are the main engine of trade and economic development of the country. A significant share of exports is in fuel and energy products (91,9%). Over the past ten years, Azerbaijan has remained a net exporter of goods, from 2008 to 2018, exports exceeded imports by an average of 3,0 times, the largest difference in the designated period was 6,7 times in 2008, the smallest – 54,4% in 2016. The peak of growth in exports of goods from Azerbaijan in 2008-2018 accounted for periods of rising oil prices. At the same time, the share of foreign trade in Azerbaijan's GDP, despite some fluctuations, remains at 38%. In 2018, net export increased by 31,8% compared to 2017 and amounted to \$ 2128,7 million. Therefore, export of goods from the Azerbaijan Republic is characterized by a generally positive trend from 2008 to 2018. In the analyzed period, the product structure of Azerbaijan the export was dominated by mineral fuels, oil and products of their distillation. With regard to product priorities, it is necessary to continue efforts to develop high-tech industries, not forgetting to support medium-tech industries. Firstly, this is rational, since these sectors are more likely to influence exports than high-tech ones. Secondly, support for the export of goods of medium-tech industries will probably help stimulate the development of the cluster industry and contribute to the necessary structural improvements in the Azerbaijani industry. The paper presents statistical data on the dynamics of foreign trade and its conditions in the last decade, which describes the main trends in this sector of the economy. The task was set to assess the contribution of exports, oil prices and terms of trade to economic growth. The degree and sign of the contribution of the external sector to economic growth is estimated ambiguously by different authors, in this paper we draw conclusions based on the analysis of time series in the vector model of error correction. Also of interest is the direction of the given influence or causality between the variables. In the course of the analysis of the literature, it was shown that in a number of developed and developing countries causality from GDP to export is observed, which suggests the primary role of productivity growth within the country. The reverse causality from exports to GDP growth is consistent with the idea of export growth. Assessment of the relationship between the factors was carried out in the framework of two models: quarterly and annual data. As a result of testing the hypothesis about the dependence of GDP growth on other factors, a positive short-term and long-term dependence of the indicator on export was revealed. Testing has shown that the external demand for Azerbaijan exports is an important factor in GDP growth and having a decisive significance over the previous decade. The importance of export in the development of the economy of Azerbaijan is difficult to overestimate. The dependence of GDP growth on oil prices and terms of trade was also confirmed. For the variable price index, both long-term and short-term relationships were obtained, for the terms of trade a long-term relationship was confirmed. It can be assumed that short-term effects are distinguishable only in a shorter time period. The export of goods and services as a whole, according to estimates, depends on oil prices in the

short term, it was not possible to show dependence on the terms of trade, in our opinion, this is primarily due to the use of annual data for analysis. No causality from GDP to other variables has been identified, i.e. the hypothesis of the primary role of productivity and domestic demand is not supported. The data speak more about the decisive role of foreign trade in the growth of the country's economy, which characterizes the Republic of Azerbaijan as an export-oriented economy. Thus, it is important to consider the external sector of the economy when making forecasts of economic growth and modeling the economic policy of Azerbaijan.

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THE DEVELOPMENT OF DIGITAL BANKING IN MODERN RUSSIA

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ABSTRACT

The banking system of Russia today is subject to transformations in the field of digitalization. The digitalization of the financial system is characterized by the integration of physical and digital components of the processes of its functioning. The development of digital banking is the path to economic transparency, reducing the shadow economy, increasing tax revenues, jobs and GDP growth. This necessitates research in the field of development of digital banking and the search for ways to improve it. The article discusses the nature and state of digital banking, identifying promising areas of its progress, studying the main trends of digital banking progress, determining its classification in relation to the Russian digital banking market and promising areas of development in Russia. Using the general methods of scientific knowledge in various aspects, the article presents models of progress, identifies its trends, characteristics and new promising areas of development in Russia.

Keywords: *digitalization of the financial system, digital banking development trends, electronic banking services, Models of digital banking, Russian digital banking*

1. INTRODUCTION

The modern world economy exists and functions under the conditions of the “fourth industrial revolution”, which, in turn, determines the conditions for its development and transformation: first, rapid technological development and the new challenges for the economy associated with this should be noted. The international financial system also faces new challenges of our time, responding to them quite promptly. The current stage of development of the banking industry inevitably leads to digital transformation, banking products, services, marketing and sales, customer service and operational processes are transferred to the digital environment. The digital bank offers most of its products and services digitally using digital channels. Mobility, customer focus, personalization of offers are the main components of the digital bank concept. According to researchers, the share of projects on the Internet over the past two years in the marketing budgets of commercial banks has exceeded 75%. This suggests that the use of digital technologies in banking marketing prevails over the use of traditional types of marketing communications (Mamedov, 2019, p.8). The development of automated information technologies and the emergence of remote ways of providing banking services in the Russian banking system drew the attention of scientists to an analysis of the problems of the formation and development of electronic banking services. Among the most significant modern studies in this direction, the works of Gracheva M.V., Zhukova S.A., Ivanova V.A., Minina T.N., Mamedova Z.F., Muravyova A.B. and etc. can be distinguished. However, the insufficient development of a number of conceptual and applied aspects of the establishment and development of remote banking services, as well as the limited empirical material introduced into scientific circulation, allowed us to conclude that questions about the features of applying

the latest telecommunication technologies in the organization of banking services are not sufficiently developed both in scientific and in the organizational and practical aspect.

2. STUDY IN THE FIELD OF REMOTE SERVICE (RBS)

Theorists and practitioners who conducted research in the field of remote servicing and banking give different definitions of the concept of “digital banking” (table 1).

Table 1: Key Definitions of digital banking

Author	Digital banking – is
Platonov E.I. (2017). P. 30-35.	- the provision of banking services via the Internet; - the use of Internet standards and protocols for the interaction of the bank with the client;
Mamedov Z.F. (2008, p114)	- operations carried out by the bank in the network, differing from operations in standard bank branches only in an interactive form of relationship with the client;
A.A. Tedeev (Tedeev, 2015. P 14)	- the provision of electronic financial services by credit and banking institutions, including the activities of credit institutions in the field of electronic settlements using bank cards and electronic money systems, as well as exchange transactions with stock values and financial intermediation of other participants in electronic economic activity;
Letter of the Central Bank of the Russian Federation No. 36T dated March 31, 2008	- the method of RBS clients, carried out by credit organizations on the Internet, and including information and operational interaction with them;
O.A. Gavrilova, (2010, p.84)	- Banking based on electronic technologies in the information environment of the Internet;
A.I. Grizov (Grizov, 2014., p84)	- the ability of the client to have direct access to a bank account using a computer via the Internet and using a standard browser;

Based on the foregoing, we will give the following definition of digital banking - this is the provision of banking services using Internet technologies, which gives customers the opportunity of round-the-clock access to their bank account and transactions on it.

3. MODELS OF DIGITAL BANKING

IBM proposed its classification of digital banks, dividing them into four types:

- Model A - digital bank brand. Classic banks that use a large number of legacy systems, business processes, tend to become closer to a new type of consumer - an “advanced” consumer focused on digital brands that meet new requirements. These banks will present new brands, offering unique products tailored to the needs of the younger generation.
- Model B - digital bank channel. The difference between the banks of this model from the previous one is the orientation of the structure to improve the existing user experience. As a rule, such banks use the back-office and the banking license of existing banks, resell their products through a more convenient user interface.
- Model C - digital bank subsidiary. This model combines two approaches: digital user experience and new business processes. Banks in this group are in fact a separate organization with a more flexible and modular back-end, using the best customer experience.
- Model D - digital native bank. Banks in this group develop all their products based on digital technology. These do not necessarily include banks without branches, but their customers expect interaction mainly through digital channels (Mamedov, 2019, p.6).

Bloomchain analysts applied the IBM classification to the Russian digital banking market and found that each of the categories proposed by experts could include at least one player in the domestic non-banking sector. According to the Bloomchain study “Fintech in Russia-2018: in search of a new market”, it is banks that remain the main drivers of the development of the fintech industry in Russia.

Table 2: Categories proposed by experts that could include at least one player in the domestic non-banking sector

Model A	Model B	Model C	Model D	Model E
Brand of digital banking	Banks with digital remote channels	Digital point of traditional bank	Actual digital bank	Non-credit organizations in the non-banking market (payment transactions)
Rocketbank Tochka bank	Talkbank	Touchbank	Tinkoff Bank Modulebank	Yandex.Money

Source: Солодков А. (2019) 29.12.2018

At the same time, there was a correction for the development of the Russian market. “Studying the IBM methodology, Bloomchain decided to highlight another development strategy, codenamed “Model E”. This category is introduced for non-credit organizations that occupy a share of the neobanking market in the segment of payment transactions (<http://futurebanking.ru/post/3757>). Such companies are characterized by the absence of a banking license or a partner bank that would provide their infrastructure for their activities. The symbiosis of the priority of digital technologies, a limited range of banking services and the lack of the need to use the infrastructure of a partner bank makes it possible to separate such companies into a separate group.

4. DIGITAL BANKING DEVELOPMENT TRENDS IN RUSSIA

The main trends in the digitalization of banks is the automation of back-office operations and operational processes, the development of electronic payment technologies, the use of analytics and the transition to cloud technologies. Today in Russia the most popular remote banking service channel is Internet banking. A full-fledged market for banking Internet services began to take shape in Russia in 2000, when not only a few, but dozens of banks began to develop interactive banking services via the Internet. Such radical changes in the field of digital banking became possible, firstly, due to the fact that Internet technologies and mobile communications were developing rapidly, and secondly, the banking sector underwent significant modernization in the post-crisis years. Experts at Deloitte Digital (a division of the international consulting company Deloitte) have included Russia in the top five countries that are leaders in digital banking in the EMEA region (Europe, Middle East and Africa). The EMEA Digital Banking Maturity 2018 survey was conducted in 38 countries and covered 238 banks and ten fintech companies; the leading group also included Switzerland, Spain, Poland and Turkey. Deloitte experts tested 12 Russian banks, including Sberbank, Alfa Bank, Tinkoff Bank, Raiffeisenbank, Rocketbank and others, told RBC in Deloitte. According to the results, Russia bypassed countries such as the UK, France and Austria. (<https://www.banki.ru/news/bankpress/?id=10397046>). According to the estimation of the Moody's Investors Service rating agency, Russia "occupies a clear leading position" among the CIS countries in digitalizing banking services and will retain its leading position in the future. Agency experts believe that Russia will be able to maintain leadership among the CIS countries in this area in the future increasing use of smartphones in payments and the spread of banking services on the Internet (<https://www.vestifinance.ru/articles/119071>).

According to Bloomchain Research, at the end of 2017 the total value of the seven largest Russian non-banks exceeded 240 billion rubles. Of these, 227.93 billion rubles were for Tinkoff Bank. The second place on the list was taken by Modular Bank (3.57 billion rubles). Both players followed the path of creating a full digital bank. In other groups, the value of companies decreases when moving from model C to model A: if the value of Touch Bank was 1.83 billion rubles, Raketbank and Point had only 0.33 billion and 0.37 billion rubles, respectively (FutureBanking.ru.2019).

5. PROBLEMS AND PROSPECTS OF DEVELOPMENT OF DIGITAL BANKING

Despite the broad prospects for the development of the digital banking market, there are a number of problems that accompany its formation and successful functioning: on the one hand, they are related to the specifics of banking, and on the other, due to the features of the Internet. The development and implementation of software systems always require significant organizational effort. The digital banking market is negatively affected by the fact that the developers of digital banking systems do not pay due attention to the creation of turnkey solutions. Banks and their customers rarely agree on the convenience of working with digital banking systems. Credit organizations are confident that remote applications to their services are understandable to users. At the same time, customers, when performing operations on the network, by contrast, have a ton of questions. Among the banks that are seriously concerned about the problem of training their customers to work with digital banking, Sberbank of the Russian Federation, VTB 24, Alfa-Bank and Bank 24.ru are distinguished. The first three are leaders in the number of customers using this system. Sberbank has acquired the longest leadership in Russia, which claims to be a full-fledged textbook, given its volume of 43 pages. The client who read them will be well informed not only with practical advice, but also with theoretical knowledge. VTB 24 has more user instructions than Sberbank. The difference is that the bank did not compile its recommendations into a single file, so the client gets access to the information by clicking on the different headings. Statistics of VTB 24 Bank show that 6-7% of customers who contacted customer support by phone or e-mail experienced difficulties with working or connecting to digital banking (<http://www.banki.ru/news/lenta/?id=9578909>). The banks calculated that the most common reasons for customers who have difficulty working with the digital banking system are their forgotten username or password, as well as the inability to connect to the system using their favorite browser. But such statistics are not typical for everyone. In addition, clients need advice on self-completion of various forms (tips on how to correctly indicate the purpose of payment, etc.). Also relevant are the problems associated with the procedure for generating, activating and eliminating errors when working with an electronic digital signature, the bank's tariff policy and, finally, the procedure for connecting the digital banking system. It is important to emphasize that the bank's online project pays off due to indirect factors: increasing assets, attracting new customers, growth in turnover, etc. A serious problem in the development and implementation of the bank's Internet project is a personnel problem. The quality and speed of solving any problem directly depends on the qualifications of specialists. For the development and maintenance of digital banking systems, programmers, system administrators, web designers, web programmers, computer and communication protection experts, economists, marketers, lawyers are needed. Sometimes it's hard to find a lawyer who knows electronic communications. The same goes for network security professionals.

6. DIRECTIONS FOR IMPROVING THE DIGITAL BANKING SYSTEM

Today, in the conditions of the high pace of development of the banking segment, Digital banking, and automated information systems in general, have a significant impact on the profitability of credit organizations, and competitiveness and attractiveness for customers.

Therefore, banks are paying increasing attention to improving and introducing new developments in the Digital banking system. To improve the Digital banking system, the use of virtual “clouds” has recently become widespread. Cloud technologies are actively promoted in the field of automation and visualization of IT-processes and are a promising area in the banking sector as a whole. Cloud technologies mean that instead of acquiring and installing your own servers for launching applications, you can rent servers from other companies, for example, Microsoft, Amazon, Google, etc. To launch applications via the Internet, servers are managed, and the bank only pays for their actual use for processing and storing information. At the present stage, both private and public “clouds” have become widespread in the Russian banking sector. An individual or private “cloud” is an IT infrastructure that is controlled and operated by one bank. In turn, the bank can independently manage the “cloud” or delegate it to an external organization. A public “cloud” is an infrastructure that is simultaneously used by several credit organizations. This type of “cloud” provides an easy and affordable way to deploy the necessary banking systems with great expansion options. There are several factors that contribute to the rapid spread of cloud technology in the banking sector. First of all, the number of operations performed by the bank is increasing, which contributes to its strengthening in this market segment. Secondly, the current state of the banking system makes it necessary to more accurately predict the risks and consequences of the bank's IT-projects, and cloud technologies help reduce risks. Thirdly, the use of “clouds” significantly reduces the bank costs associated with computing resources. Thus, we can clearly state that cloud technologies enable banks to more effectively and efficiently implement their IT projects and assess the risks of new products. Moreover, in the conditions of fierce competition and a difficult situation in the banking sector, banks need to introduce advanced information technologies in their activities. (Markova, 2016, p.45). Modern digital banking systems are considered by banks not only as a source of income, but also as a way to increase their customer base. Today, Russian customers choose banks not only for tariff rates, but also for ease of use and simplicity of interface. The development and implementation of new concepts in the Digital banking system helps to attract and retain customers. One of these concepts, which is gaining popularity among banks and their customers, is a personal financial manager (PFM). This set of functions is aimed at managing the personal finances of the client and contains the following functions:

- categorization of expenses;
- budget management by category;
- goals of savings;
- upcoming expenses;
- calendar schedule of income and expenses.

Another concept in the development of the Digital banking system is gamification, which has become a powerful trend in the development of retail customer service systems. The main motive for introducing gamification elements into the Digital banking system is the desire to attract and retain customers in interaction with the bank via the Internet. Examples of such a concept are:

- 1) Built-in mini-games in the Digital banking system;
- 2) Loyalty point systems;
- 3) The publication of elements of the financial world of the client in social networks;
- 4) Measures of financial health, reward system, etc.
- 5) Scenarios of functional availability depending on user actions.

7. CONCLUSION

The development of Digital banking in Russia is contributed by the expansion of the functionality of current solutions, the development of promising WAP, SMS services, the

creation of trading platforms and industry-wide internet auctions; improvement and accessibility of handheld personal computers, digital communicators, smartphones and mobile phones. The following are the main trends in the development of the digital banking market in Russia:

- 1) The growth of activity and the increasing role of developers of specialized equipment and software for the needs of digital banking: both domestic companies specializing in banking automation, and Western companies entering the Russian market.
- 2) Development of digital banking in a complex or in parallel with the development by the same banks of the means of organizing electronic commerce - payment and trading Internet systems; Along with digital banking services, Internet trading and Internet insurance are developing.
- 3) Expansion of implementation in commercial banks along with digital banking of other areas of remote banking services: telephone banking, RS-banking and WAP-banking; at the same time, various forms of remote banking do not compete with each other, but in many ways complement each other, providing customers with a wide choice of access channels to their own bank accounts.

The Russian digital banking system is characterized by a powerful development potential. This system of services is becoming a priority for an increasing number of banks as a fundamentally new stage in attracting consumers, optimizing costs and generating additional income. Nevertheless, a number of problems stand in the way of developing Internet banking in Russia. The main fears are related to competition from non-banking Internet payment systems, lack of properly qualified personnel, financial illiteracy of the population, security of digital banking systems and the lack of development of legislative regulation. It is proposed to improve digital banking due to:

- improving the technology platform of digital banking;
- development of IT - infrastructure of the bank;
- expansion of system functionality;
- personalization of Digital banking;
- improving the security of using the Internet service;
- training clients to work with digital banking.

All this will help increase the customer base of Russian banks, optimize costs and generate additional profit. Thus, the digital banking system in Russia has enormous potential for further development using the capabilities of the global network. So, at present, the development of digital banking in Russia is characterized by high growth rates, the rapid introduction of innovations and bringing them to the final consumer. We believe that the development of digital banking in Russia will lead to economic transparency, a reduction in the shadow economy, increased tax revenues, job growth and, ultimately, a positive effect on GDP growth.

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THE PROBLEMS OF ERGONOMIC APPROACH AND ENSURING OPTIMAL FUNCTIONING OF PRODUCTION SYSTEMS TO “HUMAN-TECHNIQUE-ENVIRONMENT SYSTEM”

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ABSTRACT

The article looks at the scientific and theoretical aspects of ergonomics and examines numerous scientific disciplines that identify common problems such as methodological tools of ergonomics. The article also examines the development of ergonomics and a system of anthropocentric principles, the types and types of automated mechanization of existing and emerging labor. Also, specific areas and objects investigated by ergonomics have been defined and described to some extent.

Keywords: *ergonomics, economic development, psychology, human labor, community development*

1. INTRODUCTION

As a result of the scientific research, it is advisable to summarize the current state of ergonomics and describe its development prospects. Ergonomics represents a scientific complex that has traditionally been created by a large number of scientific disciplines relating to the humanities, natural and technical sciences. Sociology, psychology and pedagogy, hygiene and physiology, biology, ecology, economics and labor safety, technical aesthetics, various technical sciences and technology disciplines, cybernetics and mathematics, and other sciences are these or other components of the labor investigated and studied in terms of various views and aspects. The context of ergonomics includes the efforts on numerous scientific disciplines that determine such common problems as the subject area of research, as well as methodological means of ergonomics. Ergonomic problems arise as a result of scientific and technological progress and labor character, increase in accidents and losses, increase in the number of nervous-psychic and related somatic diseases, ineffectiveness of technical systems and products, staff shortages and increase in personnel flow and other changes, scientific and technological progress and so on. This problem defines such main objectives as labor efficiency and humanism, that is, industrious man's productivity for his personality development, quality assurance and creation of security conditions. These goals determine general theoretical and practical tasks of ergonomics related to the current state and prospects of the intensification of scientific and technological progress.

2. IMPORTANT PRACTICAL ISSUES OF ERGONOMICS

Under the influence of labor physiology, engineering psychology and other sciences, practical measures on the human factor in the creation and operation of complex technical systems of products are being developed. Therefore, assessment of workplace in production, work and rest mode and environment, designing and developing anthropometric, biotechnical, hygienic and many other standards for the organization of technical tools and equipment used in the work process, specialty of employees, other component of labor aspects, as well as technical facilities concern practical issues of economy. According to the standards, attestation and rationalization of workplaces and evaluation of new equipment and technology, consumer properties of products are being carried out. These are important practical issues of ergonomics. There are also more specific issues mentioned above.

It is clear that the solution of practical issues at a certain level of quality is possible on the empirical basis of the relative freedom of science-creating disciplines. But now certain methodological synthesis and general theoretical basis of ergonomics are required to be created. Consequently, issues arise from the theoretical and methodological plan, as well as the general theoretical and methodological plan of empirical research in ergonomics. The theoretical issues include the development of the system based on the basic and derivative concept of economy, the development of theoretical concepts for ergonomic guarantee and ergonomic designing, and the ergonomic assurance of operational efficiency, as well as the development of human-available technical systems and technological processes. First of all, the development of a system of principles that define the ergonomics and anthropocentric approach, as well as the development of a system of economic research and designing techniques, an ergonomic evaluation of existing and emerging automated mechanization forms and types of labor are methodological issues.

3. ACTUAL AND PERSPECTIVE ISSUES OF ERGONOMICS

The topical and perspective issues of the research in ergonomics must include the issues of studying laws of interaction of human, technique and environment affecting the quality of labor and its products, and protection of human health and the environment, common ergonomic components of labor, and the importance of controlling the implementation of separate standards. Formation and control of the specific labor changes role in human development. As a whole, concluding the results it cannot be said that, the theoretical and practical issues of modern ergonomics are clearly described, or some of the issues that have been put forward are well described or they are sufficiently systematized. Specific areas and objects investigated by ergonomics have been defined and described to some extent. The object of ergonomics is a complex and multidisciplinary working area. Labor is the most important social system that determines existence, individual, and social development of human throughout history and life, and the development of society as a whole. The working person is a formative factor of the labor system that integrates and attracts material and technical, technological and other components of the labor system. From this point of view, working people and labor collectives are different types and forms of material and technical and other aspects of labor and labor conditions. An important part of these types and forms have high-performance technical equipment, energy, and at the same time it forms the research objects of all ergonomics defining the complexity, tension, danger and many other features of human labor.

4. METHODS AND SPECIFIC METHODOLOGIES

When assessing the current state of economy, it is necessary to mention some advances in the creation of methodological tools and case studies. There are already a number of methods and specific methodologies: algorithmization of labor relations and interaction methods of human, methods of developing structural models in the process of solving labor issues, working conditions of individual and collective parts of labor, analysis and synthesis methods of such models and on the basis of these methods, the techniques and methods of calculating the reliability of the technical operation parts of the optimum placement of tools and equipment for employees, the optimal design of devices and equipment in the workplace, the ergonomic qualimetry method, the method of assessing the economy of installations and other technical facilities, and the professionalism of specialists, methods of creating the models were developed and successfully applied in practice. As a result of the participation of sciences creating ergonomics in empirical research and special economic studies, a great deal of information was collected on the quality and quantity of human characteristics in the working process, in terms of the efficiency and working condition indicators of technical systems and products. On this basis, methodological instructions, head of the technical material of enterprises, a number of

recommendations being included in the reference book of state and industry standards were developed. Nevertheless, the methodological and especially practical advances of ergonomics, the problem of goals and objectives appear to be serious. There are many reasons for the elimination of realization of the All-Union program on ergonomics and economic service. Expansion of measures for the creation of economic services along with the far-reaching plans of social and economic development of the Soviet society is a significant event in the next five years and the beginning of a new phase of ergonomics development in the 2000s. There are perspectives of development in all directions, theory and methodology, methodological instrumental and normative-reference base, organizational issues of personnel training in the economy, practical research. It is safe to say that the main issue in the development of the economy on the bases is the integration direction of the scientific knowledge in the field of specific problems of the sciences that create ergonomics and the methods of which have already been collected. Certain advantages of this integration belong to engineering psychology, it already has experience of integration, as a result of the interaction between human and technology, engineering-psychological methods, which are the core of ergonomics, are made, according to its economic essence, sufficient advances were made in the experimental work that has had a social and economic effect and pre-determined in order to solve engineering problems through psychological means in engineering psychology. It is no coincidence that the contents of a large number of works in engineering psychology in the economy are largely consistent with itself. Of course, this is not to say that ergonomics is engineering psychology. Engineering psychology is only part of economy - the system-creating part. Unfortunately, system-creating technical and technological parts or the design and construction work in the organizational plan of economic research are ergonomics component of traditional organization. In general, it is intended not for the creation of labor activity but for the development of product technical systems, which will open new opportunities for implementation of organizational approach to economic services.

5. CONCLUSION

First of all, this will enable to create a system of economic methods aimed at specific industrial products and working conditions in each area, as well as collect field-normative data and deprive ergonomic research from the experience of dissociation. Taking into account all these, it is possible to show that there is an opportunity for special training of economists not only in universities and polytechnic institutes but also in every field. In the automation of the ergonomic project, it is necessary to take into account the specificity of the field high schools. The creation and application of an automated design system involves automation in ergonomics. Experience in automation of engineering and psychological and some economic research is already gained. For this, banks of economic data are being created, and the issue of creating an economic knowledge bank is on the agenda. Banks can almost be considered a new weapon of economists' labor and other users during the intensification of scientific and technical progress, which is important for the training of economists for the implementation of economic culture for a wide range of engineering and technical employees. The solution of urgent issues of economic development is impossible without specialists with sufficient training and economic culture in the field of ergonomics. It also requires a level of cooperation between economists who simply offer erotic with their business and product for the account of the erotic basis. There is a reason to think that, along with wide-proficiency economists having university or polytechnic training, there is a need for specialized economists of low proficiency for practical solutions of practical issues at the scale of field enterprises focused on the solution of theoretical and methodological and general methodological issues. As a result, we can say that for some reasons, not all the prospects and development aspects of ergonomics are currently being considered.

They will be defined more precisely and new ones will be discovered depending on the development of ergonomics. Here, those who study ergonomics will play a major role.

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CORPORATE GOVERNANCE AND CORPORATE SOCIAL RESPONSIBILITY OF ENTERPRISES

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ABSTRACT

Today in many countries of the world there is a growing interest in the problems of corporate governance and corporate social responsibility. Corporate governance should be adapted to market conditions and the requirements of all stakeholders. Stakeholders are not only customers and shareholders, but also employees, public and state organizations that influence the activities of corporations. The article reveals the essence of disclosure of the effectiveness and efficiency of corporate governance, the concept of corporate social responsibility (CSR), as well as the features of corporate governance. CSR definitions are given, various approaches to the study of this problem are considered, and several ways of developing corporate responsibility are highlighted. The issue of corporate social responsibility (CSR) not only becomes an urgent topic in the business community of Azerbaijan, but already occupies leading positions in academic circles related to research in the field of management. The article discusses the use of corporate social responsibility (CSR) as an element of an effective business strategy for the development of the company and strengthening its position in the local and foreign markets. The article also discusses current issues of global climate change, which is currently one of the most acute problems for the world community. And it suggests that the solution is to use the principles of corporate social responsibility (CSR), the essence of which is aimed at significantly reducing the amount of harmful emissions and their environmental impact.

Keywords: *Corporate governance, Corporate social responsibility, Environmental balance, Global warming, Sustainable business development*

1. INTRODUCTION

Corporate governance includes equity management, the interaction of owners and members of company management bodies, as well as hired company managers. For top management, it is the responsibility to develop a competitive and profitable business that can manage risks and realize growth opportunities. For the board of directors it is the responsibility for the formation of a corporate strategy, ensuring compliance between short-term and long-term goals. Corporate social responsibility (CSR) can be defined as a concept according to which the organization, in addition to the main goal of profit, takes into account the interests of society, taking on voluntary responsibility for its influence on stakeholders in the public sphere. This obligation goes beyond the obligations established by laws and assumes that organizations voluntarily take additional measures to improve the quality of life of workers and their families, as well as the local community and society as a whole. In order to create an effective corporate governance system in the company with the introduction of CSR elements, it is necessary to determine the appropriate procedures for the functioning of the organization at the level of the shareholders meeting, board of directors, senior management (first and second levels).

2. HISTORY OF DEVELOPMENT AND THE CONCEPT OF CORPORATE SOCIAL RESPONSIBILITY

Until the mid-20th century, the science and practice of organizing and doing business was based on theories that focused on achieving economic growth through unlimited use of natural resources, which, as you know, led to negative economic, environmental and social consequences. But this approach changed when several environmental and social crises occurred in the world, and awareness of the need for a more sustainable model increased. This destructive approach was replaced by the concept of sustainable development - a new world development strategy that aims at the implementation of three tasks simultaneously: achieving economic efficiency proportional to the expenditure of natural resources; establishing global social justice; protect the environment and save it for future generations. The concept of corporate social responsibility has started to develop since the 1950s. Bowen (1953) made one of the first definitions. American scientist G. Bowen in 1953 published the work "Social Responsibility of a Businessman." In this monograph, which brought the author fame as the "father of corporate social responsibility", fundamental approaches to CSR were identified. G. Bowen conceptually identified the problem that business is a part of society to which it is responsible. The 1960s are the years when the concept of corporate social responsibility has become clearer and more formal. Joseph W. McGuire in his book "Business and Society" (1963), notes that the institution assumes not only economic and legal obligations, but also certain obligations to society that go beyond these obligations. By the beginning of the XXI century, most large Western companies have formed their own CSR policies. The financial sector has responded to the growing role of CSR by introducing responsible financing practices. Its peculiarity is to take into account in the decision-making process on the allocation of financing not only economic profitability, but also environmental and social factors. To assess the performance of companies in the field of CSR and sustainable development, stock indices such as the Dow Jones Sustainability Index (DJSI) and FTSE4GOOD were developed. There is no single definition of corporate social responsibility. Various documents and research authors define it differently. For example, at the European Union level, the central idea of corporate social responsibility is recognized as the responsibility of enterprises for their impact on society. In the European interpretation, one of the central elements of CSR is the observance of the fundamental international labor standards adopted by the ILO - such as freedom of association, the elimination of forced and child labor, non-discrimination. However, the definition given to this concept in the international standard ISO 26000: 2010 "Guidelines for Social Responsibility", developed in 2010 by the International Organization for Standardization, was most widely known. From a legal point of view, this standard is advisory in nature, it is not necessary to comply with it. However, representatives of governments, non-governmental organizations, consumer groups and associations of workers from more than 160 countries participated in its development and discussion, which allows us to speak of it as a document summarizing the best international experience. CSR is a system of company management tools in the following issues, such as:

- The influence of the company on the economic, environmental and social spheres;
- Sustainability;
- Working atmosphere;
- Environment;
- Labor relations;
- Relations with counterparties;
- Ethical behavior.

We can say that social responsibility in the broad sense is the response of the corporation to certain expectations of the company regarding owners and management, production structures

of the company. The interests of a socially responsible company are no longer limited to commercial benefits, but are determined by the need to improve social status, accumulate and strengthen reputation capital.

3. CORPORATE SOCIAL RESPONSIBILITY EXPERIENCE IN WESTERN COUNTRIES

Ninety-five percent of the world's 250 largest companies currently report on their corporate social responsibility (CSR) activities. The undisputed leaders in the practical implementation of the concept of sustainable development and CSR are the developed countries of Europe, the United States, and Japan. The experience of Finnish and German companies in implementing social programs within the company and on the territory of their presence is interesting, and the best practices are in the focus of public and academic attention, which is also due to the high level of development of local government and civil society institutions. Environmental, social and managerial (ESG) criteria began to play an increasing role in deciding on the distribution of financial investments. According to the Global Alliance for Sustainable Investments, assets managed by such criteria in Europe, America, Canada, Japan, Australia, and New Zealand grew from \$ 22.9 trillion in 2016 to \$ 30.7 trillion in early 2018. Bright young workers work in a place that reflects their values much more than the generation of their parents. The European Commission gives this definition CSR: "Corporate social responsibility is inherently a concept that reflects the voluntary decision of companies to participate in improving society and protecting the environment." As a result of a long and continuous process of capitalist development of Western countries, a complex, balanced system of regulating the relationship between business, government and society in the field of socio-economic development of states has been formed. Common in the west modern concept of CSR shows the desire of companies to voluntarily and independently decide the most pressing problems of society. In the West, business participation in solving social problems can be combined into the following main models of social partnership: the first model assumes the active participation of states in the regulation of social policy, it is strictly regulated by the current commercial tax and labor environmental laws; the second model involves regulating the interaction of business and society with virtually no government intervention. Significant contribution of European and American companies in social programs, irrespective of their size, aimed at their employees, which complement the public welfare system: the introduction of a mode of incomplete working hours (system) for employees close to retirement age and supplementary pensions; funding cultural programs, free consultations (for example, health and nutrition, financial issues in difficult situations). In this context, we would like to talk about the estimates of Thomas Alberg, the head of Germany's first social and environmental bank GLS Gemeinschaftsbank, whose customers were 80 thousand people, net worth 67.5 million euros, cash flow of about 2.0 billion euros. He says: "From year to year, retained earnings increase significantly, during the financial crisis, we did not lose a cent because we invested in the real economy, namely in areas related to long-term sustainable development. We do not invest in abstract projects. Therefore, in the portfolio of our bank there are no financial products that could lead to the fact that the depositor lost his investments." Satya Nadella, Microsoft's chief executive, said commitment — along with a mission that "matches what the world needs," is a powerful way for his company to gain public trust. And because trust matters, it puts the goal at the core of Microsoft's business model. As technology becomes so pervasive in our lives and in society, we, as platforms, have a great responsibility, be it ethics in relation to artificial intelligence, cybersecurity or privacy, he says. Firms in other industries are having similar thoughts. In each business, says Mr Haythornthwaite of Master Card, a wave of digitisation is likely to lead to one company pulling ahead. Because of that concentration of power, he says, the winning platform will need to forge a close link with society to maintain trust.

4. SOCIAL RESPONSIBILITY OF BUSINESS AND IMPROVEMENT OF CORPORATE GOVERNANCE IN ORDER TO ENSURE SUSTAINABLE DEVELOPMENT

According to a recent survey, 93% of CEOs believe that sustainability is important or very important for the future success of their companies; 96% believe that sustainability issues should be fully integrated into the company's strategy and activities; and 73% see this as a way to strengthen their brand, trust, reputation and financial performance. Nearly 1,200 institutional investors from all over the world have signed the Responsible Investment Principles (PRI) Agreement, which aims to understand the importance of business sustainability and support signatories to it by integrating environmental, social and management issues (ESGs) into investment decision-making and ownership practice. Today, corporate social responsibility has become a key to sustainability in social and environmental factors beyond economic growth. Businesses carry out social responsibility activities both as a result of legal obligations and voluntarily. The economic growth and profitability-oriented approaches of businesses have been transformed into a triple bottom line approach focused on environmental, economic and social performance, which has been an important factor in achieving corporate sustainability. The acceptance of this triple responsibility approach of businesses has also revealed the necessity in 'corporate management'. In order to create an effective corporate governance system in the company with the introduction of CSR elements, it is necessary to determine the appropriate procedures the functioning of the organization at the level of the meeting of shareholders, board of directors, senior management (first and second levels). To create an effective corporate governance system in the company with the introduction of CSR elements, it is necessary to determine the appropriate procedures for the organization's functioning at the level of the shareholders' meeting, the Board of Directors, and top management (first and second levels). Under the functioning procedures we understand the role, responsibilities, functions and powers, responsibility of the meeting shareholders, board of directors and company management. Each element of the corporate governance system has its own construction rules. The competence of the meeting of shareholders - the current supreme governing body of the company - includes making decisions on the most important strategic issues (approval of mergers and acquisitions, approval of annual reports, distribution dividends, additional issue of securities). According to the traditional idea of how the company should develop, in most cases the business will be sustainable, if the board of directors subconsciously assigns environmental, ethical and social issues to its sphere of competence, along with questions about the future financial position of the company and its functioning in the market. In order to understand how sustainable business development is related to corporate social responsibility (CSR) issues, it must be borne in mind that as a company grows and successfully develops, any company undergoes certain changes. CSR is a contribution of the private sector in social development through the mechanism of social investment. Social investments of a business are material, technological, managerial and other resources, as well as financial resources of companies allocated by decision guidance on the implementation of social programs designed to meet the interests of key internal and external stakeholders, assuming that strategically, the company will receive (although not always and not just measured) social and economic effect. The main focus in the implementation of socially responsible behavior is paid to three areas (the so-called triple line of responsibility), namely: economic activity (sustainable growth and production of quality products); environmental activities (protection and renewal of natural resources); social activity (active social policy). It is an important social responsibility for companies to display behaviors that protect consumers and to fight abusive individuals and groups. User manuals should be prepared and placed in the packages about which materials the products are made of, whether they carry any dangers and how to use them. Responsibility of the company to the consumer may be costly, but increases in the market share may support

these efforts. Along with the globalization process, the responsibilities of global companies engaged in international trade and their working conditions in third world countries have been the subject of debate. There are several regulations of the International Labor Organization (ILO) for improving employment opportunities and working conditions. According to ILO sanctions, any business management operating in a global, national or local environment must comply with the following conditions:

- Child's working age and hours: Children under 15 cannot be employed. Partial permissions on this issue are limited to special regulations. If the child employee above this age is attending school, the total time he / she will spend for work cannot exceed 10 hours a day (including work, school and transportation);
- Forced employee: The company cannot employ a forced employee or ask employees to leave their identity or a certain deposit to the company;
- The right to form a union and collective bargaining: Employees have the right to form a union, to join the union and to bargain collectively;
- Working hours: Employees cannot be employed more than 48 hours a week. Overtime may not exceed 12 hours per week, except for short-term exceptional business conditions;
- Salaries and wages: Wages should be at least at the minimum wage level of the country and sufficient to meet the basic needs of the staff;
- Health and safety: The company must provide a healthy working environment, take measures to prevent accidents and injuries, provide health and safety training, and provide clean health centers and potable water. It is mandatory to comply with legal regulations on matters such as maternity leave and milk leave;
- Discrimination and discipline practices: Employees are concerned with gender, ethnicity, etc. it cannot be treated differently for reasons and it can be beaten, swear etc. physical or psychological pressure cannot be applied.

The responsibilities of companies to the ecological environment are stated in the Stockholm Declaration of the United Nations Conference on Human Environment; "Living in an honorable and prosperous environment that provides freedom, equality and adequate living conditions is the fundamental right of every person. It is everyone's responsibility to protect and improve the environment for present and future generations." The ecological environment slogan of the United Nations Environment Program, "The world is not a legacy from our grandfathers, but a trust that we will leave to our grandchildren" is very meaningful. The most important ecological difference that distinguishes the other living creatures and humans from the world is that other living creatures try to adapt to the existing ecological conditions, and humans control their natural environmental conditions, albeit partially. However, and unfortunately, with the widening of the dimensions of human domination, many economic, social, political and environmental problems have started to come to the agenda. All of these are named as "ecological problems of humanity." The general benefits of Corporate Social Responsibility to companies, especially SME administrations, can be listed as follows (www.brass.cf.ac.uk):

- It contributes to the image of the company;
- It increases trust in the company;
- It reinforces the awareness of the company;
- It allows people to be more closely interested in that company;
- It makes a positive contribution to the market value of the company;
- It increases the company's business volume;
- It motivates the employees;
- It saves costs and in this way increases efficiency;
- It positively contributes to the corporate culture;

5. CONCLUSION

Good implementation of corporate governance adds value to companies in many ways. These benefits can be listed such as finding investors, easy access to financial resources, increasing market value and getting more transactions in the stock market. Investors, other key stakeholders and the public prefer to continue to work with businesses they know about. The investors will trust the companies with the correct and real information flow provided to them, and thus the companies and therefore the markets will begin to strengthen. A strong corporate governance structure ensures that all investors' rights are protected. The concept of corporate social responsibility has become an imperative, not a choice today. Businesses that do not engage in such activities are lagging behind in many ways. All sides of the society expect the businesses that continue their lives by using social resources to focus on social problems. In order to use the resources of the society, such non-profit activities should be found. Both the business image, legal procedures and social sensitivity make it compulsory. Corporations have a great impact on society in terms of wealth and job creation, especially in terms of efficient use of national resources. Each commercial organization seeks to make a profit, acting in accordance with the laws of the host state. When making this profit, corporate organizations must act ethically and at the same time have the freedom to make discretionary decisions. Levels of corporate social responsibility for problems in the business environment include responsiveness, protection, responsiveness and interactivity. Selecting when to act, how to act and reporting such acts to the relevant stakeholders can make a difference in corporate image management of organizations. The work of today's business leaders is to actively think, adapt reporting on CSR as a corporate strategy and stop playing with the ostrich.

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IMPACT OF EDUCATION AND PEDAGOGICAL TECHNOLOGIES ON THE CONSOLIDATION OF CREATIVE COMPONENTS IN THE DEVELOPMENT OF SPORTS

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ABSTRACT

The paper discusses the impact of education and pedagogical technologies on the consolidation of creative components in the development of sports. It points to the important place of sport in the life of modern society. The authors emphasize the growing role of creativity to achieve high athletic performance. The essence of the concepts of “creativity” and “creative teacher” is formulated, the most important features inherent in them are revealed. It was determined that the pedagogical component is the most favourable for the formation of creativity of future specialists in the field of physical education and sports. The article focuses on the changes that have occurred in the educational policy of Azerbaijan, their impact on the nature of the professional activity of teachers specializing in the training of professional athletes. The influence of modern educational technologies on the quality of the educational process is analyzed, the priority of innovative activity based on the use of the latest achievements of science is shown. The concrete examples demonstrate the importance of developing and implementing new approaches to learning, disseminating modern educational technologies that contribute to the development of smart education and the formation of creative skills and competencies. In modern conditions, the development of the educational environment, including in the field of sports education, is accompanied by the active use of information, communication and digital technologies, distance learning in the educational process. The use of computer technology in the student learning system, modeling situational tasks in practice, communicating with students in small groups, student participation in the educational process, shows that this teaching system enables students to obtain sufficient knowledge, taking into account the use of advanced and modern technologies and techniques. The authors proposed specific directions for introducing innovative educational technologies in higher educational institutions of the country.

Keywords: *Education, Creativity, Pedagogical technologies, Sport, Computer technology, Distance learning*

1. INTRODUCTION

The state of higher education in Azerbaijan is currently determined by the need for constant modification of the educational process. The main goal of this modification is to ensure the training of qualified personnel in the face of changing requirements. Modernization, as the following milestone in the development of higher education, is called upon to bring into line the challenges of the time that form the public demand for improving the quality of education with the real and future opportunities of higher educational institutions. Therefore, the urgent need of the time is the problem of educating young people, including students, as creatively active, independently minded and widely erudite individuals.

Accordingly, the main goal of modern education is to create a system that ensures the educational needs of each student in accordance with their interests and capabilities, which is possible but based on the development of methods for developing students' abilities through the synthesis of modern pedagogical and information technologies. The general goal of education in the field of physical education is to form in students sustainable motives and needs to take care of their health, the development of physical and mental qualities, and the creative use of physical culture to organize a healthy lifestyle. Sport currently holds an important place for a variety of reasons that range from an insane emphasis on a healthy lifestyle to growing attention to world-class sporting events such as the Olympics. Sport as one of the fundamental aspects of human life, has changed a lot over the last decade. The advent of the Internet and the subsequent revolution in mobile technology have transformed our interaction and views on sports. Due to the digital technologies, the professionalization of sports has become apparent, and athletes and amateurs can interact in a new, previously unexplored plane. It is necessary to mention that the problem of physical culture and sports was touched to a certain extent in the works of scientists. While not underestimating the significance of research conducted by Russian scientists, it should be noted that in our country, the problem of the influence of educational and pedagogical technologies on the consolidation of creative components in the development of sports has not yet been studied and therefore this direction is relevant. The study of this direction from a scientific and pedagogical point of view follows from the modern requirements, and the success in this area is due to its organization and development on a scientific basis. The purpose of this article is to comprehend creativity as a resource for the development of sports, to consider the influence of pedagogical technologies on the consolidation of creative components in the development of sports in Azerbaijan. At the same time, our priority is the leading trend of pedagogical technology – impact on personality development, optimization and humanization of the educational process in sports.

2. ROLE OF CREATIVITY IN SPORT

If we consider creativity in sports, we can assume that sports are a useful field for studying the behavior of athletes in a difficult context. In particular, difficult situations predetermine the need to analyze creative activity using special technologies. The changes of the programs are based on consistent and realistic perspectives, which are based on a serious theoretical basis, clearly reflect social needs, as well as the life and preferences of students. Pedagogical technologies can be aimed at solving various problems: educational, developing.

2.1. The importance of pedagogical technologies for the development of creativity

Modern pedagogical technologies, such as training in collaboration, a project methodology, the use of new information technologies, Internet resources, critical thinking technology, contribute to the implementation of a personality-oriented approach to learning, provide individualization and differentiation of training, taking into account the abilities of the teacher, his level of competence. The basis of pedagogical technology is the interaction of two principles: theory - which involves the study of the general laws of the functioning and development of physical culture in society as an integral multifaceted phenomenon, as well as the formation of personal and physical qualities in people involved in physical culture and sports and the experience of direct pedagogical interaction - an understanding of the uniqueness each person. Thus, there is a need to develop new ideas in the field of physical education, physical activity, health and sports, based on empirical and conceptual research and based on high standards of disciplinary and interdisciplinary rigor. Progress can meet the requirements of Carr (Carr, 2003, 57), although academic theory is also a true theory, and digital technology can stimulate physical activity and promote social negotiation and renewal (they can also be used to monitor health status and to support the effectiveness of society).

There is a need for new ideas in the education system, which will reflect a change in the nature of physical education, health and sports in an increasingly dynamic, digital and connected world. In addition, in our opinion, the use of innovations that can play a constructive role in expressing the interests of teachers and students and their aspirations in education is objectively determined. In the modern world, the development of the sports sector plays an important role, and every day it is becoming increasingly stronger. The multidimensional world of creativity in sports, where the curriculum and practical programs relating to it often reflect the views focused on performance and compliance is not fully used (Glăveanu et al., 2016). By developing and combining these structures, we offer a set of concepts that announce the role of creativity in sports and help clarify why creative action can be vital to the development of athletes.

2.2. Creativity as the basis of innovative pedagogical activity in sports

Modernization of the content of higher education at the present stage is associated with innovative processes in the organization of education. Its important task is to develop the creativity of the future teacher at the stage of professional training. Therefore, it is important how successfully at the stage of the formation of professionally significant qualities the actualization of the creative potential takes place, necessary not only in further professional activities, but also for self-development and self-actualization of the personality of the future teacher (Campos, 2014, Carson, Runco, 1999). Obviously, the professional success and career development is achieved by teachers with a high level of professional self-awareness, innovation and creativity. At present, creativity in the educational system remains a popular issue for foreign and domestic studies. In studies, it is associated with intellectual abilities; while it is noted, that intelligence is associated with creativity to a certain limit, where too high intelligence hinders creativity (Plessner et al., 2009, Bowers et al., 2014)). From the point of view of psychology, pedagogical creativity is considered as a person's readiness for changes in pedagogical situations, and its development increases the effectiveness of professional activity and the interaction of the teacher and student. Among the indicators of pedagogical creativity, creative well-being is noted, manifested in sustainable self-regulation and self-control, a sense of joy, a level of performance, love, kindness for children, and strong-willed qualities; creative abilities that are manifested in ingenuity, the ability to combine and associate, divergent thinking, visual creativity (Oddner, 2010). A creative teacher is characterized by creative independence, the ability to anticipate and predict the development of the pedagogical process, and the result of his activity is characterized by quality, novelty, originality and uniqueness in the field of creative activity (Runco, 2007). As you know, creativity is defined as the ability to generate new ideas, deviate in thinking from traditional schemes, and quickly solve problem situations. Identification of specific features of the process of development of creativity of a future teacher allows us to consider creativity as an integral dynamic property of a personality. This ensures the effectiveness of the creative activity of the future teacher, as an expression of creative self-realization in various types of initial professional activity (Bowers et al., 2014).

3. INFLUENCE OF MODERN EDUCATIONAL TECHNOLOGIES ON SPORTS ACTIVITIES

The perception of technological innovations in sports is due to those who are stakeholders and the reasons for using technology in sports (Ratten, 2012). Some stakeholders, such as enterprises, develop the technology and use the technology in different ways. Other stakeholders, such as athletes, are more interested in how technology can enhance their competitiveness. In this regard, it is important to analyze the issue of the impact of modern educational technologies on the quality of the educational process in sports, to identify tools that can simultaneously improve the quality and effectiveness of the educational process.

3.1. The use of modern educational technologies in sports

Modern educational technologies provide the flexibility of the educational process, increase the cognitive interest of students, and contribute to correcting the shortcomings of their development, creative activity. Thus, the introduction of information and communication technologies (ICT) and multimedia technologies, firstly, makes it possible to improve the quality of sports training, to increase the motivation of student athletes to acquire and learn new knowledge. Multimedia-based electronic textbooks have a strong effect on memory and imagination, facilitate the memorization process, and make the lesson more interesting and dynamic. ICTs, in turn, are able to revive the educational process due to the novelty, realism and dynamism of the image, the use of animated images, and the introduction of game elements. These positions correspond to modern humanistic trends in the development of educational institutions, which are characterized by the orientation of teachers on the personal capabilities of students.

3.2. The impact of modern innovative technologies on sports activities

At the present stage of social development, the implementation of the educational process at a high level is impossible without the introduction of innovative technologies. Innovative technologies help not only increase academic mobility, integration into the system of the world scientific and educational space, create economically optimal educational systems, increase the level of educational corporatism, but also strengthen the links between the branches of education at different levels. The priority here is not the accumulation of a large amount of knowledge, but the ability to use it in everyday life. The essence of innovative methods is to organize the educational process in the form of dialogue, which will help students learn to express their thoughts, analyze problem situations and find effective ways to solve them. Such methods can increase the level of education, develop students, and form the skills and abilities that they will use in their future professional activities. The use of computer technology in the students' training system, modeling situational tasks in practice and analyzing on-line situations, communicating with students in small groups, the student's active participation in the educational process, enables students to gain sufficient knowledge in the field of sports, to apply the acquired skills in practice. So, lecture classes are held in the form of a lecture-conversation with elements of discussion, exchange of views, brainstorming, which allows you to attract students to a conversation, a collective study of the problem, exchange of views. The method of educational discussions is effective in the study of complex and voluminous material. A group of students can be divided into small subgroups (5-7 students in each) and to offer certain situations for consideration. The advantages of the method of educational discussions are not only consolidation of the material, the use of their own experience by students, the ability to transfer knowledge from one area to another, but also the development of communication skills, team spirit, independent thinking. Innovative is a technology that has not previously been used in the education system. The main innovative teaching methods that are effective in the field of sports include scientific and scientific-practical conferences, educational excursions, professional quizzes, business games and cases using elements of professionalism of future specialists. Such practice-oriented innovative technologies provide the regions of Azerbaijan with the necessary staff; contribute to the acquisition of the necessary competencies. The use of innovative technologies has increased the interest of the population of the republic in sports. The perception of technological innovation in sports refers to those who are interested in sport and the reasons for using technology in sports (Ratten 2012). Technological innovation is critical to the ability of a sports organization to gain a competitive advantage, especially when time is of the essence. One of the advantages of pedagogical technologies is that a personality-oriented approach is implemented, taking into account the individual characteristics and abilities of students.

Secondly, all students are involved in the educational process. Thirdly, using modern pedagogical technologies, the teacher teaches students to work independently (to plan their activities, gain knowledge, work with literature), and this, as you know, will be useful to them in later life. Fourth, students acquire self-reflection skills, which greatly facilitates the work of the teacher himself, as students can adequately assess their performance. Fifthly, using pedagogical technologies, the teacher will develop the abilities and creativity of the students themselves and this will have a beneficial effect on the entire educational process. Of course, these are not all the advantages of using modern pedagogical technologies; they are the components that affect the effectiveness of the educational process. It should be noted that modern teaching technologies involve the formation of a knowledgeable and creatively working teacher, teaching him the translation of scientific knowledge, making decisions that assess the existing conditions, analyze information and select it for broadcasting and introducing pedagogical methods into the system, as well as ways of communicating with students. In addition, modern educational technology is focused on teaching students professional operations, in particular the development of multivariate teaching methods, pedagogical methods for correcting educational actions, as well as heuristic techniques that develop students' creative abilities. In higher education, it is necessary to pay attention to the development of creativity, which is not only a component of students' willingness to apply pedagogical technologies, but will also become a component of teacher pedagogical skill in the future.

3.3. Digital technologies as a lever of innovation in education

The entry of the higher education system into the world of digital technologies inevitably required a change in the institutionalization of this process. The country applies the mechanism of system regulation at the state level of educational relations, forms a new procedure for organizing educational processes in the field of higher education and a mechanism for studying disciplines based on a competency-based approach. The following factors are currently influencing the development of the higher education system:

- Firstly, the ongoing processes of information on society;
- Secondly, the development of digital technologies;
- Thirdly, the increasing role of “intellectual capital”;
- Fourth, changes in the organizational and economic conditions for the functioning of higher education organizations.

The e-learning action plan in Azerbaijan for the reform period focused mainly on infrastructure development, positive changes in the ratio of students to computers and broadband access. Content development for student competencies was not the main objectives of this policy. Digital technology is part of the life landscape of young people as they are immersed in the digital world for many purposes, including training. Multimedia materials cover a wide range of products - from Power Point presentations to video games, modeling - and, therefore, are compatible with a wide range of pedagogy. A critical element is the adequate pedagogical integration of the game into the learning context. The game should help students achieve learning goals (Young et al., 2012), and the teacher plays a fundamental role in realizing the potential benefits of the gameplay. In a fast-paced and interconnected world, it is important that education systems provide students with adequate skills to help them deal with social and professional realities in the 21st century (OECD, 2015a; Schleicher, 2015; Wiseman, Anderson, 2014). Quality and equitable education is a key component in acquiring core competencies for lifelong learning (Commission of the European Communities, 2006) and is therefore a priority for national governments and international organizations (EU Commission, 2010; Fullan, 2010; Kinutia, Marshall, 2013). Traditional education systems are struggling to cope with the changing nature of instruction, the changing requirements for students and their competencies,

as well as the need for new ways of learning and managing difficulties (Fullan, 2010; OECD, 2015b). There is a need for educational policy reform that seeks to foster an innovative learning environment (OECD, 2015b) and 21st century skills development.

3.4. The use of distance educational technologies in sports

Currently, it is becoming relevant to use distance-learning technologies in the higher education system (Table 1). Distance learning in a university is the interaction of a teacher and a student between themselves at a distance, reflecting all the components inherent in the educational process (goals, content, methods, organizational forms, teaching aids) and implemented by specific Internet technologies or other means of interactivity (Polat, 2004). The students' independent work with literature plays an important role in distance learning.

Table 1: Distance Learning System

Information and Communication Technology	Distance Learning Methods	Motivational teaching methods
Electronic educational resources (tests)	Science club	Independent work
Electronic educational and methodological manuals (lectures, seminars)	Preparation of materials for participation in scientific conferences	Consultations
Multimedia presentations (PowerPoint)	Workshops	Participation in online presentations
Preparation for exams (tests)	Student reports	Master classes
	Diagnostics	Professional development

Source: Compiled by the authors

Distance educational technologies make the learning process open, focused on increasing the competence of students in the field of information and communication technologies (Lebedeva, 2011). The introduction of modern communication and distance learning technologies will not only significantly increase the information exchange between the teacher and the student, but also improve the quality of the educational process (Andreev, 2005). At present, distance-learning technologies are the main tool for achieving one of the goals of digitalization of education - ensuring the continuity of the learning process. Thus, the use of DOT in the educational process becomes an indispensable part of the work of a modern university teacher. It should be noted that during the period of the COVID-19 epidemic in Azerbaijan, distance learning is of particular importance. In order to organize a continuous educational process, information and communication technologies are used, which have the goal of creating electronic databases for students. The main factors determining the effectiveness of the use of ATT are presented in Table 2.

Table 2: Factors Determining the Effectiveness of the Use of ATT

The success of the use of distance technologies in e-learning students is determined by the level of:							
technical skills in computer accessibility management	Internet resources	learning motivation	self-organization and self-control	setting clear goals and objectives	tutor supervision	knowledge of norms and communication skills in a social network and the Internet	knowledge control objectivity

Source: Compiled by the authors

Higher educational institutions of the republic in a very short time switched to this form of education. The vast majority of students of the republic have not previously participated in such training. On-line conferences are also organized in the republic, where students participate remotely. We emphasize that distance education is a promising way to obtain education and increase the educational potential for residents of the regions of Azerbaijan. The spatial separation of students and educational institutions is no longer an obstacle to obtaining knowledge and advanced training (Table 3).

Table 3: Main types of educational activities using DOT

The main types of educational activities using DOT					
lectures implemented in various technological environments;	practical exercises (including laboratory and seminar) in various technological environments	educational practice implemented through the use of information technology	individual and group consultations by e-mail, through a chat conference	independent fulfillment of tasks by students, search and analysis of information resources	intermediate attestations with the use of information-communication technologies (ICT)

Source: Compiled by the authors

An analysis of the specialized literature confirms the effectiveness and feasibility of using DOT in specialized sports universities. This allows you to organize the training process with athletes who are in training camps or competitions. At the same time, a high level of motivation for mastering the curriculum according to the profile of education is taken into account. Thus, the implementation of these areas on a systematic basis will contribute to the modernization of the educational sphere and will provide an opportunity to more quickly respond to the challenges of the digital economy and increase competitiveness on the world stage. Thanks to distance learning, the organization of the educational process can become more convenient, tailored to each person. The introduction of DOT provides the student with more resources for self-controlled and independent work, and allows you to flexibly diversify the program of educational activities. The distance learning systems accompanying the courses of basic educational programs have been introduced into the educational process of almost all universities in Azerbaijan and are used as a means of organizing and monitoring students' independent work, posting additional teaching materials and information resources. Online courses – this is the space that is most useful for the teacher, with the help of which there is further development and understanding of the media and information culture. In open online courses, it is necessary to use video content, in particular video lectures, audio recordings, presentations, etc.

4. INNOVATIVE DEVELOPMENT TO ACHIEVE SPORTS RESULTS

The processes of globalization directly affect the development of sports technology. With the development of society, physical activity and sport penetrate into all spheres of human life and become more and more significant and integral part of world civilization. The sport of top achievements has been developing rapidly in recent decades, gradually turning into a separate area of activity. Sports science more and more acts as an independent scientific discipline, in which specialists of various specialties are involved. The latest achievements of scientific thought are used to monitor and analyze the actions of an athlete - from microelectronics to molecular biology.

Improving the effectiveness of the training process at each stage of the training process can be carried out only because of combining fragmentary knowledge gained by coaches, sports specialists and scientists. For the successful development of sports in Azerbaijan, it is necessary to change the existing paradigm of views on the nature of the relationship between high-performance sports and mass sports, where the latter is not important in itself, but is considered in the context of the training of highly qualified athletes. Particular attention is currently being paid to the problem of sports innovation. This is due to colossal changes in the economy, politics and spiritual life of different countries, which could not but affect the sphere of sports. Now athletes and coaches have to constantly work with innovations. The innovations that a trainer can use are diverse: new methods of sports training, problematic training, interactive teaching, etc. The implementation of technologies in the practice of sports training allows bringing pedagogical science and practice closer. All this will contribute to a change in the nature of physical education, health and sports in an increasingly dynamic, digital and globalizing world. Thanks to sports innovations, it becomes more interesting, easier and more accessible for people to play sports, and perhaps this is the most important thing, there is an opportunity to achieve high results. Thanks to innovations, sports will always be dynamic and in demand around the world.

5. CONCLUSION

The use of innovative pedagogical technologies in teaching effectively affects the quality of the educational process. These technologies help to increase the level of knowledge acquisition, teach students to think creatively, apply theory in practice, develop independent thinking, the ability to make optimal decisions in a particular situation. As practice shows, the use of innovative pedagogical technologies in professionally oriented training is the necessary term for the training of highly qualified athletes and specialists in the field of sports. This awakens students' interest in the educational and cognitive activity, which allows you to create an atmosphere of motivated, creative learning and at the same time to solve a whole range of educational, educational, and developmental tasks. Innovations are becoming the main tool for improving the quality of education in a modern sports educational institution. An analysis of the problems in the existing system of professional education proves the relevance of using innovative teaching technologies, in connection with the need to improve the quality of education and create conditions for the most complete realization of the cognitive potential of a person and the desire for learning. Integration and innovative use of digital technologies in education has become a priority of educational policy in Azerbaijan. As noted in this article, in the modern world, digital technology is considered to be a means of improving teaching and supporting innovation in educational institutions. The analysis conducted in the article showed that the use of computer technology in the student teaching system, the modeling of situational tasks in practice, communication with students in small groups, the participation of students in the educational process, allows students to obtain sufficient knowledge taking into account the use of modern technologies and advanced methods. The authors proposed specific directions for the introduction of innovative educational technologies in higher educational institutions of the country.

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FEATURES OF REGULATING THE USE OF FINANCIAL RESOURCES IN AZERBAIJAN

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ABSTRACT

The article mainly examines the implementation of state policy for financial resources. Financial resources play an important role in the structure and regulation of market relations. According to modern views, the impact of financial events on economic events and vice versa is one of the main features of today. In the past, financial events were not felt in the economic and social spheres due to low government spending and incomes. Now the situation has changed. Large-scale financial events have profound economic and social consequences. For this reason, one of the most urgent issues of the day is the proper management of financial events by the state and its effective use in solving economic and social problems. Development in modern times is the main goal of economic policy. Fiscal policy, monetary policy, budget spending, capital investment, and current development spending play an important role in increasing per capita national income, improving and improving the economic and social structure, and, in short, ensuring economic development. The ability of budget spending to achieve development depends on financial resources. Development expenditures should come from sound financial resources. The market economy is based on private entrepreneurship and private ownership. Inequality in income distribution manifests itself. Fiscal policy can be used as an effective tool to improve income distribution and living standards. The progressive tax system is one of the important tools for this purpose. Budget spending can also play a major role in this area. Spending on the education, health, and social security systems and their suitability rates are also important.

Keywords: *Financial diversification, Financial resources, Fiscal policy, National resources, Budget expenditures*

1. INTRODUCTION

Financial resources are the sum of money needed to carry out human activities. These resources are quite important as the bearing material components of financial relations. It should be noted that the main sources of financial resources are national income, profits of enterprises and organizations, regardless of the form of ownership, depreciation fund and insurance funds. One of the necessary issues for the formation of financial resources is the issuance of various securities and bonds (Фролова Т.А., 2009). However, the country's financial resources are formed mainly through taxes and other financial levies. Diversification of the national economy, development of stable and sustainable tax-based sectors of the economy and increase of export potential to increase foreign exchange reserves are characterized as necessary conditions for having strong financial resources (Zeynalova Z, Mammadli M., 2020).

2. ASPECTS OF USE OF FINANCIAL RESOURCES

Financial resources are important in the organization of all processes related to the development of the country and society. It will be difficult to implement the development priorities of the national economy, build infrastructure with high standards, modernize certain sectors of the economy, and bring modern technologies to these areas without financial resources. At the same time, development of natural resources in the framework of national interests, the organization of processing processes, the creation of a network of enterprises producing export-oriented

products are areas directly related to financial resources. In order to effectively allocate labor resources, the solution of priority problems such as the creation of sustainable, decent jobs, increasing the competitiveness of the national economy, accelerating the solution of socio-economic problems in the country is carried out with the help of financial resources. From this point of view, the state must set and implement strategic goals for the formation of financial resources and the maintenance of sustainable growth sources and increase their efficiency. These include:

- Ensuring the dynamics of the country's GDP growth;
- Improving the efficiency of foreign economic activity;
- Ensuring more productive use of national resources and raw materials;
- Application of advanced tax system and mechanisms;
- Stimulation of entrepreneurship and business development;
- Improving credit policy;
- Optimization of the use of domestic and foreign investments;
- Forming the use of budget resources on the basis of the principles of economy and efficiency.

It should be noted that the necessary condition for the emergence of the financial system and financial resources is the existence of commodity-money relations, the authoritarian nature of finance and the indirect expression of distribution processes. It is a set of economic relations expressed in the form of money as public finance and mainly aimed at the distribution and formation of GDP for the performance of public functions. Private finance is a set of economic relations that provide for the formation and management of financial resources at the level of economic entities and are more dependent on money (Schmidt R.H, Hryckiewicz A., 2006). Along with the development of the legal framework for the formation and distribution of financial resources, the state is responsible for their implementation, as well as control measures to ensure control over financial resources. In general, the state institutions involved in the formation of the country's financial resources include the budget system, extra-budgetary funds, financial resources of enterprises and organizations, property and personal insurance, state and bank loans in most countries of the world.

3. PUBLIC POLICY ON THE USE OF FINANCIAL RESOURCES IN AZERBAIJAN

It is important to regulate the use of financial resources in modern times. Thus, the formation of financial resources, the preparation of financial statements in this regard, ensuring transparency and honesty in the use of resources are important issues. Defining the legal framework and mechanisms for all these issues is important in terms of regulating the use of financial resources of each state. Most of the financial resources in the Republic of Azerbaijan are controlled by the budget system and the Central Bank, their movement is regulated and the use of resources is ensured by certain financial and credit mechanisms. In terms of practical experience, one of the main problems in this situation is the inadequacy of the legal basis for regulating the use of financial resources. This is due to the importance of legal and regulatory regulations and mechanisms for the movement of financial resources to be sufficiently active and stimulating. At the same time, the legal regulation of the use of financial resources is directly assessed as a factor in ensuring national security. The mechanisms for regulating the use of financial resources in the Republic of Azerbaijan are controlled by the Ministry of Finance. The State Financial Control Service was established under the Ministry of Finance of the Republic of Azerbaijan in order to control the movement of financial resources, the effectiveness of their use, the analysis and verification of compliance with existing legislation in this area. The main tasks of this service are to exercise state financial control over the expenditure of the state budget, including target budget funds, as well as the receipt and

expenditure of budget organizations for extra-budgetary operations, to ensure targeted and efficient spending of financial resources (Decree of the President of the Republic of Azerbaijan, 2009). It should be noted that the budget system itself is a complex process, and related issues must be improved every year. Only in this case, it is possible to ensure the adequacy and improvement of the legal framework for regulating the use of financial resources. According to the Law of the Republic of Azerbaijan on the Budget System of July 2, 2002, the main revenues of the state budget include state taxes, grants, and other revenues. Salaries, related payments, pensions, and other social payments, procurement of goods, and other services expenses, subsidies, capital expenditures, capital investments, investments, innovations, etc. are included in the main expenditures of the state budget. The Chamber of Accounts of the Republic of Azerbaijan was established by the Law of the Republic of Azerbaijan dated July 2, 1999, which prepares reports to the Parliament about analyzing the effectiveness of the use of state budget funds, giving an opinion on the preparation of draft budgets of the state budget and extra-budgetary state funds (Law of the Republic of Azerbaijan, 1999). The rules of the Cabinet of Ministers of the Republic of Azerbaijan "Submission of annual financial statements and consolidated financial statements of commercial organizations, reporting periods and publication" are one of the mechanisms to regulate the use of financial resources in terms of accuracy of accounting for financial resources and control over the use of these resources (Decision of the Cabinet of Ministers of the Republic of Azerbaijan, 2010). These Rules are developed following the Law of the Republic of Azerbaijan "On Accounting" and determine the rules for submission, reporting periods, and publication of annual financial statements of commercial organizations. The preparation of annual financial statements of commercial and credit organizations, which are the main economic entities in the concentration and use of a significant part of the country's financial resources, has an additional impact on improving the efficiency of financial resources. These reports are prepared following International Financial Reporting Standards or National Accounting Standards for Commercial Organizations. Also, comments and recommendations on the application of the 19th National Accounting Standard for Commercial Organizations "On Financial Statements of Organizations and Consolidated Financial Statements" prepared by the Ministry of Finance of the Republic of Azerbaijan are noteworthy (Rustamov P.H., 2007). From the legal basis for regulating the use of financial resources, the "Law of the Republic of Azerbaijan on Financial-Industrial Groups" is also of interest. This Law regulates the accumulation of financial resources in a particular area of activity and the legal regulation of its use. The financial-industrial group is created to combine the material and financial resources of the participants on a contractual basis and to attract investment to increase the competitiveness and efficiency of production, to establish favorable technological and cooperation relations, to increase the export potential, to accelerate scientific and technical progress, to jointly implement investment projects and programs. The state may apply various discounts to financial and industrial groups to support their activities (Law of the Republic of Azerbaijan on financial-industrial groups, 1996). Such mechanisms are developed and implemented by the state in various programs, financial and credit funds to diversify economic development. As a result of such legal and financial credit regulations, it is possible to effectively organize the use of resources, the legal basis for regulating the movement and use of financial resources is formed, and their practical mechanisms are applied. Also, due to the extra-budgetary formation of financial resources, mechanisms are created to direct these resources to the new areas of the economy, and favorable conditions are created for their effective use. For example, the activity of the extra-budgetary "National Fund for Entrepreneurship Support of the Republic of Azerbaijan" to accelerate the development of various sectors of the economy, especially in the regions, plays a useful role in regulating the efficient use of resource potential and providing practical assistance to businesses. In general, there is still a need to develop and apply more effective regulatory methods and legal

frameworks in this area despite the intensity of measures to stimulate and expand the active use of financial resources.

4. DYNAMICS OF FINANCIAL RESOURCE USE IN AZERBAIJAN

The analysis of the formation, movement, and use of financial resources is important in our country. Thus, the analysis and objective assessment of the investment climate in the country, state budget revenues and expenditures allow us to imagine the real situation with the use of financial resources. Table 1. provides information on investments in the economy of the Republic of Azerbaijan at the expense of all sources for 2000-2018.

Table 1: Investments in the economy of the Republic of Azerbaijan, mln. manat (2000-2018)

	2000	2005	2010	2015	2016	2017	2018
Total investments	1289,8	6733,4	14118,9	20057,4	22706,4	24462,5	25877,0
Domestic investments	460,3	2104,9	7499,2	9058,5	6490,3	8765,2	11874,9
Foreign investment	829,5	4628,5	6619,7	10998,9	16216,1	15697,3	14002,1

Source: SSCRA. <http://stat.gov.az>

As can be seen in Table 1, during 2000-2018, investments in the country's economy from all sources amounted to 238 billion. manats (SSCRA 2019).

Table 2: Dynamics of revenues and expenditures of the state budget of the Republic of Azerbaijan for 1995-2018 (million manat)

	1995	2000	2005	2010	2015	2016	2017	2018
Total revenue	316,9	714,6	2055,2	11403	17498	17505,7	16516,7	22 508,90
including:								
income tax	22,8	94	317,4	590,2	982,5	1145,7	1040,3	995,9
corporate income tax	86,3	125,9	355,4	1429,9	2211,1	1983,2	2285,9	2 499,70
land tax	0,8	6,7	15,3	35,3	48,7	50,3	50,4	50,6
property tax	0,9	11,8	40,4	101,8	148,2	174,7	178,6	182,2
value added tax	30,6	190,8	599,9	2082,5	3454,7	3623,5	3668,6	4 287,60
excise	17,7	22,4	141	514,9	647,8	625,1	612,6	728,6
mining tax	0	50,4	53,5	130,1	116,1	110,3	111,1	137,4
taxes on foreign economic activity	8,9	63,4	205,2	291,8	934,5	861,2	903	1 143,70
other taxes	62,9	9	28,1	90,3	247,7	457	505,7	561,6
other income	86	140,2	299	6136,2	8706,7	8474,7	7160,5	11 921,60
expenses, total	428,4	764	2140,7	11765,9	17784,5	17751,3	17538	22 731,60
including:								
to the economy	52,6	89,4	444,7	4889,9	6408,8	4124	4394,3	7 822,70
from them:								
education	75,2	181,8	372,5	1180,8	1605,1	1754,4	1742,8	1 966,60
health	29,7	40,9	115,3	429,2	708,2	702,5	704,7	709,9
social protection and social security	36,5	139,3	304,9	1123	1857,2	2645,2	2350,2	2 119,60
activities in the field not related to culture, art, information, physical education and other categories	9,8	20,6	50,6	168,4	236,3	240,1	214,8	227,2
the science	3,9	9,3	28,8	92,8	113,2	110,2	109,8	117,8
judicial system, law enforcement agencies and prosecutors	40,6	74,4	206,4	668,5	1105,7	1117,1	1177,5	1 316,40
maintaining legislative and executive authorities, local authorities	17,6	37	123,9	303	430,9	470,1	552,2	627,4
other expenses	162,5	171,3	493,6	2910,3	5283	6140,4	6253,2	7 720,60

Source: SSCRA. <http://stat.gov.az>

If we look at Table 2, we can see that during 1995-2018, state budget revenues increased more than 71 times, and in 2018 amounted to 22.5 billion. manat. During that period, state budget expenditures increased 53 times, and in 2018 amounted to 22.7 billion. manat. There has been no significant increase in some items of the country's budget revenues in recent years. For example, legal entity income tax revenues remained at almost the same level in 2015-2018 and did not show significant growth (SSCRA, 2019). This fact makes it necessary to pay attention to the problems of increasing the profits of legal entities, which play an important role in the formation, movement, and use of financial resources in our country. In general, the identification of comprehensive measures remains relevant to optimize and model the revenues and expenditures of the state budget, and the improvement of related mechanisms. The real practical features of the regulation of the use of financial resources allow us to conclude that in all cases requires a comprehensive and systematic approach, analysis, economic-financial and economic-organizational justification, strict and optimal control systems, optimal models of resource use and other regulatory mechanisms.

5. CONCLUSION

The economic efficiency of the use of financial resources is important. Thereby if financial resources are not used efficiently or there are problems with their using, the loss of resources will increase and their depletion will intensify. The implementation of these measures as ways to increase the efficiency of the use of financial resources in the country can be considered expedient:

- First of all, measures should be taken to form financial resources in the country, to make their sources sustainable and productive;
- Legislative framework, norms, and regulatory mechanisms should be improved, taking into account the practical realities in each area of use of financial resources;
- The structure, movement and use of financial resources should be thoroughly analyzed using scientific and economic methodological approaches and methods, and the resource potential should be objectively assessed;
- Steps should be taken to provide sustainable and intensive financial resources to various sectors of the economy, especially the real sectors of the economy, to develop regulatory mechanisms, to stimulate the efficient use of financial resources;
- Modern and reliable models of financial control mechanisms should be applied to ensure the efficiency of the movement and use of budget resources and extra-budgetary financial funds directed to the socio-economic development of the country;
- Measures should be taken to develop and implement targeted state programs, concepts and strategies to stimulate the efficient use of financial resources in the country;
- Methodological approaches and mechanisms based on scientific and economic bases should be developed by the practical tools, and methods of maximum efficient use of the country's oil revenues, foreign exchange reserves, and aggregate financial resources in general.

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EMPLOYMENT IN THE DIGITAL ECONOMY: PROBLEMS OF THE AZERBAIJANI LABOR MARKET

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ABSTRACT

The formation of a new technological paradigm called "Industry 4.0" and economic structure contributes to the transformation of social reality, in which all spheres of life and people's behavior are being exposed to radical changes. By parity of reasoning, the new model of labor and employment was called "Work 4.0", it is being intensively developed in countries with advanced economies, it contains whole new world of opportunities, but at the same time there are certain risks attached. New forms of labor, cooperation and exchange are being formed as the activation of modern applications of Internet connects people with machines and things. Labor activity becomes transparent and easily controlled from the outside. As the boundaries of innovation expand and opportunities for getting education improve and the quality of labor resources grows. Work grows more autonomous and mobile, whereas the fulfillment of labor functions largely corresponds to the mastery of multiple competencies, among which there is a place for lifelong learning and digital literacy which are of big importance in the digital age. Numerous objects and means of labor and production are being digitized, which, in turn, plays a great role in the emergence of new forms of cooperation and exchange. However, the list of the functions performed through the means of Internet does not content itself with providing raw possibilities for communication among people; it involves communication with things as well. This process goes on to create rather more complex cycle of dependency between the people, goods and machines which have grown more interconnected. The requirements for the employee have undergone radical shifts, yet the future implications for these phenomena remain debatable. New digital environment requires new competencies and qualifications to be created, while transforming our understanding of jobs into occasional entities with no permanent workplace or time.

Keywords: *Digital economy, Employment, "Industry 4.0", Labor activity, Machines*

1. INTRODUCTION

The development of digital technologies opens up new horizons of progress for mankind, the world is entering the Fourth Industrial Revolution ("Industry 4.0"). This means the automation and robotization of production, the widespread use of artificial intelligence, the introduction of digital technology in all areas of the economy. "Industry 4.0", being closely associated with digitalization and the construction of technological infrastructure, leads to the introduction of innovations and development. Back in 1930, the great economist John Maynard Keynes predicted that in a hundred years we will all be able to enjoy a 15-hour work week. As British scientists from Oxford University confirm in a report, "The Future of Work and Employment," "such a mode of work is no longer a fiction, although in reality much more needs to be radically changed for this." It is, first of all, about the development of a technology called "artificial intelligence": self-learning robotic production lines and systems will be able in the near future to take on even more work performed so far by humans. The relevance of the topic of this article is due to the fact that modern technological changes radically change the structure of life and social relations. Large-scale consequences are expected in the areas of labor and employment. Today, Azerbaijan is also joining Industry 4.0, a country known in the world for its oil and gas resources and excellent geographical location, making a worthy contribution to the energy security of the European Union and several other countries.

The new era poses the challenge for Azerbaijan to respond to the calls of the times and reach new frontiers in economic development. As for highly developed countries, digitalization of the economy, building a digital economy, introducing innovations are among the priorities for Azerbaijan as well. Azerbaijan has all the opportunities for digitalization of the economy, building a digital economy, sustainable development. How will the digital revolution affect the economy and employment in the world in general and in Azerbaijan in particular? Even now, innovations in higher education in Azerbaijan are noticeable, which are aimed at creating new competencies for future professionals. Out of the focus of attention are only knowledge of the most important social changes that will follow the entry into a new phase of industrial and economic progress. The limitation of students' knowledge, in our opinion, is due to the lack of scientific, public and official discourse in the country regarding the assessment and consequences of applying technological knowledge and skills. Therefore, the first section of this article (introductory) is devoted to the description of new trends in the economy and society associated with the consequences of technological progress. One of these trends is the development of a new model of labor and employment, the forthcoming of which is expected in the labor sphere of society. The main features of this model, called "Work 4.0", are, firstly, new requirements for the training of workers, which apply to all professional groups without exception. Secondly, there is a transformation of the classical organization of labor and the usual patterns of employment. Most likely, in the future, professional work and its results will become exclusively an area of personal motivation and responsibility of each employee. The expected radical changes in the social and labor sphere of society attract the attention of both the public and politicians. In recent years, the topic has been intensively studied in the scientific community and has been discussed in the media. Accordingly, the main questions for us now are how Azerbaijani science fits into this discourse, which should assess the objective changes taking place in the labor market and in the employment system in connection with changes in the requirements for employees. The second section of the article is partially devoted to these issues. It provides a brief overview of modern Azerbaijani scientific literature on the involvement of Azerbaijani workers in new trends in the social and labor sphere. Due to the lack of special monitoring and surveys in the empirical part of the article (section 3), only one hypothesis is tested - about the low degree of even elementary digital literacy (competence) of Azerbaijani workers, which does not meet the conditions and requirements of the time. The fourth and fifth sections compare the socio-demographic, professional, qualification characteristics and professional position (satisfaction with work, income, fear of job loss) of subgroups of employees and self-employed using the Internet for work purposes. It is suggested that the self-employed in Azerbaijan, using the Internet in work, are more likely to satisfy working conditions in a high-tech environment, although the classical model of hired work is gradually wear out due to changes in requirements for employees, especially in groups of highly skilled workers. The purpose of the study is to find out to what extent Azerbaijani workers use elementary digital skills - the use of mobile devices and the Internet - for professional and personal purposes, as well as to assess the consequences of using the Internet in their work for the professional profile and position of workers. In the conclusion, generalizations are formulated about the specifics of the development of labor potential and the consequences for labor and employment in Azerbaijan, as well as about the tasks that currently stand in the field of updating the competencies of workers.

2. "WORK 4.0" - A MODEL OF LABOR AND EMPLOYMENT OF THE FUTURE

Currently, the most developed countries of the world are undergoing a process of a new industrial revolution, as a result of which an innovative type of economy is developing, known as Industry 4.0. In the name that is popular today, the stages of previous industrial progress are encoded, from the transition to machine labor to the present, in which cyberphysical systems

are massively introduced into production and the boundaries between the physical, digital, social and biological spheres of life are transformed [8]. For the first time, the contours of the Fourth Industrial Revolution, or “digital revolution,” were presented at the Hanover exhibition in 2011 [2], but since then its description has been constantly updated [17]. If initially the appearance of the Internet was compared with the creation of a steam engine, but right now we are talking about production methods based on the use of cloud technologies, the collection and analysis of big data (Big data, Smart data), which are a kind of “raw material” and contribute to the emergence of the world economy based on advanced robotics, self-learning algorithms, the Internet of things, 3D methods of creating physical objects and other technologies. This allows you to build a new reality that contains global industrial networks, virtual currencies, autonomous transport, circulation of materials, individualized consumption and use of artificial intelligence in all areas of life (“smart cities”, “smart things”, “smart home”, etc.). As a result, a new model of labor and employment is spreading, which is called “Work 4.0”. It is carried out in the digital space, contains new opportunities, but at the same time risks, both for the economy and for the workers themselves. Numerous objects and means of labor are being digitized, which leads to new forms of cooperation and exchange. The profile of the employee and the requirements for him are radically changing, but remain as yet uncertain. In the digital environment, new competencies and qualifications are needed, jobs are created that are not tied to one place and time [1]. Concern is caused by a drop in the volume of human labor, especially among people with average qualifications. There are opinions that a number of professions will be unnecessary in the new economy, while the importance of engineering and computer majors will greatly increase. Also, professions related to personality development (for example, in the provision of social services) will be more in demand [18]. On the other hand, it is noted that we are not talking about the loss of professions and jobs, but about the loss of certain types of activities [19], or a drop in demand for low-cost and low-demand labor in the modern economy is expected. More often, changes in work occur in large enterprises. These trends are especially strong in the sector of information and communication, finance and insurance, automotive, electrical engineering. The digital environment is becoming part of the development of health and social welfare. However, changes happen more slowly in the spheres like education, housing, and hotel business, where customized relations and services are becoming more valuable [1, p. 4-8]. The “Work 4.0” model involves simultaneously changing the structure of labor income. In developed countries, despite the dynamic growth of the economy income inequality is again increasing. The most vulnerable groups of workers include those who are forced to perform simple tasks for a small fee. Holders of scarce intellectual capital, on the contrary, will gain new advantages, including in wages. The increase in gender inequality in the workforce is associated with the new nature of occupational positions: it is expected that one new job will appear for three lost male jobs, while women will have one new position to replace five lost jobs [8]. Rapidly changing working conditions require the adaptation of workers to technological changes or, in a radical case, the replacement of people with robotics [10]. Robotics, networking, context-sensitive information exchange, mobile applications and programs serve the purpose of efficiently implementing labor functions and increasing labor productivity. Part of the labor tasks is outsourced, especially in the field of service delivery, which leads to the development of a new type of labor activity, known as “on-demand-economy” (economy on demand). In addition, in relation to work, the adjective “mobile” is increasingly used, it is compared with activities that are designated as “atypical”. The process of blurring the boundaries between typical and atypical work now looks as follows: on the one hand, online employment is becoming increasingly popular. Digital labor markets are developing rapidly, such employment grows in scale (crowd working) [5], there is high competition and division of labor between workers. Similar business models of employment are already being adopted by individual enterprises, creating a similar internal organizational

environment. On the other hand, automation and informatization change the essence, meaning and values of work in an enterprise or organization in the same direction. Along with stability in working life, its qualities such as autonomy and flexibility become important (especially for the younger generation of workers) [11]. The ever-increasing mobility of work also leads to the fact that it can be performed outside the office. This can be work from home (teleworking), work on the territory of the client (service types of work), field working, as part of the performance of official assignments (exhibitions, conferences). One of the most important tasks facing different countries in the development of labor potential is the restructuring of the education and training of specialists, as well as the creation of a practice-oriented educational environment for retraining and permanent training of workers (lifelong learning, blended learning) [6]. This is due to an increase in demand for highly qualified specialists who not only create new technologies, but also know how to manage complex systems. The reports of politicians at the World Economic Forum in Davos note the explosive nature of the changes that have begun, and this means that people will have very little time to adapt to new requirements [8]. Particularly essential for the future workforce is an information technology, which should be owned not only by selected specialists, but also by wide groups of workers of various professions. This process is called a “qualification update”. So, in modern foreign monitoring of employment, the use of Internet technologies in fulfilling labor tasks is already emphasized.

3. INVOLVEMENT IN THE PROCESSES OF LABOR CHANGE AND EMPLOYMENT OF AZERBAIJANI WORKERS

Research on the transformations of labor and employment in Azerbaijan is mainly related to the analysis and assessment of their atypical forms and types, in particular those that involve remote work, outsourcing and self-employment on the Internet. In studies on online employment, many of the qualities of employees are similar to the profile demanded by the Work 4.0 paradigm. These include independence, autonomy, intellectual advancement, the presence of demanded competencies in the digital economy, and the ability to work in a project [9]. Considering the types of employment that are considered rare and abnormal in Azerbaijan, researchers emphasize problems that are comparable with the trends in the transition to a new model. Subsequently, such work is characterized as unstable, short-term, irregular. Persons involved in such employment break the traditional notions of the value of work, since professional activity is regarded as secondary or equivalent in comparison with other types of activity [10]. In addition, an increasing number of educated workers in the field of programming, design, advertising, marketing services and so on are involved in it. Their functions can vary from performing to entrepreneurial, administrative, and managerial [14, p. 97–99]. Earnings are highly differentiated, although in general, the opportunities to earn through the Internet are evaluated with restraint [15, p. 29]. Characteristically, this group of workers is described as heterogeneous, blurred, not showing bright qualities [14, p. 94]. This means that the usual characteristics (gender, age, income and education) can currently only have a limited impact on the choice and implementation of the work path. In general, the scientific literature does not pay much attention to issues related to the transition to a new model of labor and employment in Azerbaijan. Here you can find a mention of how many people currently own and use the Internet in their work. According to the State Statistics Committee, in the country there are 45.3% of employees using the Internet for work [14, p. 94]. Another study of specialists in the field of information technology is devoted to the study of competencies necessary for solving problems in a technologically enriched environment [13]. Solving problems in a technologically rich environment included working with e-mail and Internet resources, organizing data. If the respondent was not able to cope with the basic part of the task, then further testing was not carried out.

Finally, it turned out that while the literacy and mathematical knowledge of the population is at an average level among the countries of the Organization for Economic Cooperation and Development (OECD), then in solving problems in a technologically saturated environment it is noticeably behind [13, p. 28]. Separately, the study mentions that 33.6% of Azerbaijani test participants do not know how to use the keyboard and mouse. For contrast, in the OECD countries only 19.5% turned out to be in the above-mentioned condition [13, p. thirty]. Thus, in this study, lagging behind OECD countries and a low increase in the level of mastery of key competencies, primarily in the field of elementary digital literacy, are recorded. An analysis of the literature allows us to draw the following conclusions regarding the involvement of Azerbaijani workers in the transition to a new model of labor and employment. Firstly, there is a group of workers who carry out labor activities using computer devices and the Internet. Such labor is more consistent with the new requirements for workers, at least in the field of digital literacy. Secondly, the inclusion of the bulk of hired workers in a high-tech environment is slow, and the process of changing labor and employment (mobility, job flexibility, advanced training, autonomy, and evaluation by results) is correspondingly inhibited. Thirdly, since there are no special surveys of competencies of the bulk of workers (employees) and perceptions of the workers themselves about the current changes in the workplace, in the employment system and labor market, it does not seem possible comprehensively assess the degree of readiness of Azerbaijani workers for new conditions of work and employment.

4. THE LEVEL OF DIGITAL LITERACY OF AZERBAIJANI WORKERS

According to the State Statistics Committee, 80% of employed respondents used the Internet in the last 12 months before the survey. However, only 25.3% of workers used it at the place of work or study. For business purposes, about 16.1% of respondents used the Internet in the same period of time. To study, the Internet used by 7% of workers surveyed. For entertainment, contacts with other people or obtaining information, the respondents used the Internet more often (17.6, 29.6 and 29.7%, respectively). 44% used portable computers (laptops, notebooks, netbooks) to access the Internet. Another 16% use tablets and 38% use mobile phones or smartphones. Thus, in general, the significant use of the Internet in 2017 by employees sharply contrasts with the low level of use of computer equipment and the Internet for work purposes. For comparison: in Germany, already in 2014, 92% of employees used the Internet and 54% - computer equipment and the Internet in the workplace. Comparison of elementary computer literacy between employees and self-employed is given in the table. 1. The assumption that a group of atypical workers has a greater degree of basic computer literacy is not confirmed. Also, the Internet was used for work purposes to a greater extent in the group of employees. This is most likely due to the fact that self-employment is diverse and often characterized by the use of low-skilled labor or represented by unclaimed workers in the labor market (nannies, loaders, etc.).

Table following on the next page

Table 1: Elementary computer literacy of Azerbaijani workers, % of the subsample

Criteria	Employed	Self-employed
Internet usage in the last 12 months (before the survey)	73	62
Use of the Internet at the place of work or study	41	17
Use of the Internet for business purposes	47	33
Using the Internet for study	12	6
Using the Internet for surfing in the social networks	53	46
Using laptop to access the Internet	44	36
Using tablets to access the Internet	17	13
Using mobile phones or smartphones to access the Internet	38	32

Source: According to Goskomstat

A comparison of the socio-demographic characteristics of the subgroups of Azerbaijani workers shows that there are some differences between them, although the age structure of both groups is very similar (Table 2).

Table 2: Comparison of the ages of self-employed and employed workers using the Internet in their work), in% of the subsample

Age group	Total	Self-employed	Hired
7-24	40,2	46,0	54,0
25-35	25,8	45,0	55,0
36-64	33,9	56,0	44,0
64 and up	0,1	-	-

Source: According to the State Statistics Committee

It cannot be said that among those employed in atypical jobs there are more representatives of young generations, as is often believed [20]. Significant differences between these groups of workers are noted in relation to gender. If among self-employed there are more men than women (54% and 46%, respectively), then in ordinary employment women (40% and 60%) are significantly predominant. Comparison of workers by professional groups showed that among the self-employed workers the Internet is mostly used by trade and service workers, and then, almost equally, by highly qualified specialists and skilled workers engaged in manual labor. Among ordinary employees, people with a higher level of education use the Internet to a greater extent, while among the self-employed, the use of the Internet in work is less dependent on this criterion. The latter means that the requirement of digital literacy should become without any exception the basis for the recruitment of all qualification groups of workers. Most self-employed people work in industries such as trade and consumer services (44%) and construction (19%). A small number of such staffs (from 4 to 7%) are in the field of transport, communications, education, science and culture. Employees are also most concentrated in trade and consumer services (20%) and another 14% in education. From 5 to 8% of workers are employed in construction, transport and communications, science, culture, serve in the army and the Ministry of Internal Affairs. In all other sectors, the number of workforces using the Internet is at the level of statistical error. Thus, innovations in Azerbaijan are distributed primarily in these sectors, and the employment level will change there, firstly. It is characteristic that the industries in which a greater number of workers using the Internet are concentrated are identical in both subgroups, but with a different volume of employment renewal. Career growth [9] for both subgroups are nearly the same. To a certain degree most of the people who are dissatisfied with these opportunities are self-employed workers.

However, the vast majority of employees do not move up the career ladder (more than 90% in both subgroups). Only 8% of employees during the last year have taken any advanced training courses at their workplace. This means that for the vast majority of employees, qualifications and competencies do not improve. Among the advanced training, the most common are pedagogical, medical, legal, translation and philological and managerial specialties. Advanced training in the telecommunications sector was 7% of the total small number of advanced training. These courses concerned the training of teachers, specialists and technicians in the field of ICT, drivers, mobile installation operators, librarians and other specialists in the field of information, office data entry work. 80% improved their qualifications in their specialty, and 18% studied courses in a new specialty. Thus, it is mainly about improving professional knowledge, and not about developing competencies. Recently, fear of job loss has been widespread among workers. Such fear is more noticeable in classical employment. Perhaps the declining efficiency of enterprises and low labor productivity are forcing the majority to cut staff costs. Employment becomes unstable even in comparison with the self-employment that is not protected by law (Table 3).

Table 3: Comparison of the degree of concern about the possible loss of work of self-employed and employed workers using the Internet in their work (), % of the subsample

	Self-employed (n = 151)	Employed (n = 2476)
Very or little worried	55	63
Moderately worried	17	13
Not very worried or not at all worried	27	24
No answer	1	0
Total	100	100

Source: Monitoring data

But the self-employed are much more likely to change their place of work and profession than hired workers (the difference in subgroups is 15%). This trend is also characteristic of “Work 4.0” (see section 1). The working hours in both subgroups are as follows: in the self-employed group, the most common working hours during the day is an eight-hour working day (33%), from 9 to 12 hours (33%), 4 hours for 7% of employees. Employees more often work in the traditional manner for 8 hours (53%). Processing is characteristic of 9% of such employees, and a shorter working day of 6–7 hours for 12% of employees. Other options for labor time during the day are very rare for both groups. Estimating the length of the working week of self-employed staff causes difficulties. 20% of respondents were not able to determine the total time of work during the week compared to 6% of those working in organizations. 18% of the self-employed work 40 hours a week, but another 26% work from 45 to 50 hours. 6% work only 20 hours a week. 47% of employees work 40 hours a week and 16% work from 45 to 50 hours, that is, maneuver is also common among employees. Self-employed mostly work regularly. The vast majority of these workers per month work from 20 to 26 days. Only 5% found it difficult to answer the question about the number of their working days per month. Employees also work regularly, with the exception of 6%, who take only 15 days to work a month. Thus, a change in the structure of labor time is characteristic not only of atypical employment, but also of ordinary hired work, although to a much lesser extent. 25% of the self-employed do their work at home and spend an average of 94 hours a month on it. At the same time, 47% of them take these hours into account in the total number of hours worked. Of those employed, only 15% do work at home. They spend an average of 45 hours a month on this, which is half that of self-employed workers. Although teleworking is less common in traditional employment than in atypical forms of work, it sums up in significant amounts of working time.

Moreover, only one in five respondents takes this activity into account in the total number of hours worked, that is, in fact, we are talking about unpaid, relational work. Only 25% of total employees involved in studies indicated that they work in small enterprises (up to 20 employees), 14% - in large enterprises (over 200 employees), 23% did not answer this question, and the remaining 38% identified themselves as employed medium-sized enterprises.

5. CONCLUSION

The study of elementary digital literacy of Azerbaijani workers as the most important competence related to requirements in the new labor and employment model "Work 4.0" showed in this regard a significant lag of Azerbaijani workers in comparison with the progressive economies (for example, Poland). On the contrary, inside the labor force of the country there were no significant differences in the development and use of this competency. As a result of the study, the assumption that the self-employed in Azerbaijan is a more prepared group to work in the new conditions is not confirmed. Such differences appear while analyzing groups of workers using a computer and the Internet in their professional activities. A comparison of the professional position and profile of two groups of workers using a computer and the Internet (self-employed and employed workers) in their work confirms the presence of some qualities of workers that are supposed to be in demand in the new model of labor and employment. So, indeed, the new employment is more likely associated with the male type of labor. But since the simple numerical predominance of women in Azerbaijan corrects the entire employment structure, this feature is most likely not to be expressed in the new employment system. It is only clear that the distribution of "Work 4.0" will affect women's employment, or the replacement of jobs will require technological training (in engineering, computer specialties) of female labor. The requirement of a young age and flexible lifestyles will not seriously hinder the change of work biographies and the fulfillment of professional tasks, since there are many young people on the labor market, new life styles are spreading among employees. The most dynamic sector of trade and services from the point of view of using the Internet contributes to the development of Azerbaijani economy in American style, rather than German path — "on-demand" (creating digital platforms with the distribution of labor tasks instead of introducing technological innovations into production processes with a new design of workplaces). A serious stratification of labor and income is not ruled out, since there is a noticeable lag in elementary digital literacy among workers with low and medium qualifications. The lag in the progress of employment and the growth of labor productivity will also be associated with a lack of awareness among workers of the need for regular professional development throughout their working lives. An objective reason for this is the lack of a relationship between skill development and the level of wages of local workers. Inattention to this can slow down the process of creating and introducing innovations in the economy, and reduce the speed of economic and social development. In the field of labor and employment, due to the inefficiency of enterprises that are unable to reorganize work, and taking into account the existing opportunities, tensions associated with the risks of job loss may increase. Since the majority of employees using the Internet are employed in small and medium enterprises, we can talk about the need for a radical restructuring of the personnel management policy in large enterprises, since they are the "engines of innovation" everywhere in the world. Employees themselves adhere to a greater degree of traditional behavior, resist mobility [5] and innovation in labor functions, are not accustomed to flexibility and management of their work. Organizations and enterprises, state policy in the field of education are faced with urgent tasks to update the competencies and labor skills of the employed population of the country. Technological innovations in enterprises should be accompanied by changes in the internal organizational environment, personnel management.

For the education system, along with training in new competencies, it is important to develop educational and outreach programs for preparing for work and employment in the digital economy.

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THE IMPACT OF DIGITAL TECHNOLOGIES ON THE SECURITIES MARKET AND FUTURE EFFECTS

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ABSTRACT

The securities market is a market where long-term investment, supply and demand meet. If we look at the economic function of securities, we can assume that securities market enables savings to be converted into investments. Since its establishment, these markets connect the entities who need capital and who interest investment. For the normal functioning of the securities market, there are certain conditions, such as accurate information about securities, a large investor base with access to this information, the protection of the rights of these investors and a liquid secondary market that is not covered by excessive operating costs. All of these requirements are important, and it should be noted that the application of digital technologies plays a special role in meeting these requirements. Thus, without accurate information, investors will not be able to value securities and will not be able to invest in securities in general. Technology allows information to be disseminated to a wide audience of investors in real time and at a low cost, thereby expands the scope of investors who have access to a wide range of information. Moreover, technology reduces barriers to access for financial services and, as a result, reduces operating costs. These changes increase the number of market participants and contribute to a sharp increase in trade. In this article, user requirements, national policy targets for the financial services industry, a brief overview of practical operational problems, and a description of the organizations and competitive forces that make up the industry have been explained by describing the structure, functions and instruments of the securities market. Considering the impact of the application of digital technologies in these areas, the future effects are discussed.

Keywords: digital technologies, securities market, stock exchanges

1. INTRODUCTION

When looking at the nature and economic functions of securities, it can be assumed that securities have a regulatory role in the economy by diverting savings to investment. These markets bring together those who need capital and want to invest to ensure savings are invested. There are certain conditions for the normal functioning of the securities market, including accurate information about securities, an investor base with access to this information, the protection of investors' rights, and a liquid secondary market that is not covered by excessive operating costs. These conditions should be met, and it should be noted that the application of digital technologies has a special role in meeting these requirements. Thus, investors cannot evaluate and invest in securities without accurate information for investing. Technology allows information to be disseminated to a wide audience in real time and expands the range of investors with access to information. Moreover, technology reduces access barriers to financial services and reduces operating costs. These changes increase the number of market participants and contribute to a sharp increase in trade. It should also be noted that information about market processes and risk assessment services is very important for investors to invest in the securities

market. Thus, investors prepare estimates and programs for future investments using this information. As the operations in the securities market depend directly on information, the application of new information technologies in these markets is of particular importance. The development of digital technologies has created new electronic opportunities to expand trade by automating their operations in global financial institutions. E-exchanges and e-commerce firms, which offer the ability to buy and sell stocks, bonds, derivatives and other financial instruments online for financial information and a large audience, have the opportunity to expand and offer new services.

2. NEW TECHNOLOGICAL SOLUTIONS IN THE SECURITIES MARKET

Capital demand has an important role in the development of economic sectors through the transfer of the securities market cash flows along with the banking system. The securities market is particularly important in directing revenues concentrated in one sector to other sectors. The formation of the securities market is possible through the creation of clear rules, control mechanisms to ensure compliance with the rules, the availability of information and transparency, the necessary environment for free choice. It is known that the securities market is one of the parts of the financial market. The securities market consists of the relationship between money demand and supply. The securities market provides the flow of capital to productive areas, provides flexibility to the economy, which enables the transfer of monetary resources from one area to another and ultimately increases the rate of economic development. The structure of the securities market is shaped by user requirements, national policy objectives for the financial services industry, practical operational challenges, and competitive market forces. There is a process of giving money to those who need it through securities. Furthermore, this process is based on the principle of material interest and volunteering, not on administrative command methods. At the same time, the securities market is a favorable environment (structure, market) to meet the capital needs of countries. Financing is always needed to set up and develop new businesses. The developing (expanding, growing) securities market provides an important link for capital markets and is also a means of capital transfer within the country. The main role of the securities market since its foundation is still the driving force of its operations today. That is, the main function of the securities market is to provide interaction tools for those who need capital, seek financial resources, and want to invest. The two most important factors in the functioning of the securities market are the maintenance (formation) of a regular market and the availability of trade data. Trade and pricing has always been important for trade decisions. Decisions and investments are made according to market information. It should also be noted that in order to invest in the securities market, information about the processes taking place in the market is very important for investors. Thus, investors prepare estimates and programs for future investments using this information. In this context, the application of new information technologies in the securities market is particularly important since operations in the securities market are directly dependent on information. The use of digital technologies in the securities market began in the early nineteenth century. Initially, digital technologies were used in these markets to store, transmit and process data with digital codes. Over time, the increasing demand for information and the globalization of markets have increased the demand for the development of digital technologies and new applications. This created new digital opportunities to accelerate operations and expand trade in global financial institutions. Thus, e-exchanges and e-commerce companies, which offer the opportunity to buy and sell online stocks, bonds, derivatives and other financial instruments for financial information and a broad audience, have the opportunity to expand and offer new services. In terms of the organization and functioning of the securities industry, the organization of this industry is traditionally provided by three organizations: investment banks provide services related to the public offering of shares and bonds of a corporation; brokers manage the purchase

and sale of securities; and exchanges provide a means to set prices and actually conduct transactions.

- *Investment banks*

Investment banks have an important share in both internal and external financing. It reaches three levels of buyers and sellers through the activities of the investment bank: first, securities purchasing investment banking services, companies and governments; secondly, investors (investments) on new issues; Third, intermediaries that bring these two sides together - other investment bankers, insurance companies and commercial banks. Investment banks take the risk of offering investments explicitly, guaranteeing their purchase. The nature of competition in investment banking is changing. Price competition reduces payments for underwriting at a new time. In addition, simplifying security enrollment conditions can make insurers unnecessary. However, the need to transfer risk continues to provide a strong incentive to use investment banks' services.

- *Broker Houses*

Full-service brokers trade in securities and provide financial advisory services supported by market and industry research and analysis. In this segment of industry, subsidiaries of companies offering a number of financial management services dominate. Although they have competed with the reputation and quality of the services of the broker research in the past, price competition has also become a factor. Discounts focused on the operational aspects of the business entered the market and attracted a significant part of both corporate and individual trade. In response to entering this market, many service providers take steps to differentiate their intermediary services and increase customer loyalty. Increasing efforts focus on product development and promotion.

- *Stock exchanges* - Exchanges are independent participants in the securities industry and have two functions:
 - trading and taking risks;
 - Stock exchanges act as a secondary securities market in both debt and capital issues, offering flexibility and options to investors.

The regulatory structure of the securities industry recognizes the importance of capital and money markets for the development of all sectors of the national economy. Legislation in the securities industry in many countries is focused on three areas: providing information to investors, encouraging self-regulation of the industry, and promoting the development of a national securities market.

The function and most important role of the securities market is its role in the development of capital. Securities market institutions and players contribute to the development of the capital structures of organizations and companies. While it is possible to interact directly with fund seeking institutions and potential investors, a well-developed market structure provides the necessary services more efficiently. Since most institutions and organizations often focus on capital markets, they gain a great advantage in financing through the securities market, analyzing the securities markets and finding potential investors. One of the main services in the securities market is consultants. In the role of consultant, the securities industry informs and guides customers. It can advise organizations that need capital on the most appropriate type of financing for both private and public, and most importantly, when to enter the capital market. These decisions are based on the firm's goals. Factors to consider include the risks and benefits associated with various document issuers and tools.

The timing of securities trading decisions is also part of this advisory function. Information technology affects the use and dissemination of information in a variety of ways by the securities market. The collection, storage and retrieval of information were made using technology. Therefore, in addition to improving the quantity and quality of available data, more information will likely be required. More accurate and more acceptable decisions are expected in the securities market as investors and other stakeholders have increased access to accurate information. The application of digital technologies has already had a major impact on the use and flow of information in the securities market. It is observed that the resulting changes have an important effect on the structure of the transactions and securities market over time. Digital technologies increase the volume of securities trading. The securities bidding system on the internet collects and distributes bidding information from exchanges and adds the best bidding offers and bidding information to the system. Digital technologies allow this information to be transmitted to system subscribers in real time. The development and application of digital technologies can enhance the independent role that investors, especially individual investors, perceive as monitoring. Although financial information is currently available through various media outlets, it can be expected that individual investors will have more information at their disposal. While a "better" philosophy is generally applied to information, the amount of information can ultimately be confusing, deceptive, and irritating to users. It should be noted that stock market prices are not only affected by economic events. This influence also includes inaccurate and biased information. In addition, information collected and transmitted by intermediaries in the securities market may require translation into a form that can be used by customers. The introduction of digital technologies and the removal of geographical restrictions have accelerated the pace of mass market penetration. With existing systems, investors may be less dependent on a broker or seller to enter the market and obtain updated information. Formations transmitted through these systems can affect the immediate movement of investors and the potential stability of the securities market. Analyzes and recommendations provided to securities clients by securities market intermediaries may be more detailed, and an analysis of an individual's financial needs may be conducted to complete this process. Applying artificial intelligence in the securities market is one of the main global trends in financial technology in the world. They run risk management and insurance analytics programs, customer service, and small credit transactions. Technologies increase customer satisfaction by making the procedures more flexible and transparent and expand the functioning of the securities market by evaluating the risks more objectively and accurately. Technological solutions that manage financial and accounting activities of businesses are also widely used. The world market uses specialized software that optimizes the company's costs based on the company's strategic importance and priorities, evaluates the current situation of the company, provides customer relationships, speeds up payments and transfers, and even specializes in attracting investments. At the same time, special technological solutions are applied among market participants in the securities market. The services offered by these programs are almost entirely covered by new technological innovations and implemented through chatbots. Operations such as calculation and payment of tax payments between transactions, international financial transactions are automated with the use of artificial intelligence and blockchain technology. , electronic brokers can be shown. Artificial intelligence-based micro-investment platforms and robo-advisors are mainly used in the US market. Robo-advisors manage loans and assets, determine payments, investment directions. Examples of more popular robotic advisors in the financial markets include "Betterment" (the first robo-advisor in 2008) and "Wealthfront". The broker, which works with artificial intelligence and is used in the United States and the United Kingdom, is called "Robinhood". Relying on information technology to analyze personal investment needs, goals, and preferences may indicate an initial movement in the industry to recall individual human thinking, and perhaps a recall of customer-broker relationships.

It is not known what the impact of this change will be, but there may be a reduction in individual service based on the broker's assessment of the customer's financial goals. In general, the application of digital technologies in the securities market has allowed increasing the efficiency of the market, to automate operations, and the application of artificial intelligence and blockchain technologies has made it possible to use special software for brokerage services, investments and risk assessment. The rapid development of information technology suggests the emergence of new services in this area and the further expansion of markets.

3. CONCLUSION

While the most modern technologies are always applied in the securities market, the level of technology used today and available tomorrow cannot be compared to its original form. This research explains the structure, functions and tools of the securities market, provides information on user requirements, national policy objectives for the financial services industry, modern information technologies and programs used in market management and operations, and their functions and capabilities. The impact of the application of digital technologies in these areas is taken into consideration and their future effects are discussed. Currently, the application of artificial intelligence in the securities market is one of the main global trends in financial technology in the world. It conducts customer service and small-scale credit transactions by performing analytical programs, risk management and insurance transactions. Technologies increase customer satisfaction by making procedures more flexible and transparent, and expand the functioning of the securities market by assessing risks more objectively and accurately. Technological solutions that manage the financial and accounting operations of entities are also widely used. At the same time, specialized technological solutions are applied in the securities market among market participants. The services provided by these programs are almost entirely covered by new technological innovations and are implemented through chatbots. They are used in the market of micro-investment platforms and robo-advisors based on artificial intelligence. Robo-advisors manage loans and assets, determine payments, investment directions. Examples of more popular robotic advisors in the financial markets are "Betterment" (the first robo-advisor in 2008) and "Wealthfront". The broker, which works with artificial intelligence and is used in the United States and the United Kingdom, is called "Robinhood". The article provides information on a number of applications and examines the current and future effects of digital technologies on the securities market.

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HOUSING POLICY AS A COMPONENT OF THE STATE SOCIAL POLICY

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ABSTRACT

Access to housing is one of the most important social problems of human development, because housing is included in the essential package of basic human rights under the social contract, and the government undertakes to implement them in official capacity of state and local governments. Mainly the state that determines the priorities, forms and means of its participation in the implementation of constitutional rights of citizens, based on public interests, social justice and economic opportunities. Improvements problems in the sphere of housing policy, of course, take the central place in the activities of the President of the Republic of Azerbaijan (AR) and state executive bodies as well as programs of political parties and movements, because housing law, as defined in the Constitution of the AR, security expresses the importance of meeting the housing requirements of the community. A comprehensive set of specific rights, and other normative documents of the citizens depends on it. The rights of citizens established by law form their behavior in the solution of housing problems and the activities of state bodies and economic entities. Therefore, housing policy as one of the key components of Azerbaijan's social policy is extremely relevant and needs detailed investigation. The purpose of the study is to investigate theoretical and practical aspects of the state's participation in solving the housing problem in Azerbaijan, to identify existing problems in the area of housing provision and access, and to identify and substantiate their solutions. The research is based on the systematic methodology, analysis and synthesis methods. The scientific novelty of the research consists of the comparative analysis of housing and accessibility of housing in Azerbaijan and a number of developed countries, as well as the development of organizational and economic measures for improving public housing policy based on the model of public-private partnerships.

Keywords: housing policy, state, social policy, housing security, housing affordability, social houses

1. INTRODUCTION

Achieving the sufficient productivity indicators for ensuring a favorable demographic situation and simple generational change is the most important task of public authorities both at the national level and at the level of the subjects of the Republic of Azerbaijan. At the same time, the solution of this problem directly depends on the living standards of the population, primarily housing condition. Thus, living standards are the main factor in the country's demographic situation, which determines the availability and quality of labor resources necessary for the successful development of the economy. On the other hand, the solution of the housing problem is directly related to the level of investment activity - the volume of investment in housing construction, the volume of housing for different categories of citizens. All of the above mentioned indicates the close connection of housing policy with other types of public policy. Currently, the most important tool for solving the housing problem is 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 [1] and state support programs operating under this framework. According to this project, the position of the State Agency for Housing Construction should be strengthened in the strategic vision until 2020

to meet the housing needs of the country and the construction of residential buildings and relevant social infrastructure (schools, hospitals, etc.). The long-term vision for the period up to 2025 envisages major and planned reconstruction of cities, and the target for the period after 2025 envisages the elimination of shortcomings related to the sustainable development of the housing sector at reasonable prices in the regions. However, at present, the implementation of this strategic map cannot be called successful. In our opinion, significant resources for solving the housing problem are hidden in the methodology of forming a unified housing policy, which does not exist at the national level. By increasing the effectiveness of existing government support measures, it can help to the development and implementation of new tools that can significantly change the situation in the housing sector, both at the regional and national levels. For the stimulation of the process of providing housing to citizens from different categories, the state develops its own housing strategy and housing policy. At the same time, there is not enough scientific support for their formation. Historically, for a long time, the demand for housing did not meet the supply, and as a result, there was a significant shortage of housing, and the housing problem has gained special socio-economic relevance. Based on the social and economic importance of the housing market, the main task of the state is to improve housing policy in order to develop the economy, improve the welfare of the population, enhancement of the mobility of labor resources. All these circumstances determine the relevance of the research topic, as well as its theoretical and practical significance.

2. THEORETICAL ASPECTS OF STATE PARTICIPATION IN OVERCOMING THE HOUSING PROBLEM

There is no universal definition of "housing policy" in modern economic theory. Also, at present, the concept of "housing policy" is not reflected in either the Housing Code of the Republic of Azerbaijan [2] or any other legislative or regulatory act. Various authors interpret this concept in their own way. This, in turn, leads to a different understanding of the goals, objectives and basic principles of the formation of state housing policy. This determines the relevance of the research topic. It should also be noted that the state housing policy as a whole is not legally separated from social policy (although in fact it is developed and implemented separately from other areas of social policy), the Constitution of Azerbaijan has created a special constitutional right for everyone to receive housing. As a result of the analysis of the scientific literature, it became clear that there are many author's interpretations of the concept of "housing policy". E. S. Khlestunova [3], L.O.Zalkind, E. E. Toropushina [4], Y. I. Vasilyeva, T. Y.Zertsaninova, A. Y.Kharlov [5], N.Y. Zubarev [6], T.V. Sheludyakova, D.V. Solomax [7], N. B. Kosareva [8], N.V. Klimanova [9], O. E. Bessonova [10], V.V.Bolgova, E.E. Zherebtsova [11], I.V. Chebotarev [12] and others. Taking into account the generalizations of the definitions given in the literature, the following interpretation of the concept of "housing policy" is proposed: "This is the activity of the authorities aimed at setting modern goals, defining tasks, principles, developing programs, tools and methods to ensure the implementation of the constitutional right of all citizens to meet various needs and opportunities, as well as the requirements established by law." Then, we consider the approaches presented in the legislation, periodicals and monographs to the definition of the purpose of the state housing policy: N. Gorbova [13], E. I. Zaqorodnov [14], N. N. Roqozhina, A. A. Tumanov [15], O. A. Petrina, M. E. Stadolin [16]. Taking into consideration the generalization of the definitions given in the literature, we propose to systematize the main objectives of the state housing policy as follows:

- development of housing construction meeting the needs of different population groups;
- to provide housing for all categories of citizens, as well as the conformation the amount of safe and comfortable housing to meet the needs of the population;

- to ensure social protection of poor citizens in the housing sector by providing social security and housing within the framework of social employment contracts;
- creating conditions for attracting extra-budgetary funding resources;
- to ensure the protection of the rights of entrepreneurs and owners in the housing sector;
- development of the construction industry base and construction materials industry;
- development of competition in the field of housing construction and management;
- to prepare areas for new housing construction;
- development of construction industry and construction materials industry;
- creation of conditions for the formation of effective housing markets and land plots.

3. EXISTING PROBLEMS IN AZERBAIJAN IN THE FIELD OF HOUSING AND ACCESSIBILITY

The positive changes in the provision of housing for Azerbaijani citizens, as well as increasing its availability should be pointed out. For example, from the beginning of 2001 to the beginning of 2019, against the background of a more than 1.5-fold increase in the area of the housing stock, the housing supply increased from 14.6 to 18.1 m² (24%). In addition, the area of rooms per capita increased by 27.1% from 9.6 to 12.2 m² (Table 1).

Table 1: Main indicators of housing conditions in Azerbaijan (at the beginning of the year)

#	Indicators	2001	2006	2011	2016	2019	2019 compared to 2001. with %
1	Housing fund, mln. with m2	116,4	139,0	159,6	171,3	178,9	153,7
2	Total housing area per capita, in-m2	14,6	16,5	17,7	17,9	18,1	124,0
3	Including, area of rooms in-m2	9,6	11,0	11,9	12,0	12,2	127,1

Source: Health, social security and housing in Azerbaijan. Statistical summary. Baku, 2019, pp. 212-215

During the same period, about 39% of Azerbaijani families improved their living conditions (or rather, they believe they have improved). Also, housing affordability has increased in Azerbaijan over the last decade. If we analyze the change in one of the main official indicators characterizing housing affordability, the housing affordability ratio, we can note that it decreased from 12.5 years in 2000 (8.3 years in 2008) to 4.1 years in 2018. The housing affordability index reflects the period (in years) that an average family (consisting of three people) has to save to buy an average apartment (according to the social standard of housing, this is an apartment with an area of 54 m²). At the same time, it is assumed that the family deferred all income in order to collect the needed amount to buy an apartment. Accordingly, a decrease in such a period indicates an increase in housing supply. If we compare the official indicators of housing affordability in Azerbaijan, it seems more evident with similar indicators in other countries of the world. Thus, the accessibility factor is 3.6 years in the United States and 18.1 years in Hong Kong. Despite the improvement of the situation with housing and affordability in Azerbaijan in recent years, all problems have not been resolved. Thus, the level of housing in our country is at the level of Eastern European countries such as Poland, but lags far behind countries such as Germany and France (about 39 m²), and even the United States (70 m² per capita). About half of Azerbaijani families want to improve their living conditions. Thus, due to the unresolved of systematic measures by the state in the field of housing policy and the lack of mechanisms for the realization of their housing rights for the majority of the population, the level of affordable housing is quite low and remains as one of the most acute social problems.

In connection with the realization of the right to housing, it is necessary to use the criteria of social accessibility of housing for citizens in need of social protection by the state. One of the key points here is the time when a citizen can buy an apartment on the basis of free use, social or non-commercial rent, or own it by participating in social housing programs.

At the same time, housing should meet modern notions of comfort, and the cost of living there should be a reasonable share of family income. This criterion determines the level of state participation in the social protection of vulnerable families, including municipalities, and in the provision of social support to other low-income groups.

4. INTERNATIONAL EXPERIENCE IN THE REALIZATION OF STATE HOUSING POLICY

We consider that the main reasons for the lack of confidence in the mortgage, which is still relevant today, are:

- sufficient high interest rates on loans and their short-term repayment;
- non-transparent sources of income for the bank of those who want to get a loan;
- Insufficient income of citizens;
- economic instability of employers;
- Lack of development of such a mortgage market infrastructure, which allows to increase the reliability of the long-term lending system, to create a precondition for attracting investment in this area;
- Lack of a mortgage bond market.

It should be noted that the mortgage lending mechanism is more typical for the already established, stable housing market, which is in dynamic equilibrium. Unfortunately, the process of forming such a market in our country has just begun. It should be noted that the mortgage lending mechanism is more typical for the already established, stable housing market, which is in dynamic equilibrium. Unfortunately, the formation process of such a market in our country has just begun. Therefore, in order to solve the problem of providing citizens with affordable housing, it is expedient to use the experience of other countries in attracting funds from construction savings banks. Thus, during the existence of the construction savings banks (CSB) system in Germany, 800 billion euros were mobilized and given in the form of loans. One of the three of 45% of German families has a construction savings contract. Owing to the construction savings system, 45% of the settlements or 13 million apartments were built [17]. Such a system is widespread throughout Europe. It should be noted that the construction savings banks (CSB) exists in both pure and mixed form. In the first case, "... the apartment remains owned by the construction savings banks (CSB) until the buyer repays the loan in full during the entire process. In Germany, the construction savings banks (CSB) uses its assets without attracting external financing. It is possible to attract investors in other European countries." [18] Legally, the construction savings banks (CSB) are mutual lending companies. The prepayment period is 5 years, which is generally organize 30-40% of the cost of housing. The maximum loan term varies from 12 to 18 years and the rate is 3-5% per annum. The state applies various subsidies to privileged categories of citizens and young officials and their families and children. This subsidy practice is particularly prevalent in Sweden. The mixed use algorithm of the construction savings banks (CSB) is as follows: the bank is confident in the creditworthiness of the client for a certain period (up to 3 years), opens an account for him and deducts from salary and other income. During this period, it is necessary to collect 30% of the value of the apartment, and by crediting the balance of the bank amount can act as an intermediary between the construction savings banks (CSB) and the client. In this case, the apartment remains as the property of the bank until the end of the loan, but after the conclusion of the contract the buyer can immediately move it into their property.

The loan term is from 10 to 36 years, the interest rate is 5-7% per annum. Thus, it can be argued that the Construction Savings Banks (CSB) is the most convenient means of lending, because, according to experts, in order to get a loan in the construction savings banks (CSB), as a rule, you need to have twice as little income as buying a mortgage. Therefore, the Construction Savings Banks (CSB) has all the grounds to be an alternative to the social mortgage, as confirmed by the fact that in European countries, the income of their main customers is below average. In Western countries, social housing for low-income people is rented only for token payment. Thus, in Germany, they are provided with financial assistance to rent an apartment in the private sector. "More than half of the country's population rents apartments or houses, and in large cities such as Berlin or Hamburg, the share of tenants is more than 80%" [18]. In the United States, subsidies are given to low-income people who rent apartments. In this case, if the buyer's income increases, the programs do not expel them, but they only stop subsidizing. It should be noted that people who receive social housing programs in the United States today are really the poorest segments of the population, because the low quality of life, as well as the unfavorable environment of areas with social facilities do not attract rich people. In France, about 17% of families use social housing. The private companies that built it are entitled to tax benefits, and when the construction is completed, they rent the apartment to low-income citizens at state prices. Such private companies share powers with local authorities to determine who will be eligible for social housing. On average, the queue to get it is 10 months. The reasonable rental price is much lower than the market. In addition, about half of the residents use housing subsidies. Generally, the social housing sector in the Netherlands, Sweden, the United Kingdom, Denmark, France and Finland accounts for 15-35% of the total housing stock. Significant funds are allocated for social housing programs in European countries - from 0.1-0.3% of GDP in Italy and Greece, to 1.2-1.4% of GDP in Finland, Denmark and Austria. France spends 1.9% of its annual GDP for housing or allocates to provide free (discounted) [18].

5. IMPROVED WAYS OF THE STATE HOUSING POLICY IN AZERBAIJAN

Consistent implementation of housing policy can make an important contribution for solving the housing problem. The analysis of the problems at the present stage of housing market development allows to note the most important conditions of government intervention:

- regulated nature of decisions made by the state in the field of real estate and their low implementation, lack of incentives for the application of new technologies and housing development planning decisions;
- high housing prices and, as a result, low housing supply in most regions of the Republic of Azerbaijan;
- Insufficient availability of mortgage loans and underdevelopment of housing savings institutions required for down payment;
- High level of deterioration of communal infrastructure in the face of limited financial resources of regional and local budgets in the budget system of Azerbaijan. The author has come to conclusion that the solution to these problems is possible by using indirect regulatory methods to maintain the balance of supply and demand in the housing market.

An analysis of foreign experience in the regulation of prices in the housing market showed that the Western market uses various government regulatory instruments (direct subsidies for housing construction, interest rate subsidies to builders for rental housing, targeted subsidies for rental housing, tax breaks and deductions, etc.) . In addition, each country has launched a number of initiatives to combat the spread and negative effects of the global financial crisis on national housing markets. The main result of the global financial crisis has been a decline in housing prices in almost all countries and a change in real estate market regulation policy: active investment in social housing as a social savings and stimulation of the construction sector have

been replaced by lower public spending in some EU countries. The study concluded that the depth and intensity of the crisis in the national housing markets of foreign countries depends on the state housing policy, state regulation during the crisis, the level of public funding, various forms of real estate, housing credit system, etc. depends on alternative sources of housing construction financing. Currently, government measures are aimed at supporting the acquisition of housing by providing financial assistance to households for the stimulation of housing demand. Anti-crisis measures are to support the construction sector by providing commercial banks with construction loans and helping the population to buy apartments in houses under construction. The state control measures applied during the crisis included the following:

- property tax discount while buying a house;
- Stimulation of housing demand: targeted subsidies to poor citizens and the "Maternal Capital" program;
- National project "Affordable and comfortable housing for citizens of the country";
- assistance in the restructuring of mortgage loans;
- Continuation of the "Discounted housing" project;
- fulfillment of obligations to special categories of citizens (military, police, large families).

At the same time, the experience of foreign countries shows the efficiency of the construction of rental housing as one of the eliminating way for the discrepancy between the income level of the population and housing prices, which leads to a decrease in the overall price level in the housing market.

6. THE ROLE OF THE MODEL OF INTERACTION BETWEEN GOVERNMENT AGENCIES AND THE PRIVATE SECTOR IN THE DEVELOPMENT OF THE HOUSING MARKET

In order to increase the effectiveness of housing policy, it is necessary to take organizational and economic measures to support an economically justified balance of supply and demand through public-private partnership in the development of the housing market for the construction of state-level housing and rental housing. The study proposes a public-private partnership (PPP) model in the construction of economy-class housing, which aims to ensure affordable housing for the investor and the state represented by the municipality. The implementation of this model includes the following steps:

- on the basis of competition, based on the requirements for the construction of economy-class housing, the private investors are being selected, offering the most cost-effective solution, and a specialized management company (SPM) is established;
- Specialized management company (SMC) concludes a contract with the municipality on public-private partnership (PPP) and receives a plot of land with the right of free temporary use from the State Agency for Housing Development (SAHD) or the municipal land fund on a preferential lease outside the competition;
- the management company (MC) forms the authorized capital at the expense of deposits of private investors, as well as attracts credit resources guaranteed by the municipality;
- The source of funding may be the branches of state banks, state corporations, non-state pension funds with the participation of commercial banks;
- Management company (MC) carries out the construction of public-private partnership (PPP) facilities with the involvement of contractors and pays the costs at its own expense and debt;
- After the completion of construction, the dwellings are sold to buyers in the market at the market price, to the municipality - at a pre-agreed price, at a price lower than the market.

If the municipality provides free plot of land for the municipal land, the municipality acts as the owner in the part that determines the value of the rights granted to the land in the share of all property in the construction of the property. Then the municipality distributes the real estate to the persons on a waiting interval according to the social schemes. If the land for construction is leased, the municipality buys part of the facilities at a predetermined price and distributes them according to social schemes, or subsidizes part of the cost of housing, and then helps to buy an apartment in the agreed part of the waiting list. The advantages of this model are the increase in efficiency at all stages of project development and implementation, the introduction of technological innovations and the reduction of the budget structure; the downside is the complexity of implementation and management, the need for strict regulatory oversight, and the municipality's medium- and long-term contingent liabilities.

7. CONCLUSION

Taking into consideration the above mentioned, we have come to the following conclusions.

- 1) Housing policy is one of the main components of the social policy of Azerbaijan, because providing citizens with housing is a constitutional duty of the state in the realization of the social rights of every person.
- 2) Analysis of the implemented measures on the state housing policy of Azerbaijan shows the lack of effective mechanisms for providing citizens with affordable housing. In our opinion, the unsystematic actions of government agencies, especially the declarative nature of the planned measures to improve the living conditions of Azerbaijani citizens, have led to such a situation.
- 3) In the context of the formation of a sustainable housing market, the construction savings banks (CSB) are a more affordable means of lending than mortgaging, because citizens with incomes less than twice to get a mortgage loan can also use it.
- 4) It will be more convenient for an Azerbaijani family with an average -monthly income of AZN to buy an apartment if they reduce mortgage interest rates from 12% up to 5-7% for commercial banks and use them for the construction of a certain number of apartments each year. In this case, the total area of this type of housing should be reduced by developing special projects for one, two and three-room apartments. It is more expedient to rent this apartment not for free, but after paying the full cost in the form of a monthly rent in accordance with the inflation index, with the possibility of future privatization. This will increase the state housing stock in Azerbaijan, which will not only have a positive impact on the construction sector, but also reduce unemployment in the country.
- 5) Based on a comparative analysis of the regulation of residential real estate prices in Azerbaijan and abroad, organizational and economic measures based on the model of interaction between public authorities and the private sector within the public-private partnership have been proposed.

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CONCEPTUAL APPROACH TO THE INVESTIGATION OF THE MAIN FORMS AND FEATURES OF INTERNATIONAL ECONOMIC RELATIONS IN CONDITION OF GLOBALIZATION

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ABSTRACT

As a result of technical and technological progress in the world economy since the second half of the twentieth century, international economic relations have risen to a qualitatively new level. This case has been called “globalization”, which has been enshrined in scientific and household lexicon. The article summarizes various theoretical perspectives and trends in the global economic system, and analyzes the main features of IER (International Economic Relations) in the context of globalization. These features are mainly related to the forms of the IER (International Economic Relations), and this analysis have been conducted in this context. The aim of the study is to investigate the trends and peculiarities of contemporary international economic relations that are important to the Azerbaijani economy. The research was carried out based on methods such as systematic analysis and logical generalization using M. Porter's competitive advantage as well as scale effect theory. The practical significance of the research is to integrate the researchers in the field of rational integration of the Azerbaijani economy into the world economic system by analyzing the theoretical foundations, key forms and features of the IER (International Economic Relations in the context of globalization, and evaluating trends revealed in this area. The scientific novelty of the research is that practical research has been conducted using relevant provisions in existing theories and concepts on international economic relations, its basic forms and features in the context of globalization, as well as international experience in this area.

Keywords: *globalization, international economic relations (IER), international specialization, international trade, international cooperation of production (ICP), currency finance and credit*

1. INTRODUCTION

The study of trends and features in modern international economic relations is of great importance for the economy of Azerbaijan. Thus, information on these trends is necessary for the rational integration of our country into the world economic system. As a result of technical and technological progress in the world economy in the second half of the XX century, international economic relations (IER) have reached a qualitatively new level: the scale of both countries and activities involved in the process of international economic relations has significantly expanded and deepened. This case is called “globalization”, which is strengthened in the scientific and everyday lexicon. Globalization is a complex of interconnected processes that take place on a planetary scale and each of which has a self-regulatory mechanism [1]. As it is seen, this definition covers all aspects of international relations, reflecting the scale and versatility of the globalization process. As a result of the above mentioned factors, the following features of modern International Economic Relations (IER) can be noted:

- International economic relations mean relations between states, regional groups, transnational corporations and other world economic entities. In this sense, the study of Azerbaijan's economic relations with the other world countries should take into consideration the fact that each country is the member of a regional integration group of the European Union.

- International Economic Relations (IER) includes financial (including currency), trade, production, labor and other relations.
- The leading form of international economic relations is the financial and monetary relations in modern period [2].
- Regionalization and globalization of International Economic Relations (IER) is especially relevant in the modern world.
- The leading role in formation of the world economic order belongs to transnational capital and international institutions. Among such institutions, the World Bank and the International Monetary Fund have a particularly influential role.
- As a result of the international division of labor, the poles of economic and technological development have emerged around the world (North America, Western Europe and Asia-Pacific ocean).
- The establishment of free economic zones and international transport corridors in the context of international economic relations, has created actual problems, like the Internet economy [3].

While summarizing the various theoretical views described above and the processes taking place in the world economic system, certain features of International Economic Relations (IER) should be clarified. As these features are mainly related to the forms of International Economic Relations (IER), this analysis should be carried out in this context. Thus, the following forms of International Economic Relations (IER) are distinguished in the modern economy:

2. INTERNATIONAL SPECIALIZATION OF PRODUCTION AND SCIENTIFIC-TECHNICAL WORK

It envisages specialization in the production of certain goods and services. Inter-sectorial and intra-sectorial specializations are distinguished. In international inter-sectorial specialization, while a certain field (s) is developed in one country, the other fields may be at a non-existent level. Before and immediately after the Second World War, there was mainly inter-sectorial specialization in the world - the colonial countries specialized in raw materials. Even today, some developed countries were in this situation: Norway specialized in aluminum, Belgium - in cast iron and steel, Finland - in forestry materials, the Netherlands and Denmark - in agriculture (mainly meat and dairy). Intra-field specialization, as a rule, is not based on natural resources, but on the results of scientific and technical activities, and mainly covers developed countries. It should be noted that in some cases, Transnational Corporations (TNCs) involve developing countries in such specialization. Undoubtedly, this fact should be used in Azerbaijan's relations with developed countries, including Spain. In such a specialized intra-field condition, production of innovative products is directly depends on the expenditures on research and development in such areas of the country. One of the directions of intra-sectorial specialization is product specialization - the concentration of production of certain types of products in one country. For example, there are a large of companies specializing in various machines and equipment, synthetic materials and other products in developed countries. Sometimes there may be specialization in modifications of the product of the same name. For example, while the United States specializes in the production of large and powerful tractors, the United Kingdom specializes in medium-power tractors and Germany specializes in smaller tractors. In some cases, the country specializes in the production of certain details of a final product. These are usually parts of mass products (cars, tractors, electronic devices and appliances, household appliances, etc.). Such specialization leads to the formation of close ties between producers from different countries. For example, more than 30% of US computer-related exports are computer parts, and 50% are exports of machine-building products [4].

A number of new industrialized countries (for example, Malaysia, Singapore, Taiwan, Indonesia, etc.) also specialize in the production of various parts, especially electronics. Recently, new trends in technological specialization are gaining ground, the main feature of which is that the country specializes not in the production of specific products or parts, but in the performance of certain tasks. The carriers of such specialization are mainly research, design and consulting companies with deep specialization. The best example of this may be audit firms specializing in certain areas.

3. EXCHANGE OF SCIENTIFIC AND TECHNICAL RESULTS AND INFORMATION

Trade operations on scientific and technical knowledge and experience are different from trade in material value. First, it is intangible, and secondly, unlike other services (e.g. transport, tourism, etc.), it has a higher rate of return with intellectual capital. Technologies are a decisive factor in the pace and nature of economic development of each country, and their international exchange is valued as the most important element of the modern International Economic Relations (IER) system. It is not just a matter of selling machinery and equipment from one country to another, but an important element of the exchange is the transfer of new scientific, technical and production knowledge and experience to the partner countries, and the autonomy of knowledge exchange increases as the international technology market develops. Since international trade in scientific and technical knowledge consists of the results of scientific research, which has not only scientific but also commercial value and determines the specific features of the world technology market. Here are the licensed intellectual products that are considered industrial property - patents, licenses, trademarks, industrial designs, as well as technical knowledge and experience combined under the name "know-how". As a rule, such products are handed over to the buyer in the form of technical documents, drawings, non-licensed secrets. The sale of know-how in the form of non-license is not the main, but the accompanying nature and is manifested in direct investment, modernization and operation of industrial enterprises. Depending on the circumstances, know-how transactions can also be carried out in different ways:

- in a separate article of the relevant contract;
- as part of the item "transfer of technical documents";
- in secret form - in this case, the know-how is included in the price of the equipment and transmitted through engineering services.

License trading is the main form of international trade in technology and covers both know-how and patents for inventions. In most cases, the licensee (licensee) prefers to buy out-of-practice patents in order to minimize the risk. It may be advantageous to obtain such risky patents in certain specific areas, such as pharmaceuticals, where the risk is largely justified. The international trade of licenses is growing rapidly. This is due to a significant increase in the profitability of licensing operations and lower risk compared to direct investments.

4. INTERNATIONAL COOPERATION OF PRODUCTION (ICP)

This is a form of organization of production with the participation of two or more residents of the country. Cooperation forms an important aspect of the development and improvement of production. Specialization in the production of various details of product or the realization of various stages of the technological cycle is a common form of cooperation between competing companies. Such specialization and mutual exchange allow all companies involved in cooperation to increase their competitiveness. The most intensively developed segments of international cooperation are the production of high-tech science-intensive products in engineering, electronics, chemical industry and other fields. In recent decades, International Cooperation of Production (IPC) has made a significant contribution to the pace of scientific

and technological progress, diversification of production and the development of conglomerate-type companies. International Cooperation of Production (ICP) has become a strong driving force for the development of industry in the world, a key form of international industrial cooperation, a key factor in the transnationalization of production, the material basis of international economic integration and the process of globalization of the world economy. The further growth of the role of international production cooperation in the modern world economy is explained by its objective advantages. Among them:

- Synergetic effect of ICP. This is reflected in a sharp reduction in the investment costs of each of the participants in the cooperation, including the implementation of operational projects, as well as a reduction in the start-up and renewal of products.
- Joint and coordinated solution of a set of problems related to IBC (construction and modernization, technology innovation, product sales and after-sales services; scientific and technical and experimental design work to improve the product and create a new product, etc.) during the reproduction cycle with the application of innovation as a whole.

At present, most of the IPC has been transformed into international scientific and production cooperation. This is confirmed by the analysis of a number of international cooperation projects and related agreements conducted by the UN Economic Commission for Europe [5]. Based on this, the following 5 models can be distinguished, which characterize the predominant features of the relationship between the cooperators - the licensor and the licensee [6]:

- 1) Model 1. Under the IPC agreement, the licensor provides the licensee with its technology, the right to use its industrial and intellectual property and certain types of technological equipment. These purchases are paid for the produced product to the licensee on a cooperative basis, as well as for the services provided at the request of the former.
- 2) Model 2. This model provides for the transfer to the licensee of part of the equipment used by the licensor in its production.
- 3) Model 3. Unlike the above models, the technological line, which is not a part of the equipment, is provided to the licensee under all financial leasing terms.
- 4) Model 4. Contract cooperation. In this case, the contractor company fulfills the licensee's order for the production of intermediate products. In this case, the licensee is provided with all technical documents, and in some cases, separate equipment or components manufactured by the licensee.
- 5) Model 5. Joint production of the agreed product range. This is usually accompanied by the exchange of certain types of equipment and the mutual sale of final and intermediate products produced as a result of cooperation. In many cases, it is planned to carry out joint scientific, technical and experimental design work.

The contractual forms of IPCs described above, which do not provide for the merger of partners' property, often expand to become a voluntary combination of ownership in the form of various corporations and corporate associations (especially consortia and concerns). In this context, IPC is transforming intra-company cooperation. In many cases, the merger of former co-operators takes place in a rigid way - in the form of mergers and acquisitions by one another.

5. INTERNATIONAL TRADE

The World Trade Organization (WTO) plays an important regulatory role in international trade. Despite more than 20 years of negotiations, Azerbaijan has not yet joined the WTO. One of the important reasons for this is the principle of non-discrimination in this organization, according to which the attitude towards WTO members can not be different, and taking into consideration that Armenia is also a member of this organization, it really does not seem reasonable for our country to join this organization.

As can be seen, the WTO prefers market principles in international trade. Therefore, the main problem of national companies and the national state in international trade is related to the study of market conditions (demand and supply) for specific export-oriented products of this country, the optimal organization of commodity flows between countries and prices. Taking into consideration the above mentioned majority of different factors, it should be clear that it is a complex problem. This problem is studied in the context of international marketing and management, international trade theory and the world market, international monetary and financial relations. Socio-economic aspects of international trade are also of great importance. The below mentioned features can be noted.

- First of all, the global nature of these relations means the involvement of states and economic entities of all countries in the process. Thus, international trade plays the role of an international integrator based on the International Labor Division (ILD), uniting national economies in a single world economy and giving it an international character.
- International trade determines what a country produces and how it exchanges its products, thus deepening the ILD and attracting more and more countries to international trade.
- Trade relations have an objective characteristics, in other words, they embrace all countries, regardless of the will of one person or organization. They systematize the world economy. To be precise, it ranks countries depending on the level of development of foreign trade - the share of foreign trade in world trade, per capita foreign trade turnover. According to this feature, countries are divided into "small" and "large" categories. The first are countries that cannot influence prices on the world market. Such weak countries unite in order to influence the world market (create integration unions) and try to come up with a joint aggregate demand and supply. It is interesting, that the large countries can also unite for the same purpose.

Modern trends in international trade occur as a result of general processes taking place in the world economy. As can be seen from Table 1, the world's foreign trade turnover increased more than twice in the first 10 years of the new century compared to the last 10 years of the last century, reaching \$ 14.7 trillion in 2011. Interestingly, there has been no change in the structure of world trade in goods and services: goods make up 80% of this trade. In general, the world trade turnover in goods and services increased more than 2.9 times between 2000 and 2017, from \$ 7.9 trillion in 2000 to \$ 23.05 trillion in 2017.

Table following on the next page

Table 1: World trade in 1992-2017, bln. USD

	Goods and services	Goods	Services	Share of goods	Share of services
1992-2001	6424	5123	1301	79,75	20,25
2002-2011	14657	11688	2969	79,74	20,26
2000	7892	6358	1534	80,56	19,44
2001	7631	6125	1506	80,26	19,74
2002	8008	6367	1641	79,51	20,49
2003	9323	7442	1881	79,82	20,18
2004	11316	9070	2246	80,15	19,85
2005	12867	10366	2501	80,56	19,44
2006	14835	11995	2840	80,86	19,14
2007	17248	13868	3380	80,40	19,60
2008	19707	15902	3805	80,69	19,31
2009	15755	12383	3372	78,60	21,40
2010	18758	15084	3674	80,41	19,59
2011	21982	17958	4024	81,69	18,31
2012	22763	18642	4121	81,90	18,10
2013	23980	19600	4380	81,73	18,27
2014	23907	19047	4860	79,67	20,33
2015	21287	16604	4683	78,00	22,00
2016	20841	16090	4751	77,20	22,80
2017	23054	17877	5177	77,54	22,54

Source: www.imf.org

As can be seen from the table, the regular economic crises, as well as the growing domestic and external imbalances in the countries, also lead to a slowdown in international trade. Thus, the process of declining global trade in goods and services under the influence of the Southeast Asian crisis of 1998 continued into the beginning of the century, only from 2002 onwards, trade growth resumed and increased almost at a steady pace until 2008. As a result of the global financial crisis that began in 2009, world trade fell sharply - by 20%. It should be noted that the crisis affected trade in commodities - the decline in this segment in the same year was 22.1%. In the following years, the total trade in goods and services between the countries began to increase again. However, in 2012, the growth rate slowed down. Although the highest level of world trade in goods and services was achieved in 2013, it has been declining since 2014 and continued until 2017. In 2017, the growth rate of goods and services was 10.6 percent and the volume of trade operations exceeded 23 trillion manat. In 2010-2012, the growth rate of trade in goods was higher than in services. As a result, the share of goods in total trade turnover increased from 80.4% in 2010 to 81.7% in 2012, while the share of services decreased from 19.4% to 18.3% (Table 1). As can be seen from the table, the increase in the share of commodities has occurred mainly since 2011. From 2013, the share of commodities in total trade turnover decreased until 2017, and in 2017 this decrease was replaced by a slight increase (0.34 percentage points). It is interesting, that trade between developed and developing countries is growing faster. Another explanation for this is the transition of post-socialist countries from a transit country to a developing country and the interest of TNCs in such countries with cheap workforce. There are a number of serious trade problems between developing countries. The most important of these is that the main factor in the competitiveness of such countries is price, and trade conditions do not change in favor of these countries. These are hindering factors of the development of the country. The solution to these problems involves optimizing the commodity structure of foreign trade, eliminating the technological backwardness that makes the country's exports of finished products uncompetitive, and

increasing the activity of the country in trade in services. One of the main features of the world market of goods and services is the internationalization of the world economy and the liberalization of foreign trade. The latter fact is confirmed by the reduction of customs duties and the easing of quantitative restrictions. In addition, the nature of the world market is changing - not only the rest of the national production, but also the amount of products that are determined in advance and specifically designed for a specific buyer.

6. INTERNATIONAL CURRENCY-FINANCIAL AND CREDIT RELATIONS

Such relations mean financial relations between the subjects of different countries, i.e. residents and non-residents, as well as the transfer of property rights over financial assets between these subjects [7]. International monetary and financial relations include:

- Currency transactions on current operations.
- Currency transactions on long-term operations - international currency transfers, financial capital inflows, subsidies, etc.
- International credit. Such loans can be provided by private, public or international organizations.
- Currency speculation related to transactions in foreign exchange markets or simply from country to country in order to make a profit based on exchange rate differences.

7. INTERNATIONAL MOVEMENT OF CAPITAL

This form of International Economic Relations (IER) is a specific type of international movement of factors of production. Capital, like labor, has the ability to move between countries, and its mobility is higher than that of labor. International capital flows are not usually the physical movement of buildings, structures, machinery, equipment and investment goods, but financial flows between lenders and borrowers in different countries, the company and the owners of the company. However, if machinery and equipment are transferred to another country as an investment in the authorized capital of a company established or acquired there, it is considered a capital outflow. The international movement of capital faces certain problems:

- capital movements are associated with certain risks, and solvency information may be inaccurate;
- there are political risks that can lead to discrimination against foreign investors;
- A foreign investor is exposed to the inevitable exchange rate risk.

Although all these problems create certain obstacles to the movement of capital from one country to another, this form of International Economic Relations (IER) is quite developed. If such impediments are eliminated, capital will move from countries where it is surplus and price (i.e. marginal efficiency) is low to countries where capital is scarce and where prices (i.e. marginal productivity) are relatively high. As a result, over time, the absolute and relative prices of factors of production will equalize - in a country where capital is plentiful, its price will rise, and in a country where there is a shortage, its factor efficiency will equalize. At first glance, it may seem that after such an equalization, the international movement of capital will stop - there will be an "entropy death of capital exchange" [8]. However, in 1985, Canadian scientists James Markuzen and Lars Svensson proved this conclusion wrong - they proved that a mechanism is possible to complement the international movement of capital and goods [9]. This occurs when technological leadership exists [9]. This approach takes a central place in the theories devoted to the relations among inter-sectoral and industrialized countries. Thus, in modern period, a certain part of capital inflows is directly related to the real sector of the economy. An important mechanism for the renewal of the real sector - the attraction of advanced technologies in the country is the creation of a fertile investment climate for foreign investors in the country.

In modern times, the bulk of capital inflows are not related to the real sector, but only to portfolio investments in financial instruments. The first is related to the efficiency of factors of production, and the second to the efficiency of financial instruments.

8. INTERNATIONAL MOVEMENT OF LABORFORCE

International movement of laborforce is one of the forms of international movement of factors of production. The international movement of factors of production, together with international trade, forms the macroeconomic part of the international economy. From an economic point of view, the interstate movement of factors of production is not only indistinguishable from the flow of goods and services, but to some extent they can replace each other: As a rule, it is more cost-effective than trade. However, the movement of factors of production faces many obstacles compared to goods and services. Therefore, international trade theories sometimes accept the assumption of absolute mobility of goods and absolute non-mobility of factors of production.

9. INTERNATIONAL COOPERATION IN SOLVING GLOBAL PROBLEMS

Such international relations cover more environmental and social issues than economic aspects.

10. CONCLUSION

Summarizing the various theoretical views described in the study and the processes which took place in the world economic system, certain features of are revealed and the following forms of International Economic Relations (IER) are distinguished on the basis of these features:

- 1) International specialization of production and scientific-technical works.
- 2) Exchange of scientific and technical results and information.
- 3) International Production Cooperation (IPC).
- 4) International trade.
- 5) International currency-financial and credit relations.
- 6) International movement of capital.
- 7) International movement of labor.
- 8) International cooperation in solving global problems.

It has been identified that there are a number of serious trade problems between developing countries. The most important of these is that the main factor in the competitiveness of such countries is price, and trade conditions do not change in favor of these countries. These are factors that hinder the development of the country. The solution to these problems involves optimizing the commodity structure of foreign trade, eliminating the technological backwardness that makes the country's exports of finished products uncompetitive, and increasing the country's activity in trade services.

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PROBLEMS IN INCREASING OF EFFICIENCY OF THE COMPETITION POLICY (THE CASE OF AZERBAIJAN)

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ABSTRACT

As known, one of the most important factors promoting economic development is establishment of a healthy competitive environment. Creating a healthy competitive environment is one of the most important conditions for transition to the real market relations. Because, in the conditions of market relations, free competition acts as a driving force of economic development and plays a decisive role in expansion of economic activity, acceleration of scientific and technological progress, widespread application of advanced forms of labor organization. Upgrading the quality of goods and services and reducing costs are also provided as a result of competition. Thus, competition leads to increased economic efficiency and more fully meeting of the needs of consumers. The aim of the research is to study the processes that occur in the process of formation and development of the country's competitive policy, to analyze the current situation, and to develop scientifically and practically justified proposals and recommendations aimed at upgrading the effectiveness of this policy. The research was fulfilled under the research methods as the abstraction and systemic analysis, logic generalization and statistic analysis. As a result of the research, the factors having impact on creation of a healthy competitive environment in the country were analyzed, the competitive environment was assessed in various fields, statistical analysis of competition violations was conducted, and practical proposals and recommendations were developed to improve the competition legislation and activity of the competition authority. Limits of the research: requires more extensive practical information on the country level. Practical importance of the research: The main provisions of the Research, the results obtained and the suggested proposals can play a positive role in the researches made in this field and in enriching the scientific and practical knowledge of specialists working in competition authorities.

Keywords: *Barriers to market entry, Competition policy, Competitiveness, Competition authority Sound competition policy*

1. INTRODUCTION

As in all countries with economies in transition, the final goal of the socio-economic changes and implemented reforms that begun in Azerbaijan since the early 1990s is to build a democratic civil society. One of the main principles of the democratic society is the strengthening of the right to free choice, free business, free competition, which is synonymous with free access to the market, within the framework of the constitutional rights of citizens. The strength of a democratic civil society depends more on the effectiveness of a market economy based on free competition. The main features of a market economy based on free competition are an entire system, and for their formation it is necessary for the state to take purposeful and consistent measures over a certain historical period. In an economic environment based on free competition, resolutions are independently made regardless of the center, and the entrepreneurs find markets and consumers themselves, freely determining the scope of their main goals in order to maximize profits, increase sales and market share. Competition forces entrepreneurs to operate effectively in the market, to offer a wide range of higher quality goods and services at

lower prices. Such redistribution of the production resources on industries is carried out in a very short period of time and without additional costs, as the barriers to entering new markets are weak in the conditions of the developed free competition. Development of free competition in the economy leads to increased production efficiency, concentration of resources in more productive and necessary areas, motivates entrepreneurs to apply innovations, improve technology and more efficient use of limited resources. As a result of all the mentioned, welfare of consumers is improving, prices for traditional goods and services are gradually falling, and new goods and producers are emerging in the market. Sound competition provides the consumer the right to choose, ensures recovery of the economy, and prevents inefficient enterprises from operating. Restriction of competition significantly disrupts the ratio of market forces and the influence of the self-regulatory mechanism, leads to inefficient distribution of public resources and adversely affects the economic activity of all market participants. In a free competition based economy, the tendencies allowing unfair competition and violating consumer rights necessitates implementation of policies that can ensure state protection of competition – the antitrust or competition protecting policy. One of the basic features of the transition period is preparation and implementation of the detailed considered state policy in development of the competition. Development of competition is not a main goal in itself, it becomes subject to socio-economic transformations and serves solution of them. Pursue of the efficient antitrust policy and application of the legislation in protection of competition are the strong pushing forces of the structural changes in the highly centralized economy based transition countries. The antitrust policy implemented by the state should address issues such as putting competition in a civilized frame, eliminating the appearances of monopoly that are dangerous to society, preventing the use of unfair forms of competition, and identifying areas for state regulation. The antitrust legislation does not prohibit a business entity from having a dominant position and dominance in the market. The prohibited monopolistic activity is the abuse by the economic entities of their market dominance in order to prevent, limit or eliminate competition. Effective competition policy and antitrust legislation are considered by the international financial and economic organizations as one of the fundamental conditions and factors for implementation of structural changes in a highly monopolized and centralized economy and the transition to a market economy in general. In the process of the reforms related to the transition to a market economy in the Republic of Azerbaijan, successive works have been performed in establishment of a competition mechanism and its state protection system, and positive results have been achieved in all areas.

2. PROBLEMS IN FORMATION AND IMPROVEMENT OF LEGISLATIVE FRAMEWORK

In Azerbaijan, as in all countries in transition to the market economy, the problems related to establishment of the legal, organizational and economic conditions necessary to ensure the formation, development and protection of the competition mechanism are more urgent and pressing. The necessary foundation has been formed in the field of creating a legislative framework for development and protection of competition in the Republic. Establishment and improvement of the legislative framework of antitrust policy in Azerbaijan was carried out in accordance with the general logic of the institutional reforms. The issues related to development of sound competition have influenced all aspects of the measures to change the economic system and are reflected in the mechanisms of the institutional framework. The Constitution of the Republic of Azerbaijan stipulates that economic progress is based on free enterprise, and the restriction of competition, monopolies and unfair competition are highlighted as one of the main tasks of the state in the field of economic development. Since the early 1990s, adoption of the Laws of the Republic of Azerbaijan on “Antitrust Activity” (1993), as well as “Entrepreneurship” (1992), “Securities and Stock Exchange” (1992) “Enterprises” (1994) and

“Joint Stock Companies” (1994) created the initial legislative base for formation of free competition. In the following stages, adoption of the laws on “Unfair Competition” (1995), “Protection of Consumer Rights” (1995), “Financial Industrial Groups” (1996) and “Advertising” (1997) may be considered as completion of formation of a fundamental legal framework for protection of competition. As an important stage in development of the legal and regulatory framework for protection of competition in the Republic, the Law on “Securities” was adopted (1997), the amendments and additions were made to the Law on “Antimonopoly Activity” (1997) and taking into consideration these additions and changes, the Cabinet of Ministers of the Republic of Azerbaijan approved the “Rules for Consideration of Cases on Violation of Antimonopoly Legislation” (1998). As a result of adoption of these two legislative acts, a number of gaps in the antitrust law have been basically removed. As a result of adoption of these legislative acts, the forms of responsibility for violations of the law, which are one of the important blocks of the antitrust legislation, the grounds for liability and the mechanism of application have been established. At the same time, the antitrust legislation clarifies the legal basis, norms for mergers and the powers to review cases related to violation of the antitrust legislation, and establishes the procedural rules in this regard. Among the important legal and normative documents related to formation of a competitive environment, there are the Resolution of the Milli Majlis “on Approval of the List of Natural Monopolies” (1995), “Regulations on Procedures for Regulation of Activity of Entities of Natural Monopoly in the Republic of Azerbaijan” approved in 1996 and the Law of the Republic of Azerbaijan “on Natural Monopolies” adopted in 1999. The Decree No. 446 dated March 2, 2001 of the President of the Republic of Azerbaijan on additional measures to ensure implementation of the Law on “Natural Monopolies” establishes the division of powers of the relevant executive authorities in execution of law. Besides, the necessary legal and regulatory documents related to the implementation of the law have been developed and adopted. The necessary legal framework for regulation and control of natural monopolies has been formed. The Civil Code of the Republic of Azerbaijan (2000) specifies the right to free business and the inadmissibility of monopolies and unfair competition in civil relations. The Criminal Code of the Republic of Azerbaijan (2000) establishes the forms of criminal liability for monopolistic acts and restriction of competition. These should be assessed as necessary steps to strengthen the legal framework for protection of competition. Stimulation of entrepreneurship in the transition period and implementation of the concessional measures in itself does not disrupt the competitive environment and, conversely, serves its development. Even in all developed countries, such measures are taken for different purposes and in different sizes. For example, the European Union accounts for 85 of the subsidies granted for export of agricultural produce in the world. It is not doubtful that implementation of such measures is necessary for us. However, in the current situation, stimulus measures have been effectively applied to the problem. According to the antitrust legislation of the Republic of Azerbaijan, it is illegal to apply such measures in unfounded and discriminatory conditions. In any case, granting direct concessions and privileges to any individual company is a serious violation of the legislation of the Republic of Azerbaijan. At the same time, it is necessary to promote the priority sectors of the economy, as well as solution of regional problems on the basis of targeted programs. An appropriate legislative mechanism has been established for this purpose, and in this case, violation of the terms of competition is not allowed. As for assisting start-up entrepreneurs in formation of start-up capital, which is very important for our country from an economic point, though there is no special legal framework regulating this process, its implementation is contrary to the antitrust legislation. One of the important issues in formation of free competition in the economy and prevention of monopolistic activities is to establish a special legislative framework to protect competition in the financial services market. Despite the fact that the general provisions of the Law of the Republic of Azerbaijan on “Antimonopoly Activity” apply

to the financial services market and the Article 9 of the mentioned law provides for some illegal actions restricting the competition of financial credit institutions, it is very limited and does not allow adjusting adaptation of the financial services market to competitive environment as in a system form. Though the Law on “Antimonopoly Activity” stipulates protection of competition in the financial market in general, legislative framework in this field has been relatively poorly developed. Therefore, it should be especially noted that there is a lack of effective legislation that can ensure protection of competition in the financial market. One of the urgent issues today is to adopt an independent law on “Protection of competition in financial markets”. Though the services monopolized by the state are not a sphere of competition, they affect formation of the competition mechanism and the interests of entrepreneurs to a certain degree. In order to make such impacts effective, the principles and regulatory framework for formation of tariffs for these services have been established. From this point, though it is important to create a register of prices regulated by the state, a common legislative framework should be created in this area.

3. ORGANIZATIONAL ISSUES OF PROTECTION OF COMPETITION

The State Committee for Antimonopoly Policy and Entrepreneurship Support (Antimonopoly Committee) functioned as a special state body implementing state protection of competition in the Republic of Azerbaijan in 1992-2001. It currently operates as the State Service for Antimonopoly Policy and Consumer Rights Protection under the Ministry of Economy. ASIHMDX is tasked with developing antitrust policy, protecting competition, monitoring compliance with antitrust law, preventing monopolies and unfair competition, and taking appropriate measures to stop and eliminate violations. SSAPCRP is vested with developing antitrust policy, protecting competition, monitoring compliance with the antitrust law, preventing monopolies and unfair competition, and taking appropriate measures to stop and eliminate violations. In order to clarify the process of competition and the level of economic concentration in the domestic market, the experience of commodity market research and control over various types of transactions and mergers have been established. New steps have been taken to further deepen the institutional reforms in the Republic. In this regard, one of the measures taken covers all the powers of the State Service for Antimonopoly Policy and Consumer Rights Protection, as well as all the powers in the field of state protection of consumer rights.

4. DEMONOPOLIZATION OF THE ECONOMY AND PRIVATIZATION OF THE STATE PROPERTY IS THE BASIS OF DEVELOPMENT

The processes of demonopolization and privatization of the state property had a decisive and undeniable role in ensuring the transition from a centralized planned economy to a market economy based on free competition. In this regard, the Law of the Republic of Azerbaijan “On Privatization of State Property” adopted in 1993, the first State Program on Privatization of State Property (1995-1998) adopted in 1995, new edition of the Law “On Privatization of State Property” adopted in 2000 and the second State Program on Privatization of State Property (2000-2004) are of great importance. The world experience shows that demonopolization programs in various fields are one of the most favorable mechanisms in terms of creating a competitive environment in the industries. Thus, the programs were carried out to demonopolize the telecommunications market in Germany in 1998, insurance services in Poland in 1995, and ports in the Philippines in 1994. At the same time, we would like to note that such programs are being implemented in many CIS countries. Since 1995, the successive measures taken to terminate the state-owned monopolistic institutions and to eliminate concentration in the fields of mechanical engineering, food, poultry, forestry, light and textile industries, paid services and construction services, and in the activities of local industrial enterprises have been practically ensured demonopolization of state monopolistic institutions in

the mentioned fields. The decrees and orders issued by the President of the Republic since 2000 on the restructuring and privatization of metallurgy, chemical, gas processing and telecommunications, air transport and special mechanical engineering are of great importance in the field of demonopolization of these fields. As a result of these measures, hundreds of economic entities subordinated to the sectoral authorities were given independence and they became competitive subjects with each other in the market. In the process of privatization of the state property, new, free enterprises are created and wide opportunities are opened for development of competition. Therefore, implementation of demonopolization measures in the privatization process leads to more effective results.

5. REMOVAL OF ADMINISTRATIVE BARRIERS

Other important measures related to implementation of the antitrust policy in the Republic of Azerbaijan are the separation of regulatory functions from the economic functions of the governing bodies and, on this basis, the elimination of administrative barriers to development of competition. In addition to the regulatory functions of the government agencies in various areas, the implementation of production and commercial activities does not meet the requirements of development of market relations based on implementation of the principles of competition in the relevant sectors of the economy. In some cases, the performance of both regulatory and supervisory and economic functions by the executive and governing bodies allows for discrimination and abuse of such situation. In this regard, as a result of application of legislative acts adopted in the process of fundamental reforms in our country and the decisions made, most of the line ministries were released from performing economic functions, at the same time. Continuing progress in this area and achieving a complete solution of the problem will play an important role in maintaining and developing competition in the domestic market. Removal of the administrative barriers to competition is important on the base of the measures taken to create a favorable competitive environment. It should be noted that in the recent years, up to 50% of violations of the law on “Antimonopoly Activity” were related to creation of administrative barriers to development of competition. Formation of a market economy requires reduction of direct state intervention in the economy, elimination or minimalization of barriers to market entry. However, the decisions and instructions of the central and local executive authorities allow for monopolistic activity in some cases in the current situation. Such decisions restrict access to markets, increase the degree of monopolization of markets, and consequently hinder economic growth and the optimal distribution of resources. In the recent years, there have been the cases of actions aimed at restricting competition in the activities of executive and administrative bodies, as well as cases of obstruction of competition due to unreasonable artificial barriers created by the governing authorities in issuance of licenses. The gaps and inconsistencies in the functions and powers of the licensing authorities in determining the types of activities to be licensed have led to procrastination, abuse, inappropriate interference in the activities of economic entities, and non-objectivity in revocation and suspension of licenses. The Decree No. 783 dated September 2, 2002 of the President of the Republic of Azerbaijan “on Improving the Rules for Issuing Special Permits (Licenses) for Certain Types of Activities” played a decisive role in eliminating the above-mentioned cases. “Rules on Issuance of Special Permits (Licenses) for Certain Types of Activities in the Republic of Azerbaijan” approved by the Decree and other legal and normative documents adopted allow eliminating discrimination in issuance of licenses by the licensing authorities, setting additional unsound conditions, interfering the activity of entrepreneur by exceeding the authorities assigned and restricting competition by improper application of the legislation. The resolutions that cause administrative barriers to development of competition are made by both the central and local executive authorities. In connection with the results of the studies, the Antimonopoly Authority recently reviewed the resolutions of the central and

local executive authorities specifying to discriminate in allocation of resources to consumers in the electricity sector, to limit the advertising activities of municipalities, to violate the competitive principles in issuance of permit for use of subsoil. Deepening of liberalization in the economy of the Republic of Azerbaijan, privatization and restructuring measures implemented in the recent years, structural reforms in the governance and improvement of regulatory mechanisms have allowed the general development trend of competition in the domestic market to be established. Extensive reforms in the field of privatization of the state property since 1995 and a set of consistent and purposeful measures to ensure their implementation have allowed eliminating the monopoly of state property in the economy and rapidly increase of the number of private property-based economic entities. Formation of the necessary legislative framework has become the base for implementation of a systematic and active antitrust policy in our country. The main direction of this policy is to create a favorable competitive environment for market participants operating in the domestic market. In the first stage of fundamental reforms, the main priority was large-scale demonopolization and creation of the conditions for its development. A wide range of measures has been taken to demonopolize the economy in our Republic. In addition to the positive effects of liberalization on competition, it has a number of negative effects, and therefore liberalization makes competition policy important (John Fingleton, Eleanor Fox, Damien Neven, Paul Seabright (1995)). The studies held in Turkey show that the foreign transnational companies are more likely to establish dealer relationships with highly concentrated domestic companies. In this case, imports do not lead to weakening of concentration, but rather to its strengthening. It was also found that though import generally had a positive effect on competition in the private sector and reduced price margins in this sector in Turkey, import in highly concentrated industries resulted in increase in price margins (Ali Chulha, Cihan Yalcin (2005)). From this point of view, when liberalizing the domestic market in the country, preference should be given to imports of products in low-concentration areas and investment in high-concentration areas. In this case, it should be noted that the foreign investment can also pose a number of threats in terms of restricting competition. Implementation of the market liberalization in terms of creating a sound competitive environment in the country would further increase the effectiveness of competition policy.

6. PROTECTION OF COMPETITION AND MAIN DIRECTIONS OF FIGHT AGAINST MONOPOLY

In the market economy, the nature of the state intervention in economic processes may vary depending on the characteristics of competition in different areas. As known, it is objectively considered more expedient for the vast majority of forms of entrepreneurial activity to take place in the environment of free competition. In the conditions of free competition, the state monitors compliance with the requirements of the legislation in the course of entrepreneurial activity, and the role of the state in this area is to implement measures to prevent and eliminate violations. From this point, the objectives of the antitrust policy are to ensure development of competition, to prevent monopolies and unfair competition, to restrict the competition of temporary monopolies in this area by abusing their dominant position, to protect competition against the actions, including unfair cases that harm of may damage the interests of consumers and competitors. According to the current legislation, in some areas of this sphere, the state may impose temporary restrictions, such as licensing, application of standards, as well as regulation of certain strategic products or the price, in order to ensure the public interest. There are certain areas of the economy where development of competition is not possible or expedient for various social, economic and technological reasons. These areas are called the areas of activity of natural monopoly and they are determined in a special form in the legislation. In the Republic of Azerbaijan, communication services, energy transmission and supply,

transportation of oil through main pipelines, transportation and supply of natural gas through pipelines, water supply, heating, a number of utilities, a number of services in the field of air transport and railways, etc. are within this area. The main parameters of the operation of the economic entities engaged in the activities related to natural monopolies are regulated by the state. In addition, there are a number of areas in which provision of services and work can be carried out only by the state-owned enterprises and organizations or under the direct control of the state. These areas are usually defined in the legislation as state-monopolized areas and are regulated as a whole.

6.1. Control over the behavior of the economic entities with dominant position in market

A part of the commodity and service markets (supply and production of tobacco products, import and wholesale of a number of foods, production and sale of cement, supply and processing of raw cotton, import of cars, mobile phone service, beer production, sale, etc.) have been monopolized. In accordance with the antitrust legislation of the Republic of Azerbaijan, the enterprises with dominant position in the market are included in “State Register of Monopolistic Economic Entities” and general antitrust control is exercised over their activities. The State Register, kept by the State Antimonopoly Policy and Consumer Rights Protection, currently includes more than 90 economic entities operating in various sectors of the economy. The economic indicators of these economic entities are analyzed on the basis of the state statistical report approved in accordance with the procedure established by the State Statistics Committee, price dynamics are investigated, inspections are carried out to identify actions that may restrict competition and abuse of dominant position. It should be noted that in a number of markets, there are the cases where the economic entities abuse their dominant positions. Such cases make up one third of the violations of the requirements of the Law of the Republic of Azerbaijan “on Antimonopoly Activity” registered by the Antimonopoly Authority. Abuse of the dominant position occurs as in application of monopoly prices, including monopsonic prices, adoption of unfavorable conditions for competitors, creation of various barriers to market entry. In the process of the antitrust control, the cases of abuse of the dominant position by the economic entities in the market are revealed and relevant instructions are given to eliminate them.

6.2. Control over mergers and associations that may strengthen the dominant position of economic entities and hinder competition in the relevant goods and services market

The legislation of the Republic of Azerbaijan specifies implementation of antitrust control over establishment, reorganization and liquidation of the entities and their associations, as well as conclusion of transactions between economic entities in acquisition of shares (stakes) in order to prevent abuse of dominant positions in the market and restrictive competition. The main purpose of this control is to directly influence the structure of the market by the Antitrust Authority in order to strengthen the dominant position of the economic entities in the goods and services market, to prevent competition. In the context of development of the corporate sector and formation of corporate governance in the country economy, organization of effective control over formation of the market participants associated with property relations and the system of mutual participation in capital and governing bodies is becoming increasingly important. Control over mergers and associations also includes control over compliance with the antitrust law in establishment of associations and non-profit organizations of commercial enterprises and organizations. By establishing these associations and unions, participants protect their interests in relation to relevant professional or field characteristics. Such associations and unions, despite not entirely for commercial purposes, provide ample opportunities to influence competition.

In order to prevent their transformation into structures that hinder development of competition (creation of additional barriers to access to the area, concerted anti-competitive actions - market sharing, etc.), it is important to exercise constant antitrust control over their activities.

6.3. Horizontal agreements and concerted actions (cartel conclusions)

A favorable competitive environment is associated with establishment of effective control over the actions of economic entities that can limit competition through various agreements and concerted actions. In order to protect and promote competition in the commodity and service markets, businesses set prices, share markets, restrict access to a competitor's market, make the purchase of any good a condition for the sale of another good, raise, lower or keep prices at auctions and deals, and agreements and coordinated actions (cartel conclusions) related to implementation of other similar actions aimed at restricting and eliminating competition are prohibited by the antimonopoly legislation of the Republic of Azerbaijan. In practice, the most commonly concerted actions of the economic entities that restrict competition, are above all, agreements to restrict market access and to refuse to enter into contracts with certain buyers or sellers. The antimonopoly legislation of the Republic of Azerbaijan defines the scope of illegal agreements that restrict competition in the commodity and service markets. However, no specific mechanisms for implementation of the antimonopoly control have been established in this area.

7. FIGHT AGAINST UNFAIR COMPETITION AND PROTECTION OF INDUSTRIAL PROPERTY

Formation and exchange of business reputation of enterprises in the conditions of a transition economy are becoming one of the important factors of competitiveness. In this regard, ensuring an active fight against unfair competition methods also plays an important role in the antitrust policy. Formation of the national legislation on unfair competition in the Republic of Azerbaijan, admission of our country to the Paris Convention for Protection of Industrial Property and the Madrid Agreement on Prevention of Incorrect or Misleading Origin Indicators on Goods and International Registration of Trademarks provides large-scale activity in elimination of unfair competition and protection of intellectual property rights. As known, free competition stimulates producers to increase production efficiency by forcing them to produce the products and services consumers need at a higher quality and at lower prices. The legislation in the field of protection of competition is also aimed at protecting competition and providing maximum assistance in bringing real processes closer to the principles of competition. However, where there is competition, there is also unfair competition. Irrespective of the time of existence of a market economy, unfair competition occurs in all countries based on this system. The economic entity that offers a more useful and quality product at a more favorable price and favorable conditions for consumers in the economic competition (fight for competition) should win. This result can be achieved when all participants in the competition follow the rules of competition and business ethics. However, in practice, there are the cases where deviations from the principles of fair competition are allowed by evading the rules of competition and non-compliance with business ethics. Some economic entities allow unfair competition by harming the interests of a competitor or misleading consumers. The Law of the Republic of Azerbaijan "on Unfair Competition" provides for fight against such cases. The use of unfair competition methods is relatively widespread in the domestic market of our country. Special analyses in this area show that the main violations occur in the form of imitation of the economic activity of the competitor and misleading consumers. In the recent years, the share of unfair competition methods in the total number of cases of imitation of economic activity of the competitor in this or another form was 25-30%, and the share of the cases of misleading consumers was slightly more than 60%.

8. REGULATION OF ACTIVITY OF THE SUBJECTS OF THE NATURAL MONOPOLY

One of the main directions of the antitrust policy in the Republic of Azerbaijan is to improve regulation of natural monopolies. Prices (tariffs) of the services provided by the natural monopolies, which play an important role in the country economy as a whole, their quality, reliability in supply have a significant impact on the competitiveness of market entities operating in other sectors. From this point, the effective regulation of natural monopolies, along with coordination of the interests of natural monopolies and consumers of their services, is one of the main conditions for creating favorable environment for development of the domestic production in the context of globalization. Recently, on the basis of newly formed regulatory mechanisms, the service rates in the individual areas of natural monopoly activities (communications, electricity, water, wastewater discharge) have been revised. In regulation of the rates, the main goal is to effectively reconcile the interests of natural monopolies with those who use their services. These services should be of high quality, meet the necessary standards, and at the same time accessible for their users. For the natural monopolies, the rates should ensure covering the economically justified costs and efficient development. Regulation of the rates of natural monopolies is closely associated with the antitrust control of the conditions of service of these entities in their field of activity. In the recent time, progress has been made in improving the legal and regulatory framework for regulating the conditions of service of natural monopolies. Necessary changes were made to the rules of service in the field of railway, seaport, gas supply, and new draft rules of service in the field of telephone communication, electricity and water supply were prepared. At the same time, new forms of contracts between the subjects of the natural monopoly and the consumers of their services have been developed and begun to be implemented.

9. CONCLUSION

As a result of demonopolization of the economy and privatization of the state property, the issue to develop regulations for implementation of more effective and flexible practical measures to prevent growing monopolistic tendencies and abuses in areas beyond the direct control of the state has become a topical issue. In order to prevent widespread unfair competitions, it is necessary to strengthen control over the details, quality and other parameters of the goods in the field of import, production and sale, to take measures to prevent entry of counterfeit, low-quality and undocumented goods into circulation by all government agencies. The regulations that may be valid at the level of all state bodies to restrict competition, prevent and eliminate resolutions that may lead to discrimination and abuse as a result of administrative barriers created by the public authorities should be established. A working mechanism should be built in the field of flexible implementation of measures to strengthen competition, and the measures should be taken to increase the competitiveness of products of local manufacturers. Methods should be developed to improve the mechanism of state control over the prices of the products of the monopolistic institutions and eliminate abuses. Summarizing the various approaches to the objectives of competition policy, we conclude that the main objectives of the competition policy are: (i) to protect competition by reducing or preventing factors that restrict competition; (ii) to ensure social values in parallel with improving the competitive environment. When implementing competition policy, it should be taken into consideration that both strict and soft policies are harmful for society. Thus, a soft competition policy can create favorable conditions for dominant companies to set monopoly prices or restrict competition. On the other hand, strict policies can hinder growth and development of the profits and efficiency of enterprises. Considering the existence of this or another problem in the country, the competition policy should be aimed at improving the competitive environment and strengthening competition.

Improving the competitive environment and strengthening competition in the country also necessitate privatization, demonopolization, liberalization, creation of new companies, removal of barriers to market access, development of small and medium enterprises and other similar measures.

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STRUCTURAL EFFICIENCY OF BUDGET EXPENDITURES AS A STABILITY FACTOR OF THE BUDGET SYSTEM

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ABSTRACT

The stability of the budget system can be characterized as the capacity of all its elements to use the state's mechanisms of mobilization and distribution of centralized monetary funds to ensure the achievement of the stated goals under the influence of negative factors without any major changes in the key parameters. Economic stability can be seen as a term deriving from the budget's "price," defined not so much by its balance as by "structural efficiency." Considering the restricted discretionary funds, the possibility of their insufficient execution in budget allocations is strong, which contributes to cost structure distortion. Budgetary risk management is recognized as a required element in the management of the public sector, subordinated to common objectives: ensuring a balanced budgetary structure, maintaining fiscal stability, efficient use of budgetary funds and successful application of state powers. Structurally effective budget can only be understood as a budget that forms the basic performance conditions, assessed in terms of the impact on ensuring positive dynamics of economic development indicators and the quality of human resources in the medium and long term. Result-oriented budgeting (RBB) is a more pragmatic method of planning and executing budgets than the cost-based approach, where the focus is moved from expense to performance. According to this approach, control of the plan's execution and its modification depends on the cost-effectiveness achieved. RBB's principal concept is to relate costs and outcomes at all stages of the budget process. One of the key methods for solving the question of increasing the productivity of budgetary spending is program-targeted budgeting under the conditions of uncertainty of the economic situation.

Keywords: *budget stability, budget risks, budget expenses*

1. INTRODUCTION

One of the main prerequisites for maintaining macroeconomic stability is the stability of the budget system and its long-term balance. Budget stability is directly linked to the objective possibility of providing financial resources for government expenditure, fiscal security, and rational distribution of tax potential to cover the spending needs of each level of the budget system. A significant element of budget stability is the effective usage of budget funds and the consistency with which they are allocated. A stable budget system is a system that can respond to internal and external risks while maintaining holistic development parameters with a focus on balance. The long-term viability of the budget structure is directly linked to the problems of expenditure's "structural effectiveness." Continuing public sector reforms assume their main goal of ensuring the quality and efficacy of budgetary spending. Improving budget preparation is the principal way of improving the cost control system. It is important to solve the problem of growing financial incentives by making better use of financial resources, further enhancing budget preparation, increasing the efficiency and effectiveness of budget spending, and the quality of management of costs and performance. Among the services that decide the content of expenditure planning are, first of all, the identification of reserves for the growth of budgetary resources, the determination of directions for the use of budgetary funds, financial support for the fulfillment of the respective government bodies' obligations. The fundamental concept of budget preparation is the assured complete fulfillment of current commitments following the goals and anticipated outcomes of state policy.

2. THE CONTENT OF THE CONCEPT OF SUSTAINABILITY OF THE BUDGET SYSTEM

Ensuring financial stability is one of the economic policy goals. In a dynamic world, the definition of "sustainability" can be described as the ability of the national financial system to retain its efficiency. Signs of financial stability in the system's relationship with the environment are realized. The recent financial crisis has strongly highlighted the question of the stability of states' financial systems. Analyzing the factors influencing how the national financial system works in the sense of the global crisis, M.V. Romanovsky characterizes the stability of the financial system as the capacity and ability of its institutions, instruments and information technology to ensure the efficient functioning of all channels of accumulation, distribution and redistribution of limited financial capital to all economic subjects to achieve strategic objectives in the face of negative internal and external shocks [1]. The budget system is one of the most important elements in a country's financial system. The budget is the art of keeping financial economy records and controlling the rationality of expending national resources in many ways [2]. It affects inflation, exchange-rate policy, economic development, the country's attractiveness for investment through the budget [3]. Fiscal sustainability is the principal and determining criterion for the country's proportional development [4]. The efficiency of the budget system's functioning has a direct effect on the quality of economic growth and social welfare. The purpose of budget system functioning is to build a socially-oriented society through resource allocation and redistribution. The budget system's stability is one of the most important metrics characterizing the economy's stability and, above all, the status of its social sphere. The stability of the budget system can be defined as the ability of all its elements to use the state's mechanisms of mobilization and distribution of centralized monetary funds to ensure the achievement of the declared goals under the influence of negative factors without any significant changes in the main parameters. The tasks to be carried out to ensure the budget system's long-term sustainability and stability enable us to infer that by its sustainability, the authorities define the budget's stability. The tasks for the sustainability of the budget system include mainly meeting spending commitments with the sources of their financial support, formulating goal metrics, providing a long-term budget plan, covering budget allocations with performance indicators, etc. But it should be remembered that they face high risks in the sense of the small budget funds. Insufficient enforcement of expenditure allocations contributes to cost systemic distortions. Economic stability can be seen as a term deriving from the budget's "efficiency," characterized by its "structural effectiveness." And using a structurally effective budget, we propose to understand only the budget that forms the basic performance conditions, evaluated from the impact on ensuring positive dynamics of indicators of economic development and the quality of human potential in the medium and long term. The global financial crisis highlighted systemic imbalances within the budget structure and exacerbated the budget policy challenges. Structural imbalances consisting of an unacceptably high proportion of opportunistic revenues, in which exorbitant spending commitments were made and funded very effectively in favorable conditions, gave political dividends to the present government, but when external factors shifted, they became a direct threat to the economic and social stability of the state [5]. Economic budget instability is a deterioration of State financial system funding for socio-economic growth sustainability [6]. Budget instability is a factor in slowing economic growth and keeping track of its education and development is an important feature of preventive fiscal policy. We should speak about its efficacy in the light of the tasks that budget policy solves. If fiscal policy addresses financial issues, then the budget deficit and public debt are indicators of its success, reflecting the state of public finances. If the budgetary strategy is intended to solve the economic problem-macroeconomic balance, then metrics such as GNP growth and total private investment, the level of unemployment, and inflation should be used. Financial indicators complement the fiscal-policy efficiency characteristic [2].

As historical experience indicates, shifts in macroeconomic dynamics, reflected in the emergence of new patterns within the real and financial sectors of the economy, are the decisive factors in the formulation of fiscal policy in crisis conditions. In conditions of developing crisis, a transition from a budgetary stabilization policy to a stimulating one is being made. This establishes the importance of the following priorities in budget policy:

- maintaining social stability by stimulating employment;
- infrastructure development;
- ensuring structural changes;
- increase in innovation activity [7].

3. CONDITIONS FOR IMPROVING THE EFFICIENCY OF BUDGET EXPENDITURES

Budgetary spending serves as an instrument for enforcing the macroeconomic policy of the country, with the aid of which the state exerts control on the economic and social condition of society. At the same time, budgetary expenditure serves as an instrument for the distribution of financial resources among industries. In general, the essence of budgetary expenditure is expressed by different species characteristics of expenditure, considered qualitatively, which helps the parties to assess the economic existence and public intent of budgetary expenditure, and quantitative, indicating the amount of budgetary expenditure [8]. A comparison of costs and revenues (costs-benefits) for a specific period of budget planning is one of the principles that can be used in assessing budget effectiveness. The increase in budget spending depends on the country's GDP growth and ability to execute external and internal borrowing. To develop approaches for analyzing the effectiveness of budgetary expenditure, it is advisable to apply the principles of separation and synthesis, i.e. first, the separation of budgetary expenditure by major areas and groups, with the development of an evaluation algorithm for each group, and then the synthesis, with the formation of a certain "portfolio" of individual budgetary financing areas. Further systematization of economic entities receiving budget funding consists of selecting elements of the same type within each expenditure group based on the "allocation" of the budget funds allocated to them. The type of those appointments being enforced is the so-called public procurement. The purpose of evaluating the effectiveness of budgetary expenditure is to develop and optimize the budget, ensuring that inevitable losses in the budget sphere are minimized. Strategic development goals provide goals that determine the necessary management decisions, which also determine the tactics for assessing budget spending effectiveness. The efficiency of managing budgetary expenditures primarily defines the efficacy of the cost control program operating using the methods used. The normative approach is one of the principal methods of cost planning. It provides budget planning stability and continuity and requires a rational regulatory framework organization. The method of budgeting based on performance was incorporated into the practice of budget planning as a result of enhancing the structure of the budget process and the effective use of the budget funds. RBB 's key concepts encompass:

- planning of measured results;
- the availability of justification of expenses included in the budget;
- system for evaluating the effectiveness and efficiency;
- monitoring performance.

Control over the outcomes is exercised with program-targeted budgeting, i.e. outcome planning is carried out. RBB is a framework focused on strategic planning and includes the distribution of scarce discretionary resources in important public policy areas. The RBB can be seen as a method of budget creation and execution representing the relationship between budget spending and the results achieved.

The RBB 's basis is to identify the outcomes of the spending budget funds, based on which conclusions are drawn on the degree to which the objectives are achieved. The benefit of the RBB process is a versatile approach to State functions allocating budgetary resources. The analysis of state programs, however, reveals some weaknesses that impede the practical implementation of program-targeted planning principles [9]:

- unsuccessfully selected indicator of state programs that do not allow to evaluate the effectiveness of their implementation;
- fuzziness, fuzzy wording of goals, objectives, indicators and expected results of state programs;
- an excessive number of tasks of state programs and subprograms, as well as target indicators.

Moreover, current budget experience implies that the multi-probability effects of using budget funds decide the need to explain the discrepancies in the budget process between those outcomes. Any concept of budgeting involves presenting the financial plans in several ways to select the best or most likely. In the case of program-targeted budgeting, this principle translates into the need to prepare several ways to achieve the desired outcome, differing in the set of resources used, their cost schemes, and funding schemes [10]. Here, it is important to substantiate the assessment of the results achieved both in quantitative and qualitative indicators. The methodology for preparing and justifying program budgets should also include methods for finding the values of effective indicators corresponding to the best options for allocating resources. Measurability and comparability are the key criterion for substantiating the evaluation of tests.

4. RESULT-ORIENTED BUDGETING AS A TOOL TO INCREASE THE EFFICIENCY OF BUDGET EXPENDITURES

According to the "Result-Oriented Budgeting" (RBB) process, control over the plan's execution, and its adjustment is carried out according to the cost-effectiveness achieved [11]. The assessment criteria, in this case, are groupings of selected measures and coefficients. A new practice is the implementation of a balanced scorecard at the level of State budgets. RBB is a method of planning, executing and controlling the execution of the budget which ensures the distribution of budgetary resources according to the goals, tasks, and functions of the State, taking into account the priorities of state policy and the social significance of the expected immediate and final results of the use of budgetary funds. Limiting RBB 's scope to determine the budgetary expenditure side allows us to formulate a significant aspect of the issue. Therefore, if budgeting is known as an aspect of the management system, then it's an operation in the wide sense to systematize the financial flows that require it, and in the narrow sense, it's budget preparation itself. Consequently, any form of separation of the sources of funds from the directions of their use would result in the transformation of the budgetary process itself, which consists of systematizing the paths of the movement of funds from the source to the intent of the application when carrying out the distribution role of finance. In other words, if budgeting does not affect revenues from the budget, then budgeting is no longer involved. In the RBB, it is important to look for your metrics for results that vary from the cost metrics for incomes. But it should be noted that the issue of budget revenue shortfalls in effect increases the importance of budget preparation and programming expenses from the perspective of improving their performance, as well as managing their spending at the implementation stage of the budget. Pressure on the budget is also exerted by the need to address a variety of problems, along with a large deficit in part of the revenue:

- provision of conditions for economic growth and employment;
- Strengthening the country's defense capability in the face of growing geopolitical tensions;

- saving the support of the social sphere, etc. [12].

The program budget is called upon, according to the views of some experts [13], to be one of the key methods for solving the question of growing government expenditure and determining its effectiveness. The overall effectiveness of program budgets is closely linked to the efficiency of government services, on which the production of programmatic budgets is focused. The key concept of focused budgeting for the system is to relate costs and outcomes at all stages of the budget process. The key goals that budgeting is driven by within the program budget are to improve the expenditure's social and economic efficiency [14] and produce better outcomes at lower costs [15]. As you can see, in terms of budgeting practice, the concept of optimality in management is being applied. The budget of the system enables the assessment and analysis of the cost-effectiveness of programs intended to achieve particular policy objectives. The budget for the program sets the scope and structure for the cost options expected. The elements of a successful State system are as follows [16]:

- a clear statement of the purpose of the program;
- development of the logical structure of the program;
- determining program subgoals for each participating ministry;
- development of a system for evaluating the effectiveness of programs;
- distribution of responsibility for the results of the program between the participating ministries;
- development of an incentive system for achieving indicators.

The increased interest in program preparation and budgeting is because issues of maintaining the viability and consistency of the budget framework, which raises the criteria for budgetary expenditure 's effectiveness, are becoming increasingly important under the current conditions [17]. Furthermore, as international experience indicates, the program-oriented approach to budgeting with all the problems associated with its use is the most effective tool for the efficiency of budgetary policy, allowing the resolution of numerous social and economic problems involving the production and implementation of interrelated programmatic measures [18].

5. RISKS OF THE BUDGET SYSTEM

The value of initiatives to minimize the negative manifestations associated with the development and utilization of budgetary capital is growing in modern conditions. A recent trend in modernizing the system for handling public finances is the implementation of risk management techniques tailored to the peculiarities of coordinating budget relations. The budgetary risks associated with breaches occurring during the creation and use of the budget fund have negative implications for the budget program, the social environment, and the real economy in general. Budget risk management is a critical aspect of public sector management, and it comprises a collection of processes that are collectively decided and organized. The basic objectives of budget risk management are to ensure a balanced financial structure, preserve fiscal stability, make efficient use of budget funds, and efficiently execute state powers. The budget risk management process aims to counteract the occurrence of deficiencies during budget fund creation and utilization. The typical collection of budgetary risks created in the budget framework itself consists of the risk of revenue and payment patterns, the risk of budget revenue structure, the risk of budget expense structure, the risk of the budget deficit, and the risk of external source dependence. Due to the difference between the actual amount of payments to and from the budget, the danger of the rhythm of receipts and payments affects cash gaps creation. The danger of the structure of budget revenues should be regarded as an important factor not only in the execution of the budget itself but also in the socio-economic

growth of the budget jurisdiction territory as a whole. The risk of the structure of budgetary expenditures is combined with the risk of the structure of budget revenues. The conventional cost structure will account for a large portion of priority spending. The risk of expenditure mismatch occurs when an expenditure program is implemented, with specific revenue and cost values. The possibility of a budget execution deficit or surplus should be seen as risky. The risk of external dependence can be defined as the ratio of own sources to the sum of subsidies, subsidies, transfers, loans, and regular loans [19]. There are two conceptual approaches distinguishable in organizing budget risk management: operational and institutional. The first one focuses on the policy of risk control of public authorities' direct operations. The organizational culture of government agencies, the availability of guidelines, and formalized risk management processes, internal control, and monitoring belong to a significant role in managing risks within the context of this strategy. The second approach relates to the risk-taking policy of financial stability and State security. In the framework of this approach, risk management is intended to protect the stability of the budget system. Accordingly, both external influences and internal changes cause the management vector to be skewed towards budgetary risks. In this strategy, budget risk management is a critical component of the countercyclical budgetary framework, which allows for the use of resources to adjust the budget to risks: budget reserves, regulatory constraints on budget parameters, "stressful" budget forecasting [20]. Without the implementation of risk management approaches, which are an integral part of financial management in budget systems, high-quality financial management becomes difficult under public relations conditions [21]. Responding to budgetary risks requires applying methods and techniques to influence the existence, magnitude, and effect of budgetary risks. The choice of impact measures is primarily dictated by the form of danger from the budget and the complexity of the possible negative consequences. Essentially, budgetary threats are related to the impact of factors external to the budgetary policy (demographic population structure, state of the national economy, exchange rate adjustment, etc.). Improving the organization of budget risk management requires steps to enhance the efficiency of financial planning, budget reserves production, and use.

6. CONCLUSION

An important indicator of the budget policy implemented by the state is the efficiency of expenditures. Because of the growing budget gap, as well as an increase in the debt burden on the economy, it becomes necessary to optimize the costs incurred, including increasing their effectiveness. As is known, the basis of the implemented reforms is the "transition from cost management to results management", which involves the inclusion of most of the costs in programs that are a list of specific activities aimed at achieving the goals. Implementing this reform of the organization of public financial management significantly increases the degree of budget process efficiency. As a result, the budget's predictability and stability improve. The growth trend in budget spending commitments, while at the same time significantly decreasing the revenue incentives for their resource provision, contributes to serious risks of budget program imbalances. This phenomenon again increases the criteria for discretionary spending performance in terms of ensuring the sustainability of the budget framework. The program budget is the most important instrument for improving the effectiveness of budget policy in this regard. Under conditions of macroeconomic instability, systematic work is needed to apply program-oriented approaches, develop and implement specific proposals for program development as an effective tool for managing public policy and budgetary spending.

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HUMAN CAPITAL MANAGEMENT IN ENTERPRISES

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ABSTRACT

No enterprise can operate without human capital. Therefore, human capital is one of the most important aspects of the theoretical and practical activities of the enterprise. The results of the research conducted by the author show that depending on the organization of high-level management, the return on investment in human capital allows you to get more than return on investment in technology. Another interesting fact should be noted that with a 10% increase in the level of education of employees, labor productivity increases by 8.6%. In such conditions of growth, the productivity of share capital increases by 3-4%. Motives for investing in human capital are determined by economic, social, cultural and psychological factors. In addition to the monetary benefits of investing in intellectual capital, the positive impact on the growth of internal motivation for individuals should be especially appreciated.

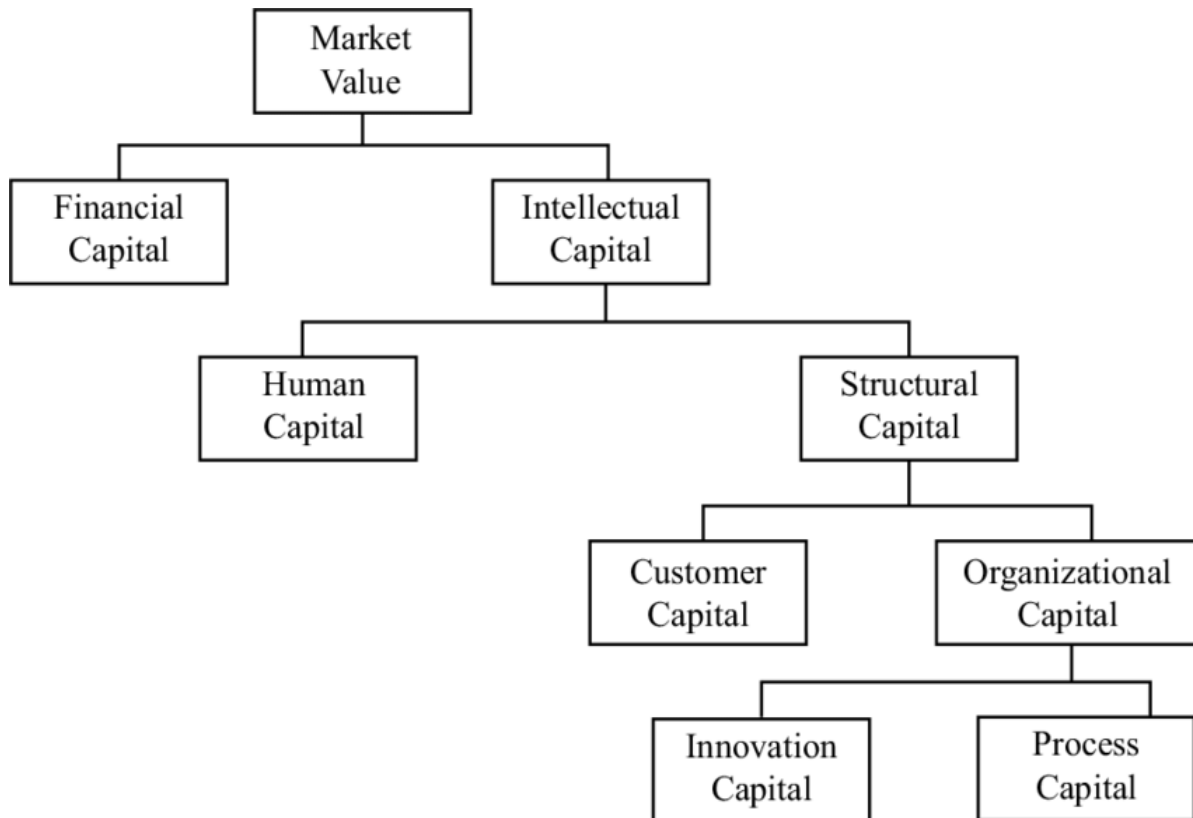
Keywords: *Human capital, Intellectual property, Management, Strategy*

1. INTRODUCTION

The new paradigm of intellectual capital management is based on the new quality management of the organizational structure of the enterprise and the internal corporate economic power. It is noted that the effectiveness of intellectual knowledge management is directly determined by the effectiveness of organizational management. The hierarchical structure of the enterprise is no longer an "incubator" of intellectual knowledge, because the economic power here reflects the conditions of strict administration, adequate to industrial technologies. This structure should be replaced by a network organization of intellectual production. A more detailed structural approach to intellectual capital was proposed by Leif Edvinson. He was one of the people in charge of intellectual capital management at Skandia Assurance & Financial Services Company. L. Edvinson has developed a system for monitoring the intellectual resources of the company. According to his theory, intellectual capital is divided into: 1) structural capital and 2) human capital. Structural capital, in turn, is a) customer capital and b) organizational capital; Organizational capital is also divided into a) innovation and b) process capital, respectively. The founding definition of intellectual capital embraced by Skandia AFS, the birthplace of intellectual capital accounting, was:

- The possession of knowledge, applied experience, organisational technology, customer relationships, and professional skills that provides Skandia AFS with a competitive edge in the market (Edvinsson, 1997).

Over time at Skandia, a "simplified" definition emerged that focused on two components: human capital and structural capital. Intellectual capital was viewed as human capital together with "those dimensions beyond the human capital [that] were left behind when the staff went home", structural capital having grown out of human capital. The Skandia Value Scheme (Figure 1) captures the varied constitution of intellectual capital, with structural capital initially being sub-divided into customer and organisational capital, which in turn subdivides into innovation and process capital, with the former being constituted by intellectual property and intangible assets (Robin and Robin, 2003).



*Figure 1: The Skandia Value Scheme
(Source: Edvinsson, 1997)*

"Intellectual capital of enterprises" means a form of capitalization of the companies' intellectual potential with the protection and effective organization of the concentrated innovation advantages. Intellectual capital is included in commercial and economic turnover by its owners as a significant investment resource and a factor of production for profit. Intellectual capital is used according to the principles of market relations and the time factor (risks, liquidity, self-sufficiency). It is intellectual capital that determines the pace and nature of the renewal of production technologies and their products. As a result, enterprises gain a competitive advantage in the market. Intellectual capital is not just a good and thinking brain. Intellectual capital can be understood as the result of technical and creative decisions, first of all, as a reasonable and sustainable intellectual advantage of enterprises in the market. As can be seen, intellectual capital also acts as an invisible system of intangible values, formed as the sum of all intangible assets of enterprises and companies. In general, it should be noted that the intellectual capital management functions of an enterprise are not a simple duplication of marketing, finance, production, personnel and research and development projects. What is important here is the organization and planning of the internal information flow of the company, the formation and design of knowledge and information base, analysis and evaluation of the real value of intellectual products, the inclusion of intellectual products in the market.

2. RESEARCH METHODOLOGY

The experience of foreign countries shows that the management of intellectual capital requires an organizational and legal mechanism for the transfer of technology. We believe that a comprehensive approach to the problem of improving the efficiency of management of intellectual property of enterprises, consisting of systems for the assessment and management of intellectual capital. Naturally, the judgments of Y. Ruus, S. Pike, L. Fernster can be mentioned as noteworthy approaches to the problem of intellectual property management in the

world economic thought. The above-mentioned economists-analysts include the concept of intellectual capital management in the placement and use of intellectual capital resources, as well as the transformation of intellectual capital resources into other resources, especially traditional economic resources, to increase the value of the organization in the eyes of other parties (Ruus et al, 2008). For example, it should be noted that innovations related to the production of goods and commodity components can be patented. Observations show that the management of intellectual property of enterprises should be organized in such a way that all this leads to the renewal of equipment and technology in enterprises. As can be seen, the process of human capital management as a whole covers the stages of formation, development and use of intellectual capital of enterprises, as well as the motivation of the process of its accumulation and reproduction. The main goal here is to maximize the benefits of using intellectual capital and minimize costs. At the same time, it should be noted that a number of factors affect the management of human capital in modern times. These are: the choice of management strategy of enterprises and companies, corporate culture, dynamism and functional synergy of goods and markets. It should be noted that the management of human capital is carried out within the development strategy of the enterprise, which includes scientific and technological development of the enterprise, the formation and improvement of corporate governance structures, commercialization of intellectual property, more reliable use of intellectual property. The organization of production, motivation and management should be given special consideration.

3. MANAGEMENT STRATEGY OF INTELLECTUAL CAPITAL

In this context, let us first focus on defining an intellectual capital management strategy. In general, the main issue in the strategy should be the exchange of knowledge on the direct growth of intellectual capital and at the same time the transformation of intellectual capital into another type of capital. Criteria for assessing the effectiveness of intellectual capital management include the tasks and stages of its management. Specifically, the state of the enterprise's resources should be assessed: innovation activity, investment attractiveness, development of human and infrastructure resources (full use of information technology), consumer satisfaction, business confidence, compactness. Based on the generalization of all the above ideas, the elements of the mechanism for the implementation of intellectual capital management functions are also noteworthy. It should be noted that the intellectual capital management functions of enterprises are divided into general and specific functions according to their content.

Table following on the next page

Management functions	Specifics of realization of functions in the system of intellectual capital management of enterprises
General management functions	
Analysis and planning	Capital investment in the reproduction of the composition and structure of the Intellectual Capital of enterprises. Planning IC growth needs depending on the development strategy
Organization	Creating a common organizational structure for the formation and development of IC in enterprises. Organization of the formation of individual elements of the enterprise IC elements
Motivation	Encouraging the creation of innovations in enterprise structures, stimulating the transfer of innovative ideas and knowledge
Monitoring and evaluation of efficiency	Determining the nature of the impact of intellectual capital on innovation activity in enterprises. Assessment of disproportionate development trends between different sections of enterprises. Control over the purposeful and efficient use of funds allocated for IC funding
Special management functions	
Marketing	Commercialization of intellectual property products created in enterprises
Financial management	Financing the development of intellectual capital from various sources
Staff management	Development of persons responsible for the creation and formation of intellectual capital of enterprises, software developers, specialists preparing scientific research and design projects. Distribution of knowledge and experience among the specialists of the structural units of the enterprises

*Table 1: Content of intellectual capital management functions of enterprises
(Source: Iksanova, 2014)*

Let's pay attention to the situation with the implementation of intellectual capital management functions in the enterprises of the republic, shown in the table above. In this regard, it would be appropriate to pay attention to some of the judgments of T.A.Stuart. Stewart believes that the multifaceted and very planned study of intellectual capital is the most important starting point for the effective organization of the management of companies' intellectual resources in any area (Stewart, 2007). As can be seen, in modern times, it has become important to choose the most appropriate version of the intellectual capital management strategy, which covers the principles, goals and objectives, methodology and functions of intellectual capital management. It should be noted that when choosing a strategy for the management of intellectual capital, it is not necessary to simply implement a strategy aimed at raising the intellectual capital of enterprises. What is important here is the transformation of this capital into corporate assets that are difficult to imitate in the market. Because on this basis, the knowledge and skills of employees of an increasing number of enterprises and companies, brands, technological know-how, the creation of a new business model and a number of other intangible assets become

hostages of various advantages in the fight against many competitors. Given all this, much depends on the choice of the model of intellectual capital management of enterprises and companies in accordance with the imperatives of the knowledge economy. The following models can be mentioned:

- The strategy of concentrating customer capital is based on the monopoly of the external environment, the expansion of the reproduction of vertical integration mechanisms and the establishment of a form of vertical management in enterprises.
- Transformation of structural capital is based on the reconstruction of the internal environment in accordance with market requirements, monitoring, selection of segments identified as development goals, capture of weak and strong signals from various mechanisms of market adaptation of enterprises.
- Social diversification strategy - is based on the expansion of the social communication base, the elimination of bureaucratization of enterprise management from their resources. It may be advisable to use this strategy in two cases. Given the insufficient resources of human and social potential (Yermolenko and Popova, 2012).

All this shows that a comprehensive approach is required to choose the right strategy for the effective management of intellectual capital of enterprises. It should be noted that in order to improve the methodology of application of intellectual capital to production, first of all, a model of optimal management of intellectual capital should be developed. A number of fundamental requirements must be defined in order to develop an effective model of intellectual capital management. On the basis of management, marketing, product quality, competitiveness management, qualimetry and a number of other accumulated experiences, the basic principles of application of intellectual capital to production have been identified: scientifically substantiated, modeled, complete, improved, dialectical, relativity, etc. The main place in the management of intellectual capital is the assessment of its level. The goal is to solve the problem of assessing the quality and quantity of intellectual capital. The solution of this problem is solved according to the basic provisions of qualimetry. Evaluation of the results of intellectual capital management is determined by the following qualification requirements: utility, sufficiency, uniqueness, reliability, integration, individuality, mobility, efficiency, feasibility, globalization, uniqueness, reproduction, economic efficiency, etc. Research shows that when talking about improving the methodology of applying intellectual capital to production, it is necessary to draw attention to the management of intellectual capital of enterprises. In this regard, it should be noted that there are a number of strategies for managing intellectual capital. These are - based on a *scenario approach*; *decomposition approach*; *integrative approach*. Based on these approaches, it is possible to improve the methods of applying intellectual capital to production. Accordingly, it would be appropriate to pay more attention to these strategies.

1. Intellectual capital management strategy based on the scenario approach - here we are talking about the effective implementation of the competitive strategy and the achievement of the following goals:
 - Formation of competitive advantages of enterprises;
 - Absolute market value;
 - Creating and maintaining the uniqueness of enterprises.

The following issues should be considered in order to achieve the goal of creating and managing a model for the application of intellectual capital to production.

- Determining the direction of redistribution of corporate knowledge;

- Formation of the process of strengthening individual competence in organized knowledge; as well as the transfer of knowledge from customers and competitors to the internal structure of the enterprise.
 - When choosing combinations of methods of applying intellectual capital to production, not only is there a rational exchange of knowledge, but also the transfer of intellectual capital from one component to another.
2. The restructuring of the model plays an important role in the decomposition approach in the strategy of applying intellectual capital to production. Decomposition of the initial model is carried out both horizontally and vertically. Here, first the components of intellectual capital are identified, then a certain part of intellectual capital is selected from the group of elements. In such an approach, active elements are selected and targeted capital is formed. The purpose of the formed capital includes the following:
- The specific significance of the formation period;
 - Significant development spending;
 - Existence of various organizations;
 - Synergy effect with other ingredients;
 - Emergence of adverse effects on innovation risks.

All this means that the creation of economic added value leads to an increase in the market value of enterprises.

3. Integration approach to management strategy in the application of intellectual capital to production. In an unstable environment, enterprises are interested in developing human capital, staff motivation, and educating employees through innovations. Some organizations in their strategies focus on the formation of organizational capital. For this reason, it should be noted that the implementation of strategic management at the level of innovation organization requires the implementation of a set of measures covering the processes of collection, systematization and analysis of information. Regular diagnostics of intellectual capital is needed to achieve the set goal. In practice, various elements of management decisions are usually used. All this allows for the effective use of intellectual and creative potential, the concentration of various resources (financial, material, etc.) in leading areas. For this reason, an integrated approach is required to achieve the goals set in the strategy for the application of intellectual capital to production.

4. DISCUSSION AND CONCLUSION

At a time of economic turmoil in most countries of the world, especially in the economically developed countries, it has become very important to determine the mechanisms for effective management of the formation and development of the country's intellectual potential and intellectual capital. All this is due to the fact that one of the most important sources of economic growth today is intangible assets and intellectual capital, which is an important part of it. It should be noted that the scale and quality of intellectual capital determine innovative development. It is already accepted by everyone as an indisputable fact that in the near future, gaining a leading position among the world's countries will largely depend on the level of development of intellectual capital. Here are the levers used for the reproduction of intellectual capital as economic mechanisms - investments in intellectual capital, prices of intellectual resources, salaries of intellectual property management entities, rents in exchange for the use of intellectual capital, sanctions, etc. understood. Economic mechanisms for managing the sources of intellectual capital, together with organizational, social and psychological mechanisms, serve to increase the efficiency of reproduction, renewal and use of intellectual

capital. As can be seen, in the post-industrial economy, information management, knowledge management, and management of intellectual resources have a special place in the formation of intellectual capital.

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THE ROLE OF THE NON-OIL SECTOR IN INCREASING EXPORT POTENTIAL IN AZERBAIJAN

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ABSTRACT

The transformation of the country into a major oil exporter, the annual increase in its production, the dynamic growth of foreign exchange earnings due to exports in this sector have highlighted the need to increase export potential in other sectors of the economy. Modern conditions dictate the need to reduce the dependence of the Republic of Azerbaijan on raw materials. The main task of the Azerbaijani economy is to prevent the country from lagging behind in the development process. In recent years, the global financial and economic crisis has posed new challenges to many countries. There were several factors that minimized its impact on Azerbaijan. This was primarily due to the purposeful management of oil revenues, the creation of a new strong infrastructure, and the wide range of maneuverability in management. The consistent implementation of state programs for the development of the regions also played an important role. All this has given impetus to the improvement of the business environment. Thus, in recent years, the issue of diversification of the economy and increasing export potential has been a priority. This can be the result of the development of the non-oil sector. Oil is a depleted natural resource, and this factor makes it important to keep the non-oil sector in the spotlight. The government of Azerbaijan, which prioritizes the non-oil sector in its economic policy, is also stepping up its efforts in this direction and supporting steps to reduce the country's dependence on oil and gas. Azerbaijan has already conceptually built its economic policy on the development of the non-oil sector.

Keywords: *non-oil sector, export potential, economic policy, natural resource, development*

1. INTRODUCTION

The "Contract of the Century", signed in 1994 as a result of the far-sighted and purposeful policy of Heydar Aliyev, introduced Azerbaijan to the world as an oil country and led to the revival and development of the declining economy in the first years of independence.

The transformation of the country into a major oil exporter, the annual increase in its production, the dynamic growth of foreign exchange earnings due to exports in this sector have highlighted the need to increase export potential in other sectors of the economy (Aliyev, 2011). Modern conditions dictate the need to reduce the dependence of the Republic of Azerbaijan on raw materials. The main task of the Azerbaijani economy is to prevent the country from lagging behind in the development process (Huseynov, 2014). In recent years, the global financial and economic crisis has put many countries to new challenges. There were several factors that minimized its impact on Azerbaijan. This was primarily due to the purposeful management of oil revenues, the creation of a new strong infrastructure, and the wide range of maneuverability in management. The consistent implementation of state programs for the development of the regions also played an important role. All this has given impetus to the improvement of the business environment. Thus, more than \$ 200 billion has been invested in the country's economy in recent years, which is the result of the development of the non-oil sector.

2. DEVELOPMENT DIRECTIONS OF NON-OIL SECTOR

Oil is a depleted natural resource, and this factor makes it important to keep the non-oil sector in the spotlight. The government of Azerbaijan, which prioritizes the non-oil sector in its economic policy, also strengthens its activities in this direction and supports steps to reduce the country's dependence on the oil and gas factor (Xalqgazeti, 2015). Azerbaijan has already conceptually built its economic policy on the development of the non-oil sector (Trend, 2017). President Ilham Aliyev set specific tasks for the further development of the non-oil sector on April 17, 2017 at the republican meeting of non-oil exporters in Yevlakh. It is important to note the following five tasks that cover the development of the non-oil sector in general. Providing additional assistance to entrepreneurs. Azerbaijan has already achieved diversification of its economic potential. Currently, the non-oil sector provides about 65% of the economy but it is also necessary to diversify exports. By moving to a new economic model, our economy will develop only through reforms, innovations, technologies and the non-oil sector. It should be noted that today farmers are given loans, they are exempt from all taxes except land tax, new equipment, lines are put into operation, fertilizers, fuel and subsidies are provided on preferential terms. All these measures revived our non-oil sector. However, additional state support should be provided to entrepreneurs so that they can export their products to foreign markets. This is necessary for both entrepreneurs and the state. Ensuring domestic demand and access to new foreign markets. Along with the need to fully meet domestic demand and constantly expand production for the export of competitive goods, we must not forget that one of the most important tasks in the coming years is to meet domestic demand with local products. At the same time, access to new markets must be gained with state support. It is important to do this. It is also important to increase the production of export-oriented products. Food security is also an important issue, and this issue is directly related to the two factors mentioned above. We are close to fully ensuring our food security. It should be noted that the successful implementation of the system of investment and export incentives also gives a great impetus to entrepreneurs and the development of the non-oil sector. The creation of the world-famous Azexport portal has greatly facilitated the work of entrepreneurs and is bearing fruit in the development of the non-oil sector. Increasing the export of products under the brand name Made in Azerbaijan. At the same time, ensuring the production of goods ordered from abroad is of great importance in the development of the non-oil sector. Sometimes it seems that entrepreneurs receive orders from abroad, but the product is not enough for export. Promotion and promotion of the Made in Azerbaijan brand abroad through public and private channels should play a role in the development of the non-oil sector. However, in order to increase exports, first of all, domestic demand must be fully met by both food and construction materials. Concrete steps are being taken in this direction.

The development of the non-oil sector also emphasizes the creation of export-oriented enterprises, as export-oriented products will also find their place in domestic markets. Of course, the exported product must meet international standards. Otherwise, it will have no export prospects. Existing laboratories must pass international accreditation, and the sooner the issue is resolved, the faster the development of the non-oil sector. Certificates issued for production in Azerbaijan must also be recognized by foreign countries. At the same time, training of export specialists and simplification of export procedures are important issues. Also, the opening of Azerbaijani trading houses in a number of countries will promote the republic, open new opportunities for exporters and, ultimately, the development of the non-oil sector. Increasing exports to the Middle East and the Persian Gulf. Along with the countries of the Soviet Union, it is necessary to open trade houses of Azerbaijan in the countries of the Asian continent. Currently, there is great interest in our products in the Middle East and the Persian Gulf. In fact, the source of this interest was the activity of our state. Thus, in recent years, certain relations have been established with these countries and the supply of Azerbaijani products there. The food market in these countries is quite large, and there is great interest in Azerbaijani agricultural products. Such markets need to be actively integrated. It is also important to establish and develop relations with large sales and supply chains in priority export markets. Study of the struggle for foreign markets. For this, it is important to study the foreign market in detail. There is a struggle for markets. We can increase production, we can make progress in the production of export-oriented products. But from now on, you will have to fight for these markets to succeed. To do this, it is important to conduct an accurate analysis of foreign markets, not only traditional but also new markets, the current state and prospects. Thus, it can be said that Azerbaijan is successfully implementing the minimum program for the development of the non-oil sector and is fulfilling its tasks within the maximum program. The core of the country reflects a unique model of economic development based on best international practice, which meets domestic demand with high-quality products based on its own production and significantly increases the export potential. The peculiarity of the non-oil sector is that the real growth rate of production in this sector is not significantly dependent on fluctuations in foreign demand compared to the oil sector. The dynamics of growth of real production in this sector mainly depends on investments, changes in domestic demand, structural and institutional changes in the country. According to research, in contrast to the oil sector in the Azerbaijani economy, real growth in production in the non-oil sector is developing poorly. This is especially due to the fact that the sector attracts less foreign investment compared to the oil sector and the external demand for the products of this sector is weak (Veliyev, 2005). Dependence on oil was one of the main problems. An important issue in the development of the non-oil sector is the development of small and medium enterprises. The state creates favorable conditions for investment and exports for the development of the non-oil sector and regions, provides loans and various benefits to farmers, organizes trade houses, exhibitions and forms a modern infrastructure. If the plan is successfully implemented, it is planned to create new jobs and create healthy competition. Thus, the development of cotton, silk, tobacco and hazelnut production are potential areas for export in this area. The development of industries can have a positive impact on urbanization, increase employment in the regions and villages, and raise living standards. Entrepreneurs have only to take advantage of these favorable conditions to develop their business and bring more benefits to the state. The process of exporting Azerbaijani wine, light industry, processing industry and agricultural products to foreign markets has already begun. Locally produced products should be characterized by high quality, low cost and competitiveness. In addition, the development of fisheries and its special place in the food industry are envisaged in the perspective. The development of this area is important in ensuring food security. The non-oil sector also includes tourism. In recent years, the budget has received sufficient funds from the tourism sector.

The development of transport, communications and logistics, especially the delivery of goods from China, Korea and Japan from the Caspian Sea via the historic Silk Road to Azerbaijan via East-West railway to remote parts of Europe and the Indian Ocean to Russia and Finland, is more profitable. According to the statistics of recent years, the following can be said. Our country has achieved growth in exports of non-oil sector products and industrial products. This shows the state's interest in purposefully increasing the export of quality non-oil, industrial products. In order to increase exports, work is being done to establish trading houses abroad, which creates new opportunities for entrepreneurs. The government is interested in bringing local products to the world market, and there is some progress in this area. Economic reforms in the country are yielding positive results in all areas of the non-oil sector. The development of this area creates conditions for solving social problems, creating new jobs and eliminating unemployment. In order to export products, trade is carried out with various countries, which leads to the inflow of foreign currency into the country. If we look at the statistics, during the 15 years of implementation of state programs, GDP - 5 times, non-oil sector - 3.5 times, industry - 3.2 times, agriculture - 2.1 times. As a result of the reforms, 1.9 million new jobs were created (1,300,000 of them permanent), the unemployment rate fell by 8%, and the poverty rate fell to 5.1% (SCRA, 2019).

3. MATERIALS AND METHODS

Statistical data encompasses 1995–2018. Data have been taken from Statistics Committee of the Republic of Azerbaijan.

Table 1: Abbreviations

WNOILI	Workers in the non-oil industry – mil person
INOILI	Investments in the non-oil industry – mln.manat
PNOILI	Production to non-oil industry – mln.manat

Table 2: indicators

	INOILI	WNOILI	PNOILI
1995	33,6	555,3	1949,2
1996	52,5	496	2539,1
1997	80	373,7	3041,4
1998	92,9	327	2806,9
1999	250,6	314,3	2630,3
2000	268,8	314,9	2901,9
2001	217,6	282,1	2891,6
2002	221,3	259,8	3095,1
2003	341,4	240,8	4083,6
2004	355,6	249,2	4656,5
2005	560,5	268	5674,1
2006	1 022,50	269,9	7274,4
2007	1 392,50	276,6	8671,5
2008	1 760,80	271,1	10222,9
2009	1 489,80	254,9	8963,1
2010	1 834,40	250,8	10570,5
2011	2 973,20	238,5	11852,2
2012	3 043,90	241,1	13433
2013	3 293,30	272,7	13853,2
2014	2 336,20	259,2	15090,1
2015	1 837,70	245,4	15060,7
2016	1 797,40	239,5	17160,8
2017	2 833,80	276,9	18512,9
2018	4 226,80	249,6	19807,4

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Table 3: Descriptive Analysis

	PNOILI	INOILI	WNOILI
Mean	8614.267	1346.546	292.8042
Median	7972.950	1207.500	268.9500
Maximum	19807.40	4226.800	555.3000
Minimum	1949.200	33.60000	238.5000
Std. Dev.	5793.131	1248.886	79.15430
Skewness	0.458946	0.655593	2.323835
Kurtosis	1.855815	2.307676	7.569312
Jarque-Bera	2.151685	2.198521	42.47944
Probability	0.341010	0.333117	0.000000
Sum	206742.4	32317.10	7027.300
Sum Sq. Dev.	7.72E+08	35873458	144104.3
Observations	24	24	24

3.1. ARDL method

Cointegrated ARDL method is as developed by Pesaran and others (Pesaran, Smith and Shin 2001). However, this method has a number of advantages comparing previous cointegration methods (Pesaran and Shin, 1999; Frimpong and Oteng–Abayie, 2006). This sample yields more reliable results when there are a few of them. Meanwhile, Ordinary Least Squares (OLS) method must be used for assessment. However, there is no endogenous problems in ARDL econometric modelling. Thus, it is possible to assess short and long-term coefficients within one model. We can calculate not differing the variables whether there are I(0) or I(1) or mixed in ARDL model (Frimpong and Oteng–Abayie, 2006; Sulaiman and Muhammad, 2010). Obviously, while I(0) and I(1) are used, series variables are known to what extent they are stationary and are defined by the single root test (ADF, PP, KPSS). ARDL assessments contain of the below-mentioned steps.

- 1) Unlimited Error Correction Model (UECM) is established. The mathematical expression of the model is as the following:

$$\Delta Y_t = a_y + \sum_{i=1}^n \beta_{yi} \Delta Y_{t-i} + \sum_{j=0}^n \gamma_{yj} \Delta X_{t-j} + \theta_{y1} Y_{t-1} + \theta_{y2} X_{t-1} + \varepsilon_{yt} \quad (1)$$

$$\Delta X_t = a_x + \sum_{i=1}^n \beta_{xi} \Delta X_{t-i} + \sum_{j=0}^n \gamma_{xi} \Delta Y_{t-j} + \theta_{x1} X_{t-1} + \theta_{x2} Y_{t-1} + \varepsilon_{xt} \quad (2)$$

In equation 1 and 2 two-variable ECM structure (one dependent and one independent) was indicated. Y and X are both independent and dependent variables interchangeably. a Indicates independent limit of the model and ε shows white noise error. θ_i is for long-term coefficient, β_i and γ_i is for short term coefficients.

- 2) Having established ECM in ARDL, the existence of cointegration relationships between variables are checked. For this, zero hypothesis is checked through Wald test (or F test) on θ_i for a long-term coefficient ($H_0: \theta = \theta_y = \theta_x = \dots 0$). The alternative hypothesis proposed is the existence of cointegration analysis among variables ($H_1: \theta \neq \theta_y \neq \theta_x \neq \dots 0$).

The existence of cointegration relations is defined by zero hypotheses. Once the existence of cointegration analysis is proved, the stability of this relationship is checked.

If y_{t-1} coefficient is θ statistically important and negative, then cointegration relation is stable. It means that deviations from unbalanced situation and long-term relations are temporary and it is getting corrected towards long term relations. θ is expected to be at -1 and 0 level.

- 3) If the existence of the cointegration relations is proved, we can assess long term period coefficients in the next step. That's why, we can apply Bewley (Bewley, 1979) transformation by equalizing long-term coefficients to 0 in equation 1 ($a_x + \theta y_{t-1} + \theta_{yx} x_{t-1} = 0$), and we can solve it in terms of y :

$$y_t = -\frac{a_x}{\theta} - \frac{\theta_{yx}}{\theta} x_t + \varepsilon_t \quad (3)$$

- 4) In this phase, long-term white noise error (ECT_t) is calculated and inserted into the equation instead of long-term coefficients ($\theta y_{t-1} + \theta_{yx} x_{t-1}$). Subsequently, assessment is done and the stability of cointegration relations is checked again. The mathematical function of evaluating model is as the following:

$$\Delta Y_t = a_y + \sum_{i=1}^n \beta_{yi} \Delta Y_{t-i} + \sum_{j=0}^n \gamma_{yi} \Delta X_{t-j} + \mu ECT_{t-1} + \varepsilon_{yt} \quad (4)$$

$$ECT_{t-1} = -\frac{a_x}{\theta} - \frac{\theta_{yx}}{\theta} x_t \quad (5)$$

$$\Delta X_t = a_x + \sum_{i=1}^n \beta_{xi} \Delta X_{t-i} + \sum_{j=0}^n \gamma_{xi} \Delta Y_{t-j} + \mu ECT_{t-1} + \varepsilon_{xt} \quad (6)$$

$$ECT_{t-1} = -\frac{a_y}{\theta} - \frac{\theta_{yx}}{\theta} y_t \quad (7)$$

So, y_t or x_t is true value of dependent variable. $(-\frac{a_x}{\theta} - \frac{\theta_{yx}}{\theta} x_t)$ is calculated value according to long-term equation (equation 1 and 2). In equation 4 and 6, if μ is between -1 and 0 and statistically important, then the cointegration relations are constant. As mentioned above, deviation for short term period is inclined to be corrected towards long term relation. In case any serious calculation error is not noted, μ is getting close to θ coefficient in equation 1 and 2, sometimes gets equal value. So, the last phase is also considered as monitoring. At the first phase, regression analysis for non-original stationary but the same-level differentiated stationary (I(1)) variables is assessed. So, for the case of two variables:

$$y_t = \alpha_0 + \alpha_1 x_t + \varepsilon_t \quad (8)$$

Thus, α_0 and α_1 – regression coefficients, y and x – dependent and independent variables, ε – white noise error, t – time. Having assessed regression analysis, the next phase is to check whether ε is white noise error. If ε_t is stationary, there will be cointegration relations among these variables. Accordingly, it will be considered as long-term equations. At the last phase, ECM is assessed by using delayed white noise error (ε_{t-1}) and converting cause-effect relations into stationary one.

$$\Delta Y_t = a_y + \sum_{i=1}^n \beta_{yi} \Delta Y_{t-i} + \sum_{j=0}^n \gamma_{yi} \Delta X_{t-j} + \mu ECT_{t-1} + \varepsilon_{yt} \quad (9)$$

Thus, a_y , β_{yi} , γ_{yi} and μ coefficients are mentioned. n is a optimum delayed measure and ε is a white noise error of the model. In order to identify optimum delayed measure, first we have to assess Vector Autoregressive (VAR) model among variables. Then, the equation 9 is assessed considering optimum delayed measure through the Least Square Method (LSM). Engle and Granger (Engle & Granger, 1987) shows that if there is the existence of cointegration among variables, ECM assessment is a must. In case of having constant cointegration relations, Error Correction Term – ECT, thus ECT_{t-1} coefficient μ is negative and statistically important. Usually, this changes -1 and 0 . If it is greater than -1 , this correction process is going to be high. Using through equation 9, we can check cause–effect relations. Granger cause–effect relation for a short term is assessed by using F–statistics and X square statistics value. This time, the statistical importance of all delay differential equation (all ΔX_{t-j}) for each variable (zero hypothesis: $H_0: \gamma_{y1} = \gamma_{y2} = \dots = \gamma_{yi} = 0, i = 1 \dots n$) is checked. Having zero hypothesis rejected, we can see that x has influence on y for a short term. For a long term, Granger use t test to identify cause–effect relations and check the statistically importance of ECT_{t-1} coefficient. Therefore, zero hypothesis ($H_0: \mu = 0$) is needed to be tested. If zero hypothesis is rejected at the end, it will reveal that there is a long–term balance impact on it and it will normalize after a while.

3.2. Unit Root tests

It is essential to check the stationary of variables through Unit Root before the assessment of regression equations. Because, keeping stability between variables is important while assessing the dependency between two or more variables by using regression analysis. However, probability distribution for every time series in order to be stationary must be identical (Fakhri et al., 2019). Nevertheless, stationary of variables is not always desirable. For a long term or cointegration relation and assessment, the variables must be non–stationary in most methods. It is also required that the first difference should be stationary or $I(1)$. It must be noted that if any time series variable is stationary with real values, then it can be considered $I(0)$. If a variable is not $I(0)$, then its first difference is calculated and its stationary is checked. In this case, if the variable is stationary, then it is considered $I(1)$. A variable sometimes changes because of probability distribution. In that case, the variable becomes trend–stationary. One can refer to modern econometric books regarding the stationary of changes and its effect in time series analysis (Hill et al., 2001; Heij et al., 2005; Asteriou and Hall, 2007). We can analyze them by applying three different unit root tests in order to get more reliable stationary test results: Augmented Dickey Fuller, Phillips–Perron (PP) and Kwiatkowski–Phillips–Schmidt–Shin (KPSS). The evaluation of these tests is done through E–Views 9. It must be noted that “unit root problem” or “variable is non–stationary” null hypothesis in unit root tests is checked. In KPSS test, “variable is stationary” hypothesis is taken and considered as stationary null hypothesis. If the variable is non–stationary without trend, and becomes stationary if trend is included, then the checked variable is considered “trend–stationary”.

3.3. The Long Run Model

$$Y_t = \alpha + \sum_{i=1}^{n-1} \varphi_i \Delta Y_{t-i} + \sum_{i=0}^{m-1} \rho_i \Delta X_{t-i} + \mu_i \quad (11)$$

3.4. Error Correction (short run) Model

$$\Delta Y_t = \alpha + \sum_{i=1}^{n-1} \varphi_i \Delta Y_{t-i} + \sum_{i=0}^{m-1} \rho_i \Delta X_{t-i} + \sigma ECT_{t-1} + \omega_i \quad (12)$$

3.5. Diagnostic Test

This article will use Breusch Godfrey LM test (null hypothesis: “no serial correlation”) in order to check subsequent correlation problem and use both Breusch–Pagan–Godfrey (null hypothesis: “no heteroskedasticity problem”) and Autoregressive Conditional Heteroscedasticity test (ARCH) for obtaining more reliable outcomes for heteroskedasticity problem. During ARCH test, null hypothesis “no heteroskedasticity problem” theory is checked. Nonetheless, Ramsey RESET Test and Normality Test (Jarque–Bera) JB was checked. Null hypothesis rejection is acceptable for every five cases. Statistical data encompasses 1995–2018. Data have been taken from Statistics Committee of the Republic of Azerbaijan.

4. RESULTS

4.1. Unit Root Test

Let's have a look at stationary of variables before identifying methods for evaluation. All stationary test results of variables for evaluation of both problems were given in the table. Each variable has been checked through three different unit root tests. The table shows that the majority of variables are I(1). Thus, according to ADF test, in With Intercept only case, LWNOILI are stationary. (I(0)). The rest of the variables (LINOILI and LPNOILI) are stationary I(1). In With Intercept & Trend case LWNOIL I(0) The rest of the variables (LINOILI and LPNOILI) are stationary I(1). In No Intercept & No Trend case, LWNOILI I(0) is stationary again. The rest of the variables (LINOILI and LPNOILI) are stationary I(1) (Table 4). In PP Unit Root Test, in With Intercept only case, LWNOILI are stationary. (I(0)). The rest of the variables (LINOILI and LPNOILI) are stationary I(1). In With Intercept & Trend case LWNOIL I(0) The rest of the variables (LINOILI and LPNOILI) are stationary I(1). In No Intercept & No Trend case, LWNOILI I(0) is stationary again. The rest of the variables (LINOILI and LPNOILI) are stationary I(1) (Table 4). According to Kwiatkowski–Phillips–Schmidt–Shin test statistics most of the variables are I(0). in With Intercept only case, LWNOILI, LINOILI and LPNOILI are stationary. (I(0)). In With Intercept & Trend case LWNOIL and LINOILI I(0). (Table 4).

Table following on the next page

Table 4: Unit Root Test (ADF, PP, KPSS)

Model	Variable	ADF-Stat	PP	KPSS	Stationarity	Integrir I(0,1,2)
At Level Form						
With Intercept only	LINOILI	-1.640147	-1.998115	0.679462**	S	I(0)
	LWNOILI	-4.634627***	-14.59209***	0.502466**	S	I(0)
	LPNOILI	-0.788296	-0.788296	0.694691**	S	I(0)
With Intercept & Trend	LINOILI	-2.182736	-1.926046	0.154117**	S	I(0)
	LWNOILI	-3.366801*	-7.060978***	0.186968**	S	I(0)
	LPNOILI	-1.604096	-1.792440	0.088466	N/S	I(1)
No Intercept & No Trend	LINOILI	2.572205	2.274996		N/S	I(1)
	LWNOILI	-2.009998**	-1.781903*		S	I(0)
	LPNOILI	4.335247	4.335247		N/S	I(1)
At First differencing						
With Intercept only	ΔLINOILI	-3.696920**	-3.668081**	0.263172	S	I(0)
	ΔLWNOILI	-3.294716**	-3.134355**	0.462499*	S	I(0)
	ΔLPNOILI	-4.119782***	-4.115303***	0.109111	S	I(0)
With Intercept & Trend	ΔLINOILI	-3.745145**	-3.621534*	0.067013	S	I(0)
	ΔLWNOILI	-3.738694**	-3.664450	0.128900*	S	I(0)
	ΔLPNOILI	-3.991359**	-3.991359**	0.088974	S	I(0)
No Intercept & No Trend	ΔLINOILI	-2.925430***	-2.893654***		S	I(0)
	ΔLWNOILI	-3.095366***	-2.914136***		S	I(0)
	ΔLPNOILI	-2.125003*	-2.849675***		S	I(0)

Note: ADF denotes the Augmented Dickey–Fuller single root system respectively. The maximum lag order is 2. The optimum lag order is selected based on the Schwarz criterion automatically. PP Phillips–Perron is single root system. The optimum lag order in PP test is selected based on the Newey–West criterion automatically. The critical values are taken from MacKinnon (1996).

KPSS denotes Kwiatkowski–Phillips–Schmidt–Shin (Kwiatkowski *et al.*, 1992) single root system. The optimum lag order in KPSS test is selected based on the Newey–West criterion automatically.

***, ** and * indicate rejection of the null hypotheses at the 1%, 5% and 10% significance levels respectively.

The critical values are taken from Kwiatkowski–Phillips–Schmidt–Shin. (1991) Assessment period: 1995–2017.

Legend: S–Stationarity; N/S–No Stationarity

All these results are available for next assessment and methods. Reliant on the enumerated test results, variable are accepted as I(1). It means that all above–mentioned methods are applicable. As mentioned above, during application process of ARDL cointegration method, one of the important issues while establishing a model is to identify optimum lag length. At this time, the most important factor is to eliminate the subsequent correlation problem in selected optimum model and keep the minimum of SBC information criteria value.

4.2. VAR Lag Order Selection Criteria

In order to determine optimal lag for ARDL model, VAR Lag Order Selection Criteria was employed and we got the below–mentioned results (Table 5).

Table 5: VAR Lag Order Selection Criteria

	Lag	LogL	LR	FPE	AIC	SC	HQ
LPNOILI	0	-18.04160	NA	0.001251	1.829705	1.977813	1.866953
	1	52.57184	116.6657*	5.96e-06*	-3.527986*	-2.935554*	-3.378991*

Note:

- * Indicates lag order selected by the criterion
- LR: Sequential modified LR test statistic (each test at 5% level)
- FPE: Final Prediction Error
- AIC: Akaike Information Criterion
- SC: Schwarz Information Criterion
- HQ: Hannan–Quinn Information Criterion

According to Tabel 5, optimum lag period for all models is 1 (lag=1) based on 2 accepted information criteria (AIC and SC).

Table following on the next page

Table 6: Results from bound tests

			Significance								
			I0 Bound				I1 Bound				
Dependant variable	AIC lags	F-statistic	10%	5%	2.5%	1%	10%	5%	2.5%	1%	
LPNOILI	1	0.202372	3.17	3.79	4.41	5.15	4.14	4.85	5.52	6.36	No Cointegration

Table 6. – reveals the cointegration relations among variables. Thus, there are the no-cointegration relation production non-oil industry, workers in the non-oil industry and investments in the non-oil industry. In other words, there is a no long term relations. Thus, based on the Narayan (2005) table, F-statistics is below 5% minimum indicator.

4.3. ARDL– Results for Long Run Model

Table 7: Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LPNOILI				
INOILI	0.606208	0.158408	3.826870	0.0011
WNOILI	1.255997	1.298309	0.967410	0.3455
C	-1.698838	7.993377	-0.212531	0.8340
Cointeq = LPNOILI - (0.6062* INOILI + 1.2560* WNOILI -1.6988)				

The outcomes were explained in Table 3. Thus, in case, grows investments in the non-oil industry (PNOILI) 1%, the production to non-oil industry grows (PNOILI) 60.6%. Grows workers in the non-oil industry (WNOILI)1%, the Production to non-oil industry grows (PNOILI) 125.6%

4.4. ARDL model (ARDL– Results Error Correction (short run) Model)

Table: 8 Coefficients

	ARDL	ECM
Variable	$\Delta LPNOILI$	$\Delta LPNOILI$
$\Delta LPNOILI_{(t-1)}$	0.138014	0.172561
$\Delta LINOILI_{(t-1)}$	0.142078	0.128430
$\Delta LWNOILI_{(t-1)}$	0.099550	0.148431
$LINOILI_{(t-1)}$	-0.066613	
$LWNOILI_{(t-1)}$	-0.419824	
$LPNOILI_{(t-1)}$	0.086119	
$ect_{(t-1)}$		-0.133452
Constant	2.086818	0.054006

Note: ***, ** and * indicate rejection of the null hypotheses at the 1%, 5% and 10% significance levels respectively

Table 9: Unit Root Test ($LPNOILI_{ECT}$)

	ADF-Stat	
$LPNOILI_{ECT}$	At Level Form	
With Intercept only	- 2.299465	No Stationarity
With Intercept & Trend	-2.433719	No Stationarity
No Intercept & No Trend	-2.354717**	Stationarity

Note: ADF denotes the Augmented Dickey–Fuller single root system respectively. The maximum lag order is 2. The optimum lag order is selected based on the Schwarz criterion automatically; ***, ** and * indicate rejection of the null hypotheses at the 1%, 5% and 10% significance levels respectively. The critical values are taken from MacKinnon (1996). Legend: S–Stationarity; N/S–No Stationarity

ARDL model coefficients are 90-95% statistically no significant (Table 8). The results of short-term and ECM model have been illustrated (Table 8). On the other hand, etc. coefficient is negative in all cases. Although ECM coefficient factors are not important, according to Pesaran and others (2001) they pave the way for having the cointegration relations because of negativity.

4.5. Diagnostic Test

Table 10: Diagnostic Test Results

Diagnostic Test Results (LM Version)

		Heteroskedasticity Test: Breusch- Pagan-Godfrey	Normality Test (Jarque–Bera) JB	Heteroskedasticity Test: ARCH χ^2	Breusch–Godfrey Serial Correlation LM Test: χ^2
LPNOILI	Statistic	2.864041	1.401670	0.241190	1.384334
	Sig	0.4131	0.496171	0.6233	0.5005

Table 11: Diagnostic Test Results

Diagnostic Test Results (F Version)

		Heteroskedasticity Test: Breusch- Pagan-Godfrey	Normality Test (Jarque–Bera) JB	Heteroskedasticity Test: ARCH χ^2	Breusch–Godfrey Serial Correlation LM Test: χ^2
LPNOILI	Statistic	0.900822	N/A	0.221694	0.544366
	Sig	0.4591	N/A	0.6428	0.5900

Legend: N/A–Not Applicable

Regression equations are adequate. It also passes all the diagnostic tests against serial correlation (Durbin Watson test and Breusch–Godfrey test), heteroscedasticity (White Heteroskedasticity Test), and normality of errors (Jarque–Bera test). The Ramsey RESET test also suggests that the model is well specified. All the results of these tests are shown in Table 10 and Table 11. The stability of the long-run coefficient is tested by the short-run dynamics. Once the ECM model given by equations (Table 8) has been estimated, the cumulative sum of recursive residuals (CUSUM) and the CUSUM of square (CUSUMSQ) tests are applied to assess the parameter stability (Pesaran and Pesaran, 1997). Figure 2 plot the results for CUSUM and CUSUMSQ tests. The results indicate the absence of any stability of the coefficients because the plot of the CUSUM and CUSUMSQ statistic no fall inside the critical bands of the 5% confidence interval of parameter stability.

Figure 1: Dynamics of indicators

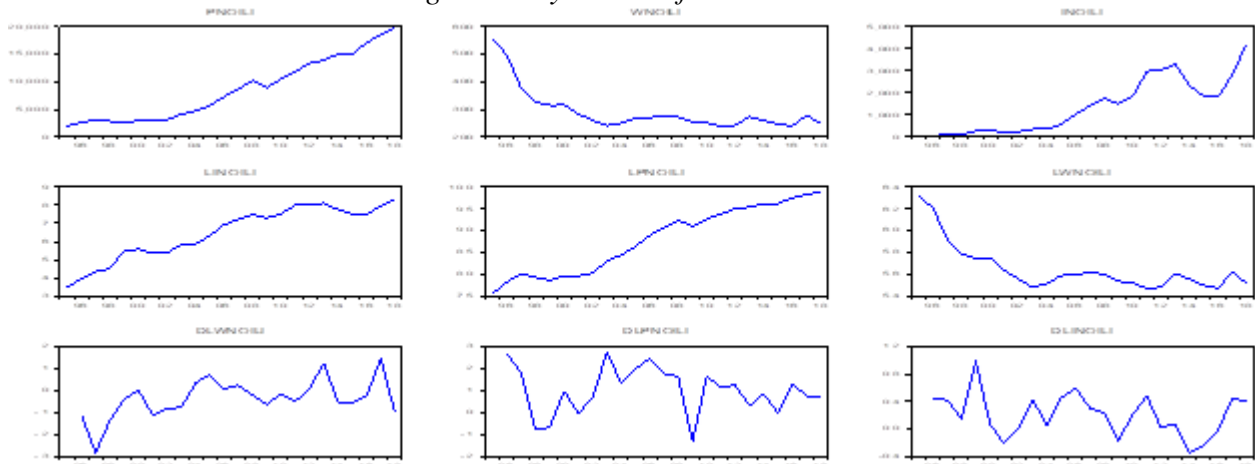
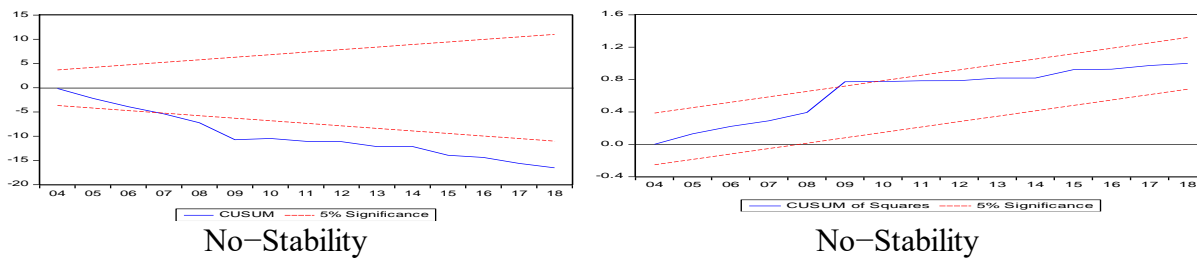


Figure following on the next page

Figure 2: Plot of Cumulative Sum of Recursive Residuals

5. DISCUSSION

As a result of used test outcomes and models, we can note the followings: According to Single Root Test results, only small part of used variable are $I(0)$, however, most of them are $I(1)$. We can mention this as a cointegration relations among variables. There is a weak cointegration relation among variables. There is slightly weak relations among the significant degrees of ARDL model coefficients and ARDL - Results Error Correction (short run) model coefficients. Obviously, all requirements for models are satisfied. So, long run coefficient which was included to the model as a constant variable is negative and statistically no significant in model. Besides, ECT diagnostic test in all models provided a positive outcome. In other words, there is no correlation and heteroscedasticity problem in model. Standard regression error is small. ECT has been distributed equally. There is no specification problem in models. Because, the rejection of null hypothesis is high.

6. CONCLUSIONS

The issue of eliminating the dependence of the Azerbaijani economy on oil is still the basis of the government's economic policy. Over the past fifteen years, three state programs on socio-economic development of the regions aimed at ensuring the development of the non-oil sector in the country have been successfully implemented. In recent years, the share of the non-oil sector in GDP has grown from 50 percent to 80 percent. The government's policy of increasing the share of the non-oil sector in GDP by realizing the existing non-oil industrial potential in the country is the right step to eliminate the economy's dependence on oil. It is unacceptable that many projects have been signed in Azerbaijan for the development of the non-oil sector, which can only be attributed to the fall in oil prices on the world market. Each country must prioritize the development of the non-oil sector at a time when it receives large revenues from the oil sector and oil prices are higher than at present: Azerbaijan has also focused on the development of the non-oil sector at a time of high oil revenues. The reality is that the development of the non-oil sector is a matter of time and precision. Due to falling oil prices, it is wrong to expect hasty results from the non-oil sector. As I mentioned earlier, this takes some time. The state has always considered the development of the non-oil sector a priority. Today, work is underway in this direction. We see the results step by step and we will be able to see them in the future. If we look at the current state budget revenues, it is clear that revenues from the non-oil sector are gradually exceeding revenues from the oil sector. More in this area, it takes time to achieve the desired result. In reality, it is impossible to pay social expenses without a transfer from the state oil fund to the state budget. The strategic goal of the country is that in the near future it will be possible to cover a number of such expenses from the state budget through revenues from the non-oil sector. The development of the non-oil sector does not consist in the creation of plants, factories, production facilities where it came from. You can create them at any time. But the main question is what to produce there. Let's see if the product produced there will be able to compete with its foreign counterpart within the country and attract buyers. It is not a condition that we can export this product to foreign markets. From this point of view, the main thing is not that we produce a wide range of non-oil products.

The development of the non-oil sector does not consist in the production of a wide range of products. The main thing is that we can produce a quality product that meets the needs of the buyer in a small range, but at a high level of competition in the domestic and foreign markets. This should be the main goal in the development of the non-oil sector.

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SOCIAL-ECONOMIC WELFARE AND HUMAN CAPITAL

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ABSTRACT

Economic development and prosperity of every country is complemented with social policy. The population welfare, the main indicator of social economic development, is evaluated by how well the financial and social needs of the population, the society's main capital, are met. In modern societies, the speed, quantitative and qualitative growth rate of economy is no longer as a goal in itself, but is a necessary tool for enriching and improving people's lives and their well-being. The main agenda of United Nations Sustainable Development Summit held in New York in 2015 was to formulate goals to improve the well-being of all world population and ensure the sustainable future for next generations. Based on these principles, the Azerbaijani government has developed its "Strategic Road Map" document (Strategic Road Map on National Economy and Key Sectors of the Economy of Azerbaijan) to develop the national economy. The document lists the following long-term goals for development of social economic welfare of national economy: protection of macroeconomic stability, formation of competitive innovation-based economy, development of non-oil sector and business environment as well as increase of income of population and development of human capital. Additionally, hazardous chemical and waste recycling and disposal, and protection of ecological balance should also contribute to the improvement of life quality. The current economic crisis following Covid-19 pandemic has resulted in sharpest decline of oil prices in world markets. The government's anti-crisis program's goal is to remedy the losses in macroeconomic policy and protect the well-being of the population to mitigate the impacts of oil price changes.

Keywords: *Economic development, Human capital, Macroeconomic stability, Population welfare, Social policy*

1. INTRODUCTION

The Article 25 of International Labor Convention stipulates that every person has the right to a standard of living, including food, clothing, housing, medical care and social services necessary to protect the health and well-being of oneself and his/her family. People are both the beneficiaries and the drivers of human development, as individuals and in groups. At all times, they acted as participants and creative subjects of economic and political life. World experience has shown that the level of development and progress of any country is determined by the level of development of education and science of the people who mobilize and organize the use of these resources, rather than the natural and material resources they have.

2. THE RELATIONSHIP BETWEEN THE CONCEPTS OF SOCIO-ECONOMIC WELFARE AND HUMAN CAPITAL

The goal of development in modern societies is not only high income of population, but also the expansion the opportunities for them in education, health, public decision-making, entrepreneurship, creative life and other areas. The speed, quantitative and qualitative growth rate of economy is no longer seen as a goal in itself, but as a necessary tool for enriching people's lives, improving their well-being and improving their quality of life. The material goods such as gross domestic product, national resources, income per capita and others are not satisfactory indicators to contribute to high life standards anymore either. The income inequality, pollution of the environment, atmosphere, water and air have disproved the idea that GDP is a key

indicator of economic prosperity. Therefore, as people develop, their social well-being depends not only on economic indicators, but also on their role in the development of society, their political and economic activities, and their comfortable and safe lifestyle. Social welfare creates ample opportunities for people to realize their human potential by having a decent level of income, meeting their physiological needs as well as their social and spiritual needs. Social welfare, which is a prerequisite for high quality of life, is based on the quality of life index in international reports and indicators such as health, literacy rate, family life, material well-being, social life, political stability and security, political freedom, gender equality and so on. People's income and savings, the share of non-food products in consumer spending, the level of access to health services and other factors of life standards characterize the level of social welfare. In modern societies, the main goals of welfare states are to ensure minimum living standards, fair distribution of income, ensuring the sustainability of products and services, eliminating economic instability, maximum freedom of choice as well as meeting people's housing, health, education, health and other public needs. The economic development and growth of each country contributes to economic prosperity which in itself secures and improves social prosperity. Economic development and social prosperity are equally connected and interdependent. While sustainable economic development is the material support of social problems, people with a good standard of living are a tool for the sustainable and rapid development of their country's economy. The improvement of social prosperity of people (high quality nutrition, education and health standards) contributes to their active participation in economy and thus to the development of economic development. Therefore, each state has to ensure the sustainability of its economy in order to implement its social policy in accordance with the existing socio-economic realities. The urgency of the economy to address social issues and human development in general, is particularly noticeable against the background of environmental problems, the escalation of economic, political and territorial conflicts between countries and their negative impact on people's lives. People want to live a healthy and long life, acquire knowledge, acquire the professions and specialties they desire, raise their children healthy and prosperous, and ensure the safety of their families. Additionally, the use of new technologies, the deepening and intensification of human-nature relations and the need to improve the social security system require the solution of human problems in economic terms. For example, the consumption level of each country varies depending on its economic development. As real income of people increases, so do their purchasing power and the consumption level of material goods and services which structure improves significantly, or vice versa. In addition, the comparison of real income of the population in the current and comparable base years allows us to calculate the consumer price index, which characterizes the protection of living standards. The Social Health Index, one of the most widely accepted indicators of social welfare in the world today, includes 16 socio-economic indicators that cannot be measured in terms of GDP. The Sustainable Development Index, another indicator of social life which is closely related to the environment, supports that GDP should not be formed at the expense of the environment. The concepts of social welfare, economic development and human capital are complementary to and dependent on each other. Human capital is formed by the people; their health, knowledge, abilities and experience act as a certain resource and reflect the costs of education, health, vocational training, etc. High quality human capital is the most valuable asset of any society. Additionally, human capital is the realization of human potential, i.e., their profession and education, skills and experience, level of intelligence, creative activity, etc. People participate as potential resource in reproduction, as productive force in economy, and as consumers in market economy. Simultaneously, the level of education and health protection of people play an important role in increasing labor activity, prolonging their lives and improving their welfare. The more advanced the health care system is, the higher is the natural population growth, working capacity and labor activity, which

contributes to additional labor resources and human capital. President Aliyev says: "People's health, safety, comfort and well-being are paramount to us." Improving the quality of human capital and the effective use of its intellectual potential has a significant impact on the growth of labor productivity and competitiveness of the economy. In other words, higher quality human capital becomes the driving force of economic growth by creating added value in the economy. As President I. Aliyev stated: "We are rich in resources. But our greatest resource is people's knowledge and education. We must use every opportunity to turn financial capital into human capital." Investments in human capital return in the form of the country's development. A strong, highly skilled and innovative workforce serves the development of financial needs, benefiting society as a whole. This leads to the increased growth rate of economy with an increase in labor productivity, and as a result material well-being and purchasing power of population increases thus contributing to the development of human capital. Socially prosperous, well-educated and healthy population is an indispensable capital for the development of any country. Developed countries like the United States, Japan, South Korea have generated more income from human capital (more than 80% of their national wealth) than from material resources.

3. SOCIO-ECONOMIC DEVELOPMENT DIRECTIONS OF THE AZERBAIJANI ECONOMY

The economic development and progress of each country is complemented by its social policy. Social policy has a complex structure and secures the effective employment of the population, access to advanced medical services, right to quality life of the retired, disabled, large families and others. The main goal of social policy is the comprehensive development of human, the methodology and means of organizing effective forms of meeting his/her needs. From this perspective, spending all additional revenues in social sphere is a manifestation of the social orientation of the economy. The main goal of the socio-economic development strategy of the independent Azerbaijani state is to secure national interests and achieve sustainable economic development. In this context, the main direction in the economic sphere has been to increase the income of population by implementing structural changes in the economy and its diversification, to expand export opportunities by increasing the competitiveness of the economy, stimulate the private sector and business environment, develop small and medium entrepreneurship and investment reforms for the balanced development of the non-oil sector and regions. This contributed to an increased rate of economic development and labor productivity, and as a result, to the improved financial well-being and increased purchasing power of population, and ultimately, to the development of human capital. The reforms aimed at creation of clean environment, eradication of poverty, improvement of population's welfare and quality of life, priorities also outlined in the "Transformation of World: Journal on Sustainable Development by 2030", have been the result of economic sustainability in Azerbaijan. Although the economy has more than tripled since independence in 1995, Azerbaijan had not been able to avoid the negative effects of external shocks such as the drop of oil prices in world market. The main agenda of United Nations Sustainable Development Summit held in New York in 2015 was to formulate the goals to improve the well-being of all world population and ensure the sustainable future for next generations. Based on these principles, the Azerbaijani government has developed its "Strategic Road Map" document and listed development of social economic welfare of national economy and realization and development of human capital as its main priorities. After the short-term recession of 2016, the economy of Azerbaijan started to stabilize and entered the recovery phase in 2017. Since 2018, the growth has accelerated through diversification of economy and implementation of sustainable development policies, which strengthened the country's position in the world economy. As a result, in 2019, the economy as a whole grew by 2.2%, including industrial production by 1.5%, non-industrial sector by 3.5%,

and non-industrial production by 14.4%. Investments in the amount of 15.5 billion dollars were made in all sectors of the economy. The center of the economic reforms in Azerbaijan had been the human factor and improvement of social welfare, and 2019 was announced as the year of social welfare. Last year, 3.9 billion manat was spent to improve the welfare of 4.2 million people, as well as 1.6 billion manat was allocated to increase salaries, pensions and social benefits of 3 million people. Doubling the minimum wage in 2019 (from 130 to 250 man) has improved the financial situation of 950,000 people. Additionally, the 72% increase in the minimum pension amount covered 650,000 people. The government helped to remedy the loans of 800,000 people. As a result of these measures, taking into account the priority of purchasing power, Azerbaijan has ranked the second among the CIS countries in terms of increase in the minimum wage, average monthly salary and pensions. The UN's Human Development Index, which reflects the level of well-being of the world's population, is assessed not only by income, but also by other socio-economic indicators, such as population's literacy rate and creativity, longevity and health, access to jobs and training, cultural development, environmental protection, and others. With a coefficient of 0.757 on Human Development Index, Azerbaijan, is included in the list of countries with high human development. According to this index, the average life expectancy in the country is 72.1 years, when the average length of education is 12.7 years, of which 10.7 years are elementary, middle and high school years. To achieve a decent standard of living where the gross national income per capita (\$ 15.6 thousand) is based on the purchasing power which reflects the level of income of citizens, sustainability of economic development should be secured. The life expectancy index to some extent reflects the state of the health system and social protection in the country, and in this area, the main goal of Azerbaijani state is to develop the policies to ensure the healthy and long life for its citizens to be in the same level to those of the developed countries. The reforms in the field of education are aimed at ensuring the sustainability of economic growth and creating conditions for the development of human capital by improving its quality and formation of a highly qualified and innovative workforce. To secure higher economic growth in 2020 and beyond, it has been planned to increase the real GDP by 3% - the oil sector by 1.6%, the non-oil sector by 3.8%, agriculture by 4.8% and service sector by 3.6%. Economic growth should be achieved by increasing the share, role and importance of the non-oil sector and the private sector in comparison with oil sector and public sector, respectively. Of 18.3 billion manat of planned investments in fixed assets, 12.2 billion manat would come from domestic investment while 6.1 billion manat would be external investments. Of this amount, 10.6 billion manat was planned to be directed to the non-oil sector with oil sector getting 7.7 billion manat. More than 60% of investments was expected to be implemented by the private sector. To improve social welfare and develop human capital, it has also been planned to increase the number of high quality jobs, reduce income gaps in the regions, increase the financial well-being of the middle class, bring the minimum wage to the level of the average monthly wage, ensure food security, improve health and education services, expand and improve the service sector areas, utilities and housing conditions. To solve the above-mentioned problems effectively, the main task is to develop the non-oil sector by eliminating the economy's dependence on oil, deepen economic diversification and specialize in the production of high-quality and competitive products, increase access to foreign markets and join the global value chain. Extensive and effective social protection measures to ensure a fair redistribution of income in the social sphere lead to a qualitative increase in living standards and the development of human capital. Also, in the post-oil period the transition from social assistance to self-employment and the further improvement of social infrastructure has created new prospects for the development of human capital. The new development strategy of the economy is aimed to utilize economic benefits in development of human factor and the social market model has been adapted to the requirements of the new era.

As a result, in 2020 Azerbaijan ranked 44th out of 180 countries on the “Economic Freedom Index Report” and 35th out of 137 countries in the World Economic Forum's “Global Competitiveness Report”.

4. THE IMPACT OF THE PANDEMIC CRISIS ON THE SOCIO-ECONOMIC DEVELOPMENT OF AZERBAIJAN

The global political and economic processes, trade disputes, and the worst crisis of the 21st century, the Covid-19 pandemic, and its bitter consequences have forced all mankind, all segments of society and resources to fight this crisis. The threat of coronavirus, along with health concerns, has been accompanied by restrictions on the movement of products and services, and the collapse of global commodity markets and production. In addition, sharp fluctuations in energy and stock markets around the world, as well as the rapid decline in oil prices have collapsed the economies of the countries. The most influential international organizations have confirmed that this is worst crisis in the world history since 2008. Per estimations of experts, the economic downturn in 2020 is projected at 47% in the world - 9.7% in the Eurozone, 2.7% in China and 8.4% in the United States. According to the International Monetary Fund, the global economy will shrink by 3% in 2020, the economies of oil-exporting countries in the Middle East and Central Asia shrinking by 3.9%. The Azerbaijan's economy is expected to shrink by 2.2%. The return to the pre-crisis situation is projected to happen in the second quarter of 2022, and the IMF has provided \$ 1 trillion in loans for these measures. It is obvious the response measures in the countries depend more on their economic situation rather than global measures, and on economic, political and financial stability rather than statehood traditions. The Anti-Crisis Program of March 19, 2020, includes 20 measures in 4 main sectors to reduce the negative impact of pandemic as well as fluctuations in the energy and stock markets on the country's economy. The action plans had been implemented in three areas - support for economic growth and entrepreneurship, support for employment and social welfare, and protection of macroeconomic and financial stability. The macroeconomic policy designed to reduce the impact of the crisis is primarily aimed at protecting human health, ensuring the social welfare and economic development of the population, and so on. The Azerbaijani government has created the conditions to ensure a safe lifestyle for its citizens by taking the main risk and maintaining macroeconomic stability and economic activity to prevent the crisis from deepening. "Our priority is people's health, their lives and social protection. We must have enough resources for this, because the elimination of the complications caused by this disease requires large financial funds. By supporting producers and consumers in macroeconomic policy, we can recover from economic losses by minimizing losses as much as possible. The health and human life cannot be restored, so for us the key is people and their lives." To eliminate the consequences of social and economic problems, the impacts on the population welfare and the country's economy were assessed and approached through the prism of a new socio-economic lifestyle. The priority was given to strengthening social protection measures by establishing close relations with the World Health Organization in order to prevent the deepening of the crisis, ie to minimize human losses, to expand the health care system infrastructure by not limiting their welfare and traditional way of life. The measures such as prevention of unjustified dismissals and redundancies in the public and private sectors, maintenance of the salaries of employees on leave, temporary employment for the unemployed through the creation of paid public jobs, lump sum payments to those registered as unemployed, registration of the unemployed, expansion of self-employment as well as of the scope of unemployment insurance payments, and others have been directed to secure employment and social welfare. The efforts have been made to secure the sustainability of social welfare by addressing issues for socially vulnerable families - providing financial support for students to pay for education, implementing mortgage and credit mechanisms, expansion of targeted social

assistance and self-employment, support for utilities, passenger transportation, etc. In order to overcome the crisis, 10.4 billion manat was allocated from the state budget for the implementation of social projects such as targeted social assistance, paid public works, self-employment, rental housing, compulsory health insurance, mortgage and so on. This amount is 2.6 billion manat, or 33.5% more than last year. Increasing the scope of paid public works, self-employment and targeted social assistance projects as a whole ensures the realization and restoration of people's health, skills and abilities, which in turn promotes the development of human capital. Along with the social problems caused by the pandemic, the Azerbaijani state has also faced economic issues related to the fluctuations in the world energy and stock markets, which limited the aggregate demand and supply. The decline in aggregate and expected revenues and the limitation of aggregate demand have significantly narrowed the domestic market and created investment constraints. Therefore, the measures taken to eliminate the negative effects of both crises create conditions for the provision of income of the population, which stimulates aggregate demand, increases aggregate supply and, eventually, the recovery and expansion of the economy. Meanwhile, support programs and measures have been implemented around the world to address the consequences of the Covid-19 pandemic, currently threatening the humanity. For example. In Turkey and Georgia, whose main sources of income are tourism, the priority has been to support the air transport system, which has suffered the most, and for Kazakhstan, it has become more necessary to take measures to expand the health care infrastructure along with business and employment. In Azerbaijan, it became imperative to open new medical institutions and significantly increase the salaries of health workers by investing in the healthcare system infrastructure. In general, the work has been done to restore the activities of all affected economic sectors and increase their economic activity. It should also be noted that in order to eliminate the consequences of the pandemic crisis and its negative impacts on macroeconomic stability, employment problems and entrepreneurship, the Republic of Azerbaijan has utilized only the internal resources. One billion manat had been allocated from the state budget. Fighting the crisis with internal resources and without resorting to external debts and devaluation has had a positive impact on the process of economic and social recovery in the post-pandemic period. Despite the fact that the IMF, WB and other organizations provide assistance to countries in need to overcome the crisis, Azerbaijan made a voluntary financial contribution of five million dollars to the World Health Organization. The 2.5 billion manat financial aid, allocated by Azerbaijani government to anti-crisis program constitutes 1.2% of GDP and 3.7% of the state budget, which is higher than those in the CIS countries. For example. This amount was 2 billion lari (2% of GDP) in Georgia, 300 billion rubles, (0.5% of GDP) in Russian, 1 billion dollars (1.5% of GDP) in Uzbekistan, 100 billion USD (2% of GDP) in Turkey – aid package had been allocated. The goal of the Support Program is to maintain the short-term sustainability of the economy, achieve short-term recovery, and ensure sustainable development in the post-coronavirus era by providing financial support to pandemic-affected areas to offset losses. In order to restore business activity, it was expedient to implement a gradual increase in economic activity. The state financial assistance was prioritized to pay a significant part of the salaries of individuals and small entrepreneurs affected by the pandemic, to secure their sustainability. The protection of entrepreneurship and business requires less resources than the elimination of the socio-economic effects of its bankruptcy, and creates conditions for employment. Of all employed population in Azerbaijan, 14.5% is employed in the repair of commercial vehicles, 1.6% in tourism and catering, 14.5% in transport and warehousing, 1.6% in recreation, entertainment and cultural areas. Measuring the degree of losses in the specific area, the state assistance has been fairly provided to secure the salary fund of business entities, taking into account the most affected areas. In addition, the introduction of tax incentives to support economic growth and entrepreneurship also helps solve social and economic problems.

For example, measures like temporary exemptions from property, land, profit, income and simplified taxes, reduction of the social insurance burden, temporary exemption from VAT on imports of certain products necessary to meet the food and medical needs of the population, etc. help to prevent the decline of economic activity by providing certain social benefits. The support program also envisions the provision of soft loans to households and some entrepreneurs to overcome the difficulties in repaying loans. The most affected areas in trade, service, transport and communications sectors were also provided with soft loans. By providing the financial support to the affected sectors, employees and low-income people, the goal was to ensure the health and well-being of the population and their return to economic and social life. It should also be noted that the recent decline in world oil prices has had a minimal impact on the Azerbaijani economy. The upper limit of the transfers from the Oil Fund to the State Budget is projected around 11 billion 350 million manats and there will be no impediments in allocating these funds to the budget. The volume of transfers from Oil Fund to the budget this year is only 15% of the fund's reserves. That is, the Oil Fund would be able to make such a transfer, even if we do not take into account the future income of the fund. In order to maintain the stability of economic growth, it is also planned to continue measures to support the private sector, small and medium enterprises and increase investment in these areas. In post-pandemic period, the new model of economic growth envisions the further expansion of work in the construction, mining and petrochemical industries, transport and trade, logistics and telecommunications, domestic tourism, agriculture and processing industry, and the digital economy as the main priorities of economic policy.

5. CONCLUSION

The goal of development in modern societies is not only high income of population, but also the expansion the opportunities for them in education, health, public decision-making, entrepreneurship, creative life and other areas. While sustainable economic development is the material support of social problems, people with a good standard of living are a tool for the sustainable and rapid development of their country's economy. Improving the quality of human capital and the effective use of its intellectual potential is becoming a driving force in increasing labor productivity and economic growth in the country. The human factor, which is an irreplaceable capital, has been at the center of the economic development strategy of the Azerbaijani state since independence, and the focus has been on improving socio-economic welfare. Even during the pandemic crisis, macroeconomic policy is primarily aimed at creating conditions for the development of human capital by protecting human health, ensuring the social welfare and economic development of the population.

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QUALITY AND SAFETY MANAGEMENT SYSTEMS IN WORLD PEACE AND THEIR IMPORTANCE

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ABSTRACT

In order to be effective, any enterprise or organization must have an effective quality and safety management system for the products it produces and all the processes that it realises during production. The management system is a tool that allows enterprises of various purposes to achieve maximum results with available resources. This is primarily the ideology of the enterprise, its policy in the production and sale of products. The modern management systems are based on the principles of a «process and system approach». Each enterprise decides for itself what to lay at the basis of its management system: quality, safety, or both. The idea of a security management system is to control the prevention and elimination of risks that can affect the safety of a product and the health of consumers. These principles are valid for the quality management systems and product safety as well as for the enterprise management system as a whole. The use of such management systems in enterprises and organizations allows them to effectively manage all processes, to ensure systematic and comprehensive approach to quality management, and to organize the economic progress and development of the company, which is important for maintaining its position in the international market. Today, a large number of enterprises and organizations around the world apply these systems, and as a result, the organizational management of the enterprise is much easier, any activity is officially registered, and resources and labor costs are saved. This, in turn, means an increase in material income and higher economic benefits for a company, which also strengthens its position in the global market.

Keywords: *International requirements, Management system, Organization, Product quality*

1. INTRODUCTION

At the current level of development of science and technology, the main way for any enterprise and organization to achieve its goals of increasing competitiveness, gaining an important place in the world market and maintaining this place, minimizing production losses is to constantly focus on improving the quality of products. Because its competitiveness directly depends on the quality of the product. To assess the competitiveness of the product and the enterprise as a whole, it is necessary to use a group that includes a very wide range of indicators. Thus, the modern consumer, when choosing from a large number and variety of products on the market, at the same time pays attention to many indicators: the consumer is interested in all the features of the product at different stages of its life cycle. In this regard, based on the requirements of international standards (ISO 9000), it can be said that economic, organizational, commercial, social and psychological indicators should be included in the list of features for assessing the competitiveness of the product (Zenkov Andrey Nikolaevich. Veliky Novgorod 2007). The quality management system is an agreed working structure that operates in the enterprise and incorporates effective technical and management methods. Its main purpose is to ensure better and more practical (experimental) interaction of people and machines, as well as to protect the interests of consumers, to organize a convenient exchange of information to meet the requirements of the product quality level, to reduce (to minimize) quality costs. If we look at the world experience in this field so far, we can see that this experience has formed not only quality management systems, but also general principles and methods that can be applied in these systems.

The quality management system is a coordinated working structure operating in the company and including effective technical and managerial methods that provide the best and most practical ways for people, machines, and information to meet the requirements of consumers for product quality, as well as cost savings quality. (Zelenskaya Anastasia Sergeevna. 2011, Moscow)

2. WHAT IS A QUALITY MANAGEMENT SYSTEM (QMS)?

KMSs are an integral part of the management of enterprises and organizations, and some of them are secular. Currently, there are 3 levels of conceptual differences in the quality management system (Shalimova Nina Mikhailovna. Ekaterinburg 2006.):

- Systems that meet the requirements of ISO 9000 series standards;
- TQM - general quality management systems;
- Quality management systems that meet the requirements of national or regional standards.

Quality management systems that meet the requirements of national or regional standards are harmonized version of widely used international standards with the national standards of a certain country.

2.1. Quality Management Systems that meet the requirements of ISO 9000 series standards

A quality management system (QMS) is as a formalized system which documents processes, procedures, instructions and responsibilities for achieving quality policies and objectives, The requirements necessary to obtain high quality. A QMS helps business leaders and entrepreneurs to coordinate and direct an organization's activities (to meet customer needs and expectations) and regulatory requirements. Also this system helps an organization to improve its effectiveness and efficiency of organizations activities on a continuous basis. ISO 9001:2015, the international standard project specifying requirements for quality management systems. It is the most prominent approach to quality management systems and also a secular normative-technical document. Sometimes the term "QMS" is used to describe the ISO 9001 standard or the bulk of documents detailing the QMS, but it actually refers to the completeness of the system. The documents are suitable for description of the system (<https://quality.eqms.co.uk/blog/types-of-quality-management-systems>). Quality management is very important in any enterprise and organization, and the quality management system applied for this purpose should cover all aspects of the enterprise or organization's activities in the management process. Here are benefits of a documented quality management system include:

- First of all, meeting the needs of consumers is ensured, which attracts more customers, increases sales and ensures the longevity of the enterprise. At the same time, the producer's self-confidence is growing, his reputation in the local and foreign markets is growing;
- The second is the satisfaction of the organization's necessary requirements, which ensures compliance with the rules and the provision of products, semi-finished products and services in the most economical and resource-efficient way. In this case, it also allows the company to expand, grow and increase profits, continuously improving the quality of its products (<https://asq.org/quality-resources/quality-management-system#Benefits>).

Table following on the next page

Table 1: Additional benefits of QMS

№	The additional benefits from the application of QMS
1	Defining, improving, and controlling all existing processes
2	Reducing waste while the production process
3	Preventing mistakes in all the processes
4	Lowering costs
5	Facilitating and identifying training opportunities
6	Engaging organizations staff
7	Ensuring overall organizational orientation
8	Communicating a readiness to produce consistent results

Source: <https://asq.org>

The ISO 9001: 2015 standard is currently the most widely used quality management system standard in the world and its effectiveness has been approved by major manufacturers and large enterprises. The quality management systems applied on the basis of this standard allow the planned and systematic organization of each process in the management of the enterprise, the documentation of procedures and their maintenance. Therefore, this system is currently used by the vast majority of enterprises, regardless of the volume of production and field of activity. In addition, other standards related to quality management systems include ISO 9000 series (including ISO 9000 and ISO 9004), ISO 14000 series (environmental management systems), ISO 13485 (medical device quality management systems), ISO 19011 (audit management). making) can be attributed. The requirements of KMS are still based on the requirements of ISO 9000, but at the application stage, the specifics of the relevant areas are taken into account as specified in these standards. In addition, other standards related to quality management systems include the remaining ISO 9000 series standards, including ISO 9000 and ISO 9004, ISO 14000 environmental management systems standards, ISO 13485 medical device quality management systems, and ISO 19011 audit organization and management standards (<https://www.iso.org/home.html>.2018).

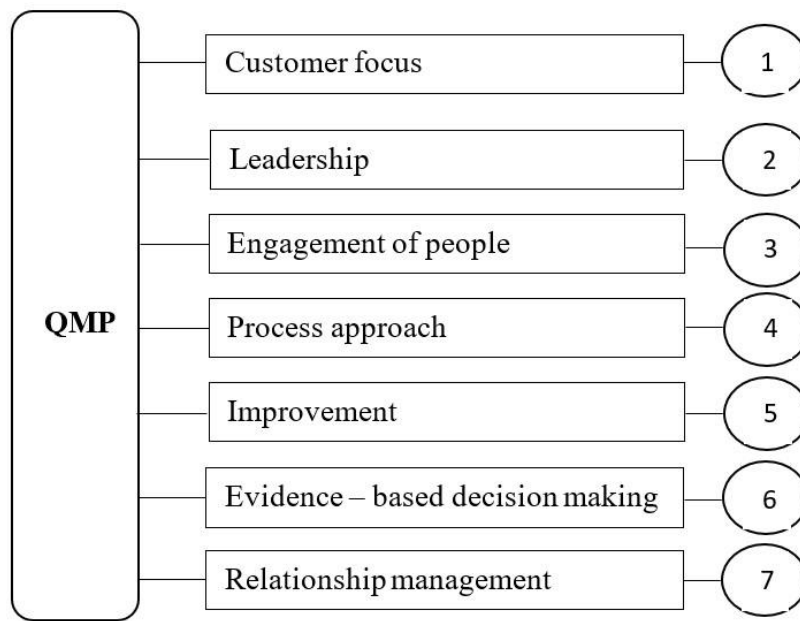
2.1.1. Elements and requirements of a QMS

Each element of the quality management system helps to achieve common goals designed to meet the needs of both, customers and organization. Quality management systems must always take into account the unique needs of the organization to which they are applied. However, the following are examples of common elements of all systems:

- The organization's quality policy and goals;
- Quality manual;
- Procedures, instructions, and records;
- Data management;
- Internal processes;
- Customer satisfaction with product quality;
- Opportunities for improvement;
- Quality analysis.

Figure following on the next page

Figure 1: QMP (Quality Management Principles)



Source: <https://asq.org/quality-resources/quality-management-system#Benefits>

2.2. What is TQM (Total Quality Management)?

TQM (Total Quality Management) is an approach based on the participation of all members of an organization or enterprise and aimed at achieving long-term success by providing quality consumer needs and benefits to all members of society. This quality management theory was founded by Edwards Deming, who worked in Japan for a long time in the mid-20th century. The foundations of this system include:

- Knowledge of systems, system approach and optimization;
- Knowledge of the basics of statistical theory and variability;
- Basics of knowledge theory;
- Basics of psychology.

We can say that TQM is a management method adapted to the variability of the external environment when production standards become ineffective. The concept is based on quality - the quality of materials, processes, products, delivery, service.

In the 1980s, Deming developed fourteen basic principles and implemented a management program (<https://en.wikipedia.org/wiki/>):

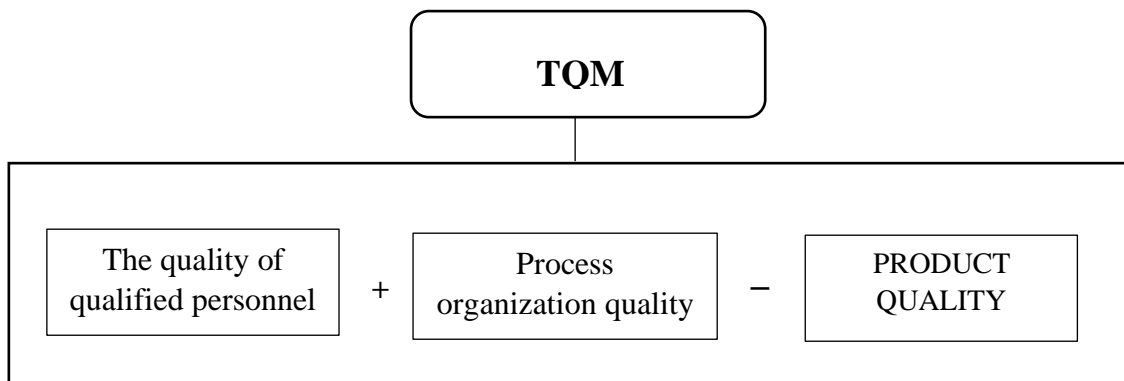
- 1) The constancy of the goal - set yourself the goal of continuous improvement of the quality of products or services and be invariably firm and constant in achieving these goals;
- 2) New philosophy - adopt a new philosophy: radically change and reconsider your views on the nature of management and the role of the manager in the modern world. We have entered a new economic era;
- 3) End dependence on mass control - eliminate the need for mass audits and inspections as a way to achieve high quality;
- 4) End the practice of procurement at the lowest price - refuse to evaluate and select suppliers, taking into account only the prices of their products. Because not high-quality resources will not give a qualitative result, and a low price does not often mean high quality;
- 5) Set a goal to improve each process to achieve higher quality, increase productivity and reduce costs;

- 6) Apply modern approaches to the organization of trainings, professional development of staff and staff training in general.
7. Build "Leadership" - Adopt and apply the "leadership" system as a working method in order to give employees the best performance;
- 7) Eliminate fears - Encourage effective two-way communication, use other means to overcome fear, reluctance and hostility within the organization;
- 8) Break down barriers between departments, services, departments, facilitate communication;
- 9) Refuse the use of posters, slogans, calls for employees, since the vast majority of problems arise in the system and it is not in the power of workers to change anything in it;
- 10) Eliminate arbitrary tasks and quantitative standards - discard work instructions and standards that establish production standards, quotas for employees and tasks for managers. Pre-established standards can adversely affect quality;
- 11) Give workers the opportunity to be proud of their work - remove the barriers that make it impossible for them;
- 12) Encourage the desire for education and improvement - establish an educational program for employees and fully support the desire for self-improvement;
- 13) Commitment to quality improvement and the effectiveness of senior management are needed - clearly define the unwavering commitment of top management of the organization to continuous improvement of quality and productivity.

2.2.1. The main idea of TQM

The main idea of TQM is that the company should work not only on the quality of products but also on the quality of work in general, including the work of personnel. because, the quality of a product is its ability to meet the needs and expectations of a particular consumer, which is very important for the organization. The figure 2 sets the quality value in TQM.

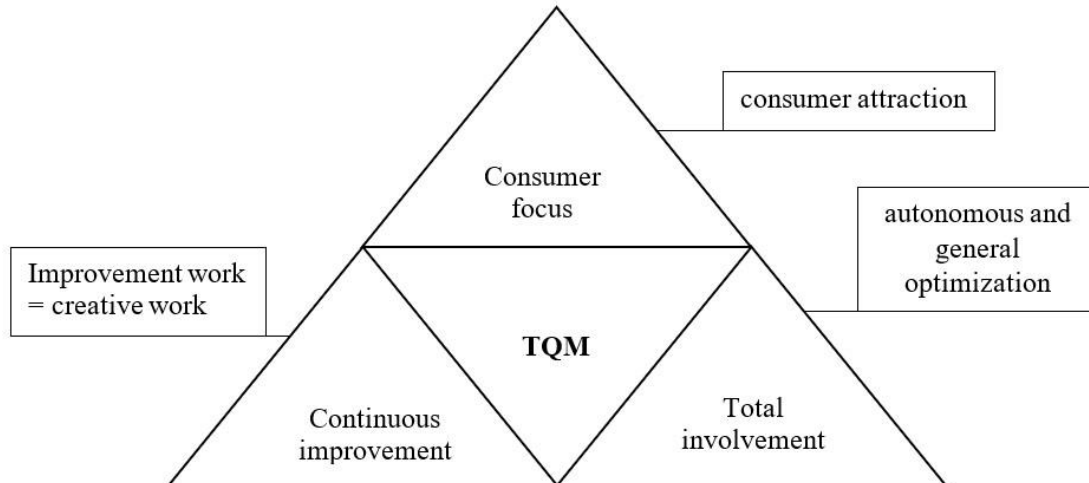
Figure 2: Quality value in TQM/ (Klyuyev A.B. «Production Management»)



Responsible persons and organizations responsible for quality assurance must have sufficient authority to:

- To formulate ("see") quality problems;
- Prepare and propose solutions;
- Verify the implementation of decisions;
- To suspend the supply or installation of equipment, structures and materials that do not meet the established requirements.

These organizational rights should be granted officially by the decision of the project management (enterprises, firms). Personnel carrying out activities to ensure the quality of the project, including personnel of subcontractor services, must be qualified. In order for this staff to have sufficient professionalism, the project manager must provide his training.

Figure 3: Fundamentals of the TQM concept

Source: <https://analytics.infozone.pro/main-provisions-of-tqm-concept/>

3. CONCLUSION

Market relations in the socio-economic sphere and the rapidly changing external environment have placed enterprises in conditions of increased competition for consumers. This determined the need for the development and implementation of effective measures to ensure the improvement and development of measures, improving the image and their competitiveness, focusing on satisfying customer needs and guaranteed high quality of products. The degree of development of the economy of any country largely depends on the ability and willingness of enterprises of various industries to change and improve their processes, products, relationships with suppliers and consumers, owners and other interested parties. The competitiveness of products and enterprises as a whole largely depends on indicators of product quality and safety and enterprise processes. Therefore, the company needs to have effective quality and safety management mechanisms, as well as mechanisms to quickly track changes in consumer preferences. In this regard, it seems very promising to develop quality and safety management mechanisms at the product design stage and integrate various quality management systems.

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HOW WILL COVID-19 AFFECT HUMAN RESOURCES MANAGEMENT IN AZERBAIJAN? IS COVID-19 IS A THEREAT OR A CHANCE FOR HUMAN RESOURCES MANAGEMENT IN AZERBAIJAN?

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ABSTRACT

This article contains many interesting and different aspects of the overall view of employee-employer relations in a comparison of before, during and after COVID-19 pandemic. The article sets discussions about past, current and future standings of HR in Azerbaijan from the point of view being treated by COVID-19, as well as the level of readiness of organizations to force-majeure situations and readiness of employees based on their skills and motivations. Another point set in the article is about technology as organizations' desire to invest in technology, invest in employee development and organizations' fears about hiring multi-skilled employees. Technology is discussed from another point like how much organizations are dependent on technology? Is investment necessity arising from coercion under-enforcement of COVID-19 thereat or did they ever predict the importance of technology and invested to keep up with times? Moreover, this article puts some questions in terms of a problem to discuss. One question is that, will organizations running their business in Azerbaijan in a traditional still run their business in that way or will COVID-19 bring up the situation them to adjust their strategy in a way of investing in the technology on experience of an employee? How will traditional employee-employer relations develop after COVID-19? Another question is what is the future of favorite topics like team building, performance management, staffing, and employee loyalty? Will companies still keep investing in teambuilding or the economy will grow in a different way replacing teamwork with freelance workers, remote jobs and similar understandings? The Author has successfully referred to scientific provisions of well-known local and foreign economists, various scientific concepts, researches of popular organizations and journals in Human Resources Management, personal questionnaires as well as relevant legislative acts of The Republic of Azerbaijan. The article uses comparative analysis, logical generalization, analogy, synthesis methods. Increase pf functional roles of Human Resource Management in the Labour market, the importance of human capital in market competition and implementation of technology in labor forces are pointed as a solution in this article.

Keywords: *Freelnce jobs, Human Resources Management, Remote-working, Team-working, Technology*

1. INTRODUCTION

The COVID-19 pandemic, which lasted for several months, raised many questions in its early days. Many experts offer some predictions and solutions because they see that the pandemic is not taken seriously by people. Of course, it is clear to everyone that the economy will not lag behind this trend and will be subject to change. Human Resource Management, which has a significant share in the formation of the economy, is also one of the areas that will be subject to these changes. The impact of COVID-19 on the Economy and, consequently, on Human Resource Management can also be attributed to the intensive application of the emerging fourth industrial revolution and artificial intelligence technology and the advantages and threats it can create. Given that artificial intelligence, which will form the core of the Fourth Industrial Revolution, is the product of the human hand and brain, then the approach to Human Resources

will not be unambiguous. It is safe to say that Human Resource Management is currently one of the most popular fields in Azerbaijan. Thus, the rapidly developing Azerbaijani economy has managed to create strong competition over the past twenty years. With the reduction of dependence on oil and oil products, the volume of investments in both domestic production and services in Azerbaijan has increased, which in turn has necessitated the application of international experience. One of the areas in which international experience is most widely and effectively applied, and at the same time plays a key role in the dissemination of information throughout the country, is Human Resource Management. The main reason for the rapid popularity of Human Resources in the country was its ability to quickly and effectively get out of the field of personnel clerical work. The general approach is that post-pandemic change will bring innovation to all areas of Human Resources. We will see the greatest manifestation of these changes in the employee-employer relations that will emerge in Azerbaijan over the years and in the labor market in Azerbaijan in the example of these relations. Many new fields can be created, specializations split or merged. It is expected that the "Labor Code of the Republic of Azerbaijan", which is considered the main tool of the state in the regulation of human resources, and other legislative acts related to this code will have a significant impact. Thus, various types of contracts (Numerical flexibility), which have not been very popular in the country for many years and are manifested only in projects and cooperation with foreign companies, may become widespread in the country. Freelancers, part-time employees, fixed-term employment contracts, virtual and remote workers or outsourced suppliers will eventually eliminate the classic concept of full-time employees. This, in turn, will create the concept of multiskilled employee.

2. METHODOLOGY

All the roles and functions of Human Resources in Azerbaijan, trends from the perspective of workers and employers have been conducted on the basis of a comparative analysis of the past and the pandemic period. The analysis consists mainly of interview-type surveys, surveys, data from the Statistics Committee, international experiences and generalizations and summaries of their results. At the same time, there was an appeal to the Labor Code of the Republic of Azerbaijan and other legislative acts related to this code in order to properly investigate the situation in Azerbaijan.

3. LITERATURE REVIEW

Given that the topic is a hot topic, it is impossible to come across a lot of research in this area. If we look at various resources, we can see that the authors actually started discussing the changes mentioned in the article years ago. In his publication, Duncan O'Leary outlined the many benefits of self-employment and the forms of support that can be provided by the state. It can be seen that all the arguments about the benefits of self-employment have been justified over the years. Changes in the recruitment process, new views on candidates, the benefits of using electronic resources that eliminate the meaning of time and space during the interview, remote interviews, and other innovative innovations will also be future recruitment solutions (Vozza, 2020). The leadership in this area is still in the training and development sector. Most of the research is related to the course of the Learning and Development process during and after the pandemic. Despite numerous proposals and forecasts, the real result is that this sector is more stagnant than others. We can call this stagnation "pre-storm silence". Organizations continue the process, there is a need for high-quality professionals in the ongoing process, but there are no training providers to ensure this quality. In this case, companies turn to alternative resources instead of taking a step back (Taylor, 2020). There is also a legislative side to the issue, where the main leading role is played by the Labor Code of the Republic of Azerbaijan and the Tax Code of the Republic of Azerbaijan.

It is these two pieces of legislation that can be considered the leading desktop books for Human Resources. In addition, decrees of the President of the Republic of Azerbaijan, decisions of the Cabinet of Ministers, decisions of local self-government bodies, and many legislative acts were the table documents of HR professionals. In addition to the usefulness of so much legislation, it is important to look at the issue from the perspective of HR professionals and employers, as well as from the perspective of employees, and discuss its role and future in HR development. In his publication, Duncan repeatedly referred to tax law, noting that the tax system was a major motivator or barrier to self-employment (Duncan, 2014).

4. ANALYSIS

4.1. Labour code - numerical flexibility

Along with the strategic management of human resources, compliance with the law should also be in focus. Human Resource Management is mainly regulated by the Labor Code of the Republic of Azerbaijan. The retail collection of cited legislation in many sources poses many challenges for both the employee and the employer. The worker has difficulty fully assimilating the rights granted to him by law, and sometimes too many references prevent him from examining his rights in depth. The problem for the employee can be summarized and concluded that in fact the solution is simple. Thus, an employee has the right at any time to apply to the relevant government agencies, a lawyer or a trade union for detailed information on any obscure issue. In a similar situation, Legal Entities do not have the ability to enforce the law at the highest level. As I mentioned above, the sheer number of pieces of legislation makes HR professionals err. While we are not saying this is a deliberate move, the reality is that HR professionals find it difficult to relate to laws that are manifested differently in several sources in the legislation, or the lack or lack of interpretation of the legislation misleads officials and, at best, leads to writing in a wasteful form. Another dark point that the legislation creates for organizations is the employment contracts and their types. Both the labor code and tax legislation support many employment contracts and do not impose any restrictions on employment contracts between an employee and an employer. In parallel with the employment contract, companies are free to choose a contractor. The disappointing point is that the legislation does not develop steps or bills that encourage enterprises and organizations to work with freelancers. The survey in this direction asked several questions to the respondents. The first question was to measure the percentage of numerical flexibility applied by companies. The survey of 200 respondents from both employees and employers (human resources representatives, managers and entrepreneurs) suggests that the application of Numerical Flexibility in Azerbaijan is very low. Thus, 74% of respondents said that more than 50% of employees work in enterprises with full-time employment contracts. Only 40% of respondents said that between 0 and 15 percent of employees are freelancers and home-based workers.

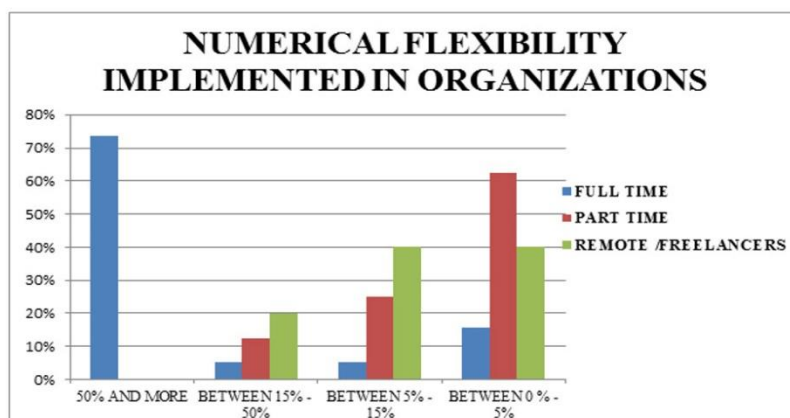
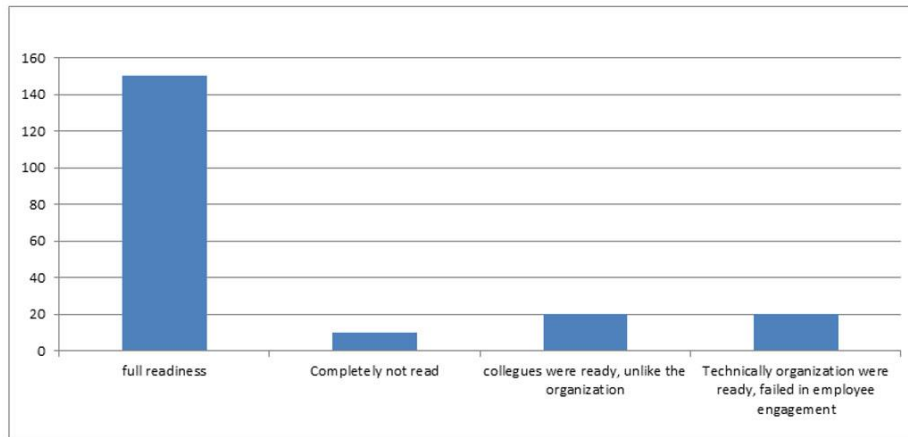


Figure 1: Numerical flexibility

The question in the second stage was whether your organization was ready to apply numerical flexibility (homework and freelance work). The survey was mainly based on experience covering the pandemic period. 75% of respondents said they were ready for it. Only 5% of respondents said they did not believe it.

Figure 2: Readiness level of Organizations



During the principle of working on a freelance contract, all three parties, the employee, the employer and the state, are profitable. So that:

Worker:

- When an employee works on a freelance schedule, he determines his own income and tries to earn more. The person who earns more becomes more of a taxpayer;
- An employee who does what he loves is more productive;
- More income means more spending;
- Freelancers are more interested in specializing in one field.

Employer:

- The customer / client who conclude a freelance contract also pays less tax, which reduces the cost of the product or service sold;
- The company reduces dependence on one employee or one person for a service, insures its risks. Termination of contracts with freelancers is more convenient and less risky than employment;
- It is possible to hire several employees for one job and achieve concentration of different abilities in one person.

Government:

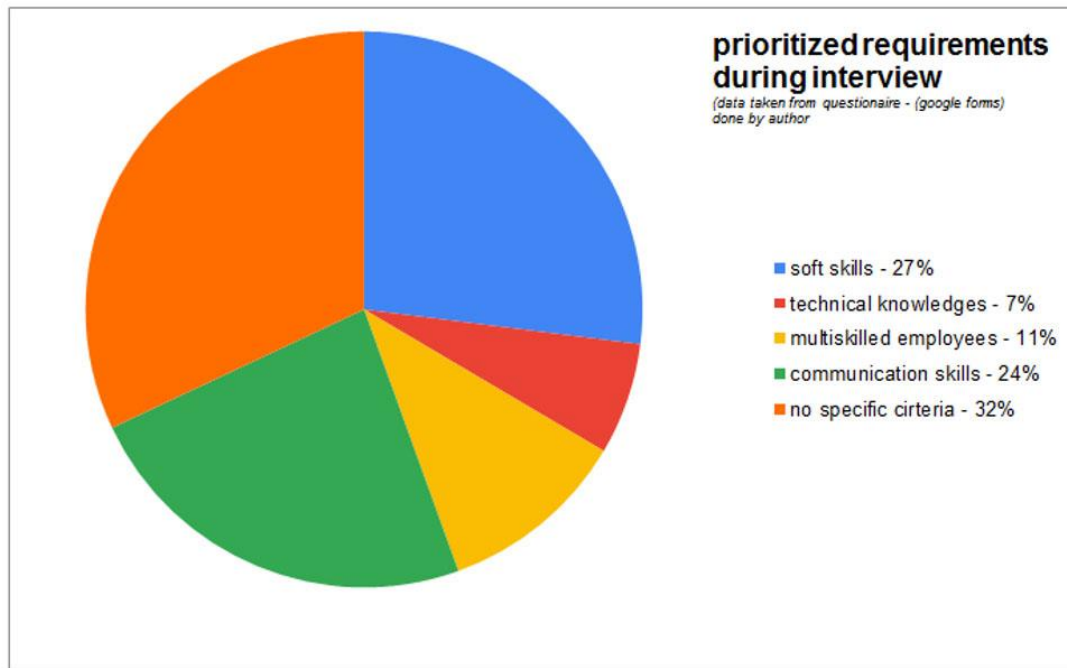
- More taxpayers mean more revenue to the budget;
- The number of any conflicts or violations that may arise between the employee and the employer is reduced and it is easier to identify the party responsible for the violation;
- The number of parties in the market offering services is growing. This, in turn, leads to increased competition and transparency;
- A person with a freelance work schedule tends to work from home, which leads to the natural regulation of traffic jams and many other factors related to human movement or inaction. We have witnessed a clear example of this and its benefits during the pandemic.

As can be seen from the above, the most profitable party in this mechanism, if applied, is in fact the legislation and the state that enforces it. The state succeeds here by insuring the employment of citizens, supporting the development of entrepreneurship and increasing revenues to the state budget.

4.2. Recruitment and selection

The government's growing focus on self-employment does not mean that companies are called for unemployment. Of course, there will be insured job seekers who prefer their employee stability to material income. In this case, the companies will continue to look for employees and the placement process. Of course, changes are expected in employee - requirement - employer triangle of labor the market. If we look at the issue as a domino effect, it is clear that the introduction of Numerical Flexibility will lead to changes in the strategies and policies of companies in recruitment and staff planning. Recruitment remains a favorite area of interest for Human Resources representatives to this day. Given that this area is a priority, we can assume that one of the areas that will change the most after the pandemic will be the area of recruitment. In addition to being sensitive to the recruitment process, we can also note that there are no traditional and out-of-bound behaviors. The following are some of the distinctions that do not deviate from the usual forms, or that we rarely encounter exceptions. Almost every company that has a "say" in the labor market has its own website, which has career sections that meet modern standards. However, companies also have difficulty attracting qualified candidates to their pages. The main criterion here is that job seekers are not interested in applying to private companies and developing new tactics for job search in a situation of "abundance of ads" and are satisfied with what is offered on a joint coffer. This is not due to restrictions imposed on them. Even large companies that are not interested in competing in such a situation prefer to be in the same coffer instead of encouraging candidates. In some cases, companies try to change this situation and direct candidates to themselves, but they face far fewer applications than expected. The natural reason for this is that the online application forms that companies place on their pages seem long and tedious for candidates. Such behavior of candidates forces companies to attract candidates in the most traditional ways. Another case is that the "Job specification" and "person specification" sections in job advertisements lead to misunderstandings between candidates and employers. Candidates' failure to carefully read the job requirements in the announcement leads to an artificial increase in the workload of enterprises. Thus, there is an additional loss of time and additional costs in the recruitment process for enterprises. For high turnover positions, we can see that this cost is many times higher than the annual average. Candidates, on the other hand, justify not reading the job advertisement by the fact that companies place a template ad and the requirements in the ad are unrealistic. In this case, companies make concessions to consider the criteria that are the main performance indicators for the position as secondary, and based on the supporting criteria of the candidates, such as personal communication, soft habits, and self-presentation. This in many cases makes it difficult to find exactly the right candidates. In a survey of Human Resources specialists, only 7% of respondents paid attention to technical knowledge and 11% to multiskilled employees. The other 82% answered "soft habits", "communication skills" and "no specified criteria" differently.

Figure following on the next page

Figure 3: Prioritized requirements during interview

The pandemic proved that this approach to the labor market is fundamentally wrong. Although it has been a tradition for years to require criteria such as "stress management" and "time management" from candidates, no one wanted to explain why this ability was used. Companies that needed to work from home during the pandemic began to understand the true meaning of "time management." Employees operating under a standard employment contract were able to perform better by being insured against certain risks under the supervision of managers in the relevant departments. Due to the impossibility of direct control during the pandemic, the potential of workers to work freely was revealed, and only workers who could use this skill were able to prove that they were a successful choice. He stressed that there are many gaps in the way workers work from home or continue to work in stressful situations, and that these gaps cannot be resolved as expected. The root of this can be traced to two main points, both in the recruitment process and in the training policy. The period of the pandemic has once again proved the importance of including in the recruitment standards of companies the points necessary for change. It is expected that there will be 3 main trends in recruitment standards for the near future:

- Maximum e-recruitment and transfer to the online platform using technological innovations;
- Multiskilled employees;
- Providing employees with autonomy at different levels.

It is not utopian to continue work from different platforms while working from home. In fact, millions of investments are not required from enterprises to apply this form. This experience builds online recruitment experience in organizations and will increase interest in online recruitment in enterprises in the future. It will not be absurd for companies to apply online, to organize a screening process with artificial intelligence and various algorithms, or to automatically measure the knowledge and skills of candidates through testing. This will allow the company to reduce dependence on human labor, reduce errors and prejudices caused by subjectivity in decision-making based on the human factor, and save time. It is possible to schedule interviews in an automated manner in the country, video CVs as a requirement in the job advertisement or reflected in the application form.

In terms of distance, time, and technical capabilities, e-recruitment proves its importance so that dozens of eligible candidates who cannot participate in the interview, or who cannot apply at all, are not left out of the process. Multiskilled employee is actually a trend that businesses have been looking for for a long time. The hired employee must know both the steps before and after the process, thus insuring against errors in his work and preventing artificial delays in the process. Although the Azerbaijani labor market surpassed Taylor's "scientific management", Hackman and Oldham's job characteristics model did not fully transition. The most fertile conditions for this transition are now. The Hackman and Oldham's job characteristics model also reflects the need to give employees autonomy. One of the main difficulties that many organizations faced during the pandemic was the lack of decision-making skills required of them within a limited period of time, when employees did not have direct access to managers. Although we try to link this with the psychological problems caused by isolation, as well as technical problems, we are aware that the lack of autonomy of employees for years has created a situation. That is why reducing dependence on managers, giving employees autonomy to make decisions within their authority, taking into account changes in management style that will be re-formed, will lead to the formation of more productive employees in the future. In fact, this is what we are looking for.

4.3. Learning and development

We can say that Learning and Development is one of the developed areas in Azerbaijan. Both the large number of investments in in-house training and the freedom of choice of companies due to the abundance of suppliers in the training market allow us to say this. However, this does not mean that this function of human resources will not be affected by the pandemic. Changes in the recruitment process will not go unnoticed by L&D. To understand the extent of the impact, it is necessary to pay attention to several points. First of all, I must say that the training market in Azerbaijan is one of the hottest sectors, and the reason for this activity is the interest in training and self-development, both at the individual and corporate levels. Both businesses and employees or candidates understand that development is the key to competition in the labor market. One of the factors that accelerated this was the result of the above-mentioned survey during the recruitment process. Although companies mentioned this in job advertisements when looking for a candidate, soft skills, psychological state, behavioral skills, communication, etc. played a more important role in a candidate's assessment than a candidate's professional and technical knowledge. The second point was that the organizations and enterprises acting as clients preferred trainings and certificates of international prestige. Certificates of such prestigious international training companies as ACCA, CFA, CIMA, SHRM, CIPD, CIPS were given serious importance in the country, and some organizations were able to create a segment in the training market by organizing such trainings. This also created ambiguity in the training sector. Thus, organizations operating or targeting the international market take the existence of international certificates very seriously and do not accept other alternatives. The situation was slightly different in local enterprises. Companies that prefer the local market have either tended to create their own in-house training bases instead of receiving training from local training providers, or they have been interested in having only a handful of employees ready to become certified professionals. In this case, the company competing in the local market was not interested in the employee having international certificates. In this case, the main target audience of local companies were individuals rather than corporate ones. At best, local training companies sought to maintain their market position by changing their strategies and collaborating with reputable international organizations. L&D is stagnant during the pandemic. Although training providers try to keep the dynamics of the market active, it is a reality that, given the above-mentioned nuances, it is clear that the Azerbaijani training market is highly dependent on external factors.

First of all, because, as I said, the main advantages of the country are more inclined to the services and certificates offered by reputable international organizations, and there is a partial dependence. Currently, the process of freezing in the processes of certification, examinations, etc. of large organizations is underway, and this process has been suspended indefinitely in local companies. At the same time, international organizations offering certificates such as Coursera, Udemy, Harvard Business School online class have announced their training bases in full or in part globally free of charge. This has moved many local companies in the best sense of the word. The use of such resources, which are open globally, allows local companies to think about two things:

- Can online trainings really be effective?;
- How much up to date was the training data of local training companies?

The first question applies not only to small and medium entrepreneurs, but to all institutions. In fact, this issue can be considered as a determining factor in the future of the L&D function of Human Resources. If we look at the different types of comparisons and comparisons posted on the Trainingindustry.com website, we can see that many companies use different types of training delivery methods such as video-based learning, social / informal learning, webinar, ILT, which they have kept as a passive resource for a long time. In the coming years, the approach to the training sector will change the purchasing habits of companies in two directions. First of all, the volume of capital investments of organizations in Learning and Management Systems (LMS) will start to increase. LMS offers users a control tool for a better organized training strategy. The increase in investment in LMS will increase companies' confidence in the concept of online learning. Along with LMS, the demand for ERP systems in companies will increase, which will make new employees technologically friendly and will form a strategy to improve the technical knowledge of current employees.

5. CONCLUSION

Of course, the results of the analysis, observations and surveys show that the prospects of Human Resources in Azerbaijan are high. One can be optimistic about the development of human resources. It is gratifying that a large number of professionals working in this field love their work love this profession and enjoy the support of their organizations for their enthusiasm. However, since development is impossible without change, changes in this area also promise a positive line of development. As the beginning of any process is law, the process of human resource improvement will begin with legislation. First of all, the laws collected in different sources and in force for the current period and do not need to be changed should be collected in one source. Outdated or obsolete laws should be withdrawn from circulation. This will be a step taken to facilitate the work of those who benefit from the legislation. With a deeper understanding of the concept of numerical flexibility, it is possible to take measures to encourage enterprises and the labor market to use this form of labor relations. The promotion of different types of contracts in the example of numerical flexibility can bring a new dynamic to the labor market. The introduction of Numerical Flexibility, in turn, will pave the way for electronic recruitment, electronic interviews, more objective organization of the recruitment process and more purposeful and multifaceted use of artificial intelligence. It should be borne in mind that technological innovations that will spread to other sectors of the economy will bring people closer to technology, increase confidence, and this will facilitate the work of some kind of recruiters. If applied correctly in the early stages, the long term is a serious achievement and technology. Of course, it is not right to limit the electronicization of the recruitment process only to electronic applications. It is necessary to reduce the dependence of all possible processes on human decision and intervention. Another burden in this case falls on the training and development sector.

Entrepreneurs, who became more enlightened after the pandemic, will now try to reduce costs in order to reduce costs. This savings will affect L&D. The cost of training will decrease, but at the same time the demand for training will increase. It is necessary to find the most convenient and economical solution for both employees and entrepreneurs who have been left out of the training process due to various types of obstacles as a way out.

The most effective way to do this, of course, is to create an information hub. It is necessary to create a learning hub for all companies, which is available 24 hours a day and has a constantly updated database.

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TOURISM EXPORT INCREASING WAYS

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ABSTRACT

It is obvious that export has main effective role in economic development. Besides goods export, services export have gained important place in international trade. Tourism export is one of the significant sector in international trade in services. Tourism development by it's multiplicative effect could influence other economic sectors. Tourism has direct, indirect and induced impacts on every country economic development. Economic literature indicates that high quality of infrastructures and technology development have positive impacts on tourism export development. Besides, convenient business environment that is effective in developing entrepreneurship and increasing relations between tourism cluster actors could stimulate tourism development in a country. Azerbaijan has prioritised export diversification and increasing export earnings in recent years. Although there was some improvements in total export, but so far oil export has the main share in country export. We consider that tourism export could have major role in export diversification and economic development. According to the recent statistics, tourism export has main share in total services export in Azerbaijan. Considering there are serious rivals in global economy and tourism needs high volume of investment, government have to interfere direct and indirect in this sector and we think that tax exemption and government's financial subsidy could be a more effective. Good quality of tourism services that resulting from improving infrastructure and environment protection, increasing relations between tourism and related sectors, are not important for only local society. Government, firms and social organizations have common interest. We consider that creating clusters, including these related organizations could be useful. Surely, creating clusters by government incentives and stimulating policies could be more effective. Mechanism of creating appropriate cluster and relevant suggestions will be discussing in this paper.

Keywords: *Tourism services, Tourism export, Government incentives, Cluster*

1. INTRODUCTION

By studying the experiences of the other countries, it becomes clear that international trade relations are very important in economic development, and export has effective impact in international trade relations. For this reason, every country in the world has special attention to the development of exports, and considers it one of the main priorities of foreign trade policy. On a global scale along with the foreign trade in goods, the foreign trade in services is also expanding, and the share of exports of services in the total foreign trade of the world is increasing. Tourism service export is one of the most perspective and important sector of export in services. According to statistics global tourism and travel accounted for 10.4% of the global GDP and industry generated one in 10 of the world's jobs in 2018. In 2018, direct contribution of travel and tourism in global GDP amounted 2750.7 billion USD (3.2% of global GDP) and export generated by international tourism reached USD\$ 1643.2 billion, accounted 6.5% world

export (World Travel and Tourism Council, 2019, “Travel and Tourism Economic Impact 2019 World”). After gaining independence, the Republic of Azerbaijan has paid special attention to foreign trade relations and has taken appropriate action to develop this sector. As a result of implementation of successful oil strategy in Azerbaijan in a short period, foreign trade relations have expanded, and the country's exports have increased. One of the main issues facing our country in the current situation is to diversify the economy and to increase the number of export products. Despite recent developments in the non-oil export sector, oil exports still account for a large share of the country's total exports. In our opinion, tourism services export can play an important role in diversifying the country's exports.

2. THE IMPACT OF TOURISM DEVELOPMENT ON THE ECONOMY: THEORETICAL APPROACHES

The analysis that conducted in some countries has revealed export of tourism services have a positive impact on the economic development of the country from various aspects. The revenue earned from expenditures by foreign tourists are vital for foreign exchange inflow into country's economy through the tourism sector and it's importance is increasing. There are direct and indirect impacts of tourism on economic growth. In general, the impacts of tourism on economic growth should be analyzed from three aspects: direct, indirect and induced. In order to organize and develop tourism sector in a country, a lot of actions have to be taken first. One of such important actions, is availability of the essential infrastructure for construction sector, which plays an important role in usual operations of tourism. In this regard, the activity of engineers in this sphere is stimulated by the income from tourism earnings. As a result, the government can increase its revenue by imposing taxes on citizens who have a direct and indirect relationship with the tourism sector (A. Ntibanyurwa, 2006). According to some researchers, the country's rich natural resources and the availability of a large number of human resources are the main factors in the development of tourism. Lanza and Pigliaru have noted that a country's specialization in tourism, which has wide natural resources, has a positive effects on the country's economic growth (Iza Lejárraga, Peter Walkenhorst, 2013). Sayman and other researchers have noted that tourism the world's fastest-growing sector, has a positive impact on improving the country's infrastructure and increasing investment. In addition to tourism, other sectors also benefit from the creation of basic infrastructure for tourism and the necessary investments in this area. For example, in the field of agriculture, it should be noted that the infrastructure provided for tourist sector is used to connect the regions and transport of products. Hernandez has noted that the implementation of construction works for tourism sector has positive effect on creation new jobs and raising earnings of workers in this sector. Although these new jobs are short term, they generally improve people's living standards and increase financial condition in the region. At the same time, as a result of the increase in the number of tourists visiting certain regions, and their spendings in those regions has a positive impact on the economic growth of the region and the country as a whole (A. Ntibanyurwa, 2006). The impact of tourism on the country's economy depends mainly on the amount of goods and services consumed by tourists (transportation services, entertainment, tour guides, rental and sales, hotels, restaurants, etc.). At the same time, the demand for these products has a positive impact on the development of other sectors related to tourism. As a result of increasing demand and consumption of tourists, the production and income in these industries also increasing, and induced effects of tourism is expanding. The increase in these earnings, in turn, leads to an increase in revenues to the government budget through direct and indirect taxes, as well as customs duties (A. Ntibanyurwa, 2006). According to many global researchers, in some developing countries, the tourism sector is considered an export-oriented sector because it has a larger share of foreign exchange earnings than other sectors. At the same time, it should be noted that the tourism sector, unlike other export-oriented sectors, faces the least trade

restrictions. Because goods and services related to tourism are mainly produced in the country. This characterizes the fact that tourism is more important development-oriented sector in the economy. Considering that export has important role in the development of each country's economy, it should be noted that tourism has the main role to reduce the country's dependence on exports of raw materials. Thus, if the country's economy depends mainly on the export of agricultural products and natural resources, the development of tourism, in addition to increasing the country's foreign exchange earnings, can stabilize price changes that have a negative impact on raw materials. As a result of trade relations between economic sectors and tourism in sphere of raw materials and finished products are increasing, the dependence of the economy on imports of capital goods for producing goods and services for tourists and for domestic market would decrease. Thus, financial resources that was decided to paid for imports will be spent on regions needs and development. OECD reports that 80% of tourism exports revenues are for exporter country and only 20% for another country (OECD, 2018, "Tourism Trends and Policies 2018, Highlights"). Tourism has many advantages, one of them is that tourism industry is a labor-intensive industry. The growth of tourism services directly leads to an increase in employment of the country, on the other hand, an increase of wages in the labor market in tourism industry causes improvement in the welfare of the population. Tourism has a multiplicative effects on the economy. This means that the tourism earnings are distributing along the economic sectors. Tourism industry has mutual relations with all economic sectors. Thus, ensuring the demand of tourists does not mean only tourism products (hotels, transport, etc.). Tourism demands also cover agriculture, transport, finance, construction and other sectors. The arrival of tourists in a region not only leads to the inflow of foreign exchange in that sector, but also creates opportunities for the earning incomes in other areas related to tourism. Sectors directly related to tourism also generate income for other sectors by purchasing the raw materials and equipment they use in their activities. For this reason, it should be noted that tourism is a main catalyst in the economy. The development of tourism is effecting to other sectors through a multiplicative effect. For this reason, we could say that tourism has direct, indirect and induced effects on economic development. The direct impacts of tourism is relating to the earnings of some sectors which has direct relation with tourism (hotels, restaurants, resorts, etc.). The indirect effects of tourism are encompassing the sectors that offering goods and services to sectors wich has direct contacts with tourists. The induced effects of tourism refer to increasing demand in local regions (real estate, food, transport, education and other consumer products) due to tourism earnings rising. Thus, the direct, indirect and induced effects of tourism are spreading throughout the country's economy. The degree of indirect and induced effects of tourism industry depends on local production level and households purchasing powers in the region. As the more locally produced goods are consuming, the region will benefit more from the tourism industry.

3. DEVELOPMENT OF TOURISM IN AZERBAIJAN

It is clear from all the noted above that the development of tourism industry and increasing export of tourism services have a wide range of positive impacts on the economy, and these positive impacts can be observed at the macro level as well as by other sectors. Tourism sector for it's importance for the positive impacts on economic and social development of Azerbaijan, and it's vital ability in raising total exports, expanding this sector is very essential. For this reason, a lot of actions has been done in our country for developing this sector. These actions includes the "State Program on development of tourism in the Republic of Azerbaijan for 2002-2005" and a "State Program on the development of tourism in Azerbaijan Republic in the years of 2010-2014". At the same time, in order to promote the rich geographical landscape and for introduction the ancient cultural and historical heritage of our people, in 2011, the "Year of Tourism" was declared in our country.

In addition to the above, according to the Presidential Decree on March 16 in 2016, one of the strategic roadmaps covering 11 priority areas is aimed at the development of tourism in the country. This strategic roadmap considers a long-term strategy and action plan for 2020, 2025 and beyond. As a result of these government actions, some progresses has been made in this sector in recent years. According to official statistics, over the past period the number of tourists visited our country has increased, and demand for labor force in this sector has increased.

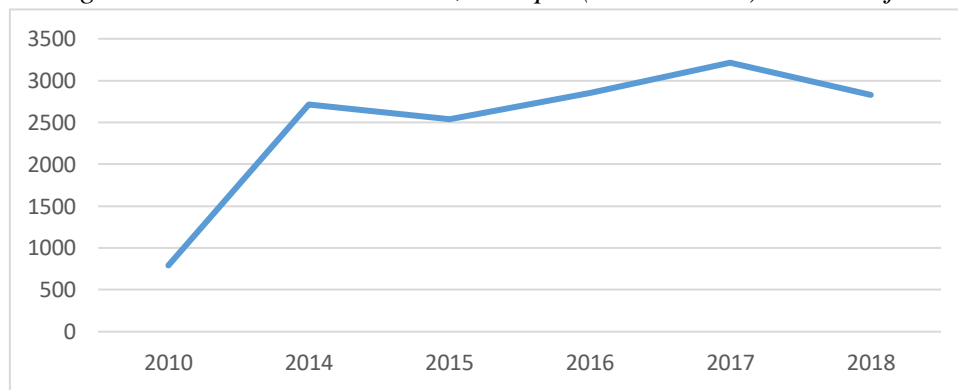
Table 1: Number of foreign citizens arrived to Azerbaijan (per thousand persons)

Year	2010	2014	2015	2016	2017	2018	increase (2016)	increase (2017)	increase (2018)
Volume	1280	2160	1922	2045	2454	2633	6,4%	20%	7.3%

*Source: Tourism Highlights 2017, 2018, 2019 Edition, UNWTO and
<https://data.worldbank.org>*

According the data above (table 1), volumes of tourist flows increased steadily between 2015 and 2018, and in 2018 there was an increase of 7.3%. As the number of foreign tourists visiting the country increased, so did the income from foreign tourists (Figure 1).

Figure 1: International tourism, receipts (current US\$) - Azerbaijan



Source: <https://data.worldbank.org>

As mentioned above, the export of tourism services is a priority sector for our country. Because export of tourism services has a large share in exports of total services.

Table 2: Total service exports of Azerbaijan (by million USD)

	2010	2012	2013	2014	2015	2016	2017	2018
Total service exports	2,49	4,81	4,13	4,29	4,44	4,36	4,68	4,69
Commercial service exports	2,39	4,68	4,11	4,28	4,42	4,34	4,66	4,67
Travel service exports	0,65	2,43	2,36	2,43	2,3	2,71	3,01	2,63

Source: <https://www.trademap.org>

According the data above (table 2), volumes of tourist service exports of Azerbaijan increased steadily between 2010 and 2017, but decreased in 2018. But it is clear that the share of travel service exports in the total service exports of our country is high. This proves that tourism industry is important sector in our country.

4. FACTORS AFFECTING THE DEVELOPMENT OF TOURISM SECTOR

In order to increase the impacts of tourism sector on economic development and to provide the sustainability of the tourism industry, it is necessary to achieve progress this sector and also

related sectors. Thus, some related issues, including security, related services, relevant infrastructure, promotion of destination places and other problems that are important for the tourism sector can lead to a decrease in revenues in this sector if not at the required level. One of the main reasons that hinder development of tourism, is a lack of cross-sectoral relationships, as well as the provision of agricultural and industrial products consumed in the tourism sector, mainly through imports. For this reason, it should be noted that the strong linkages between tourism industry and other related sectors make it impossible to develop this sector alone. It is more important to develop tourism together with a related sectors (construction, security, medical services, manufacturing, agriculture, etc.). Thus, by considering these advantages, most countries of the world have accepted the inevitability of the development of tourism sector and they are attempting to identify the factors in tourism development. According to different countries experiences, there are many factors that influence the development of tourism. One of the factors that influence the success of tourism sector is the socio-economic and infrastructural development of the country. In a 2005, Sing and Kaur noted that one of the main factors that influence the development of tourism was the quality of infrastructure and technological development in the country. Similarly, in 2001, Chang and Lee reported that the main factors that influenced the trade in tourism services between Europe, Asia, and North America was their infrastructure development. As a results of analysis in 2008, Eugene-Martin noted that the level of economic development is more important in attracting tourists in developing countries than in developed ones (Iza Lejárraga, Peter Walkenhorst, 2013). The activities of government agencies is important in the tourism-oriented diversification and growth strategy of the economy. Budak noted that the high crime rate in the country has negative impact on tourism development. Also Eilat and Eynav, Sequira and Nanes explained that the high political risk in the country is a hamper for development of tourism. At the same time, in 2011, Brau et al. noted that low level of corruption, the accountability of government departments, the effectiveness of the government, political stability and the rule of law, and the high performance of government departments are main factors of tourism economy development. Favorable business environment, which develops entrepreneurship and creates conditions for the establishment of relations between the units of the tourism cluster, is one of the main factors stimulating the development of tourism. Cataneo (2009) noted that protection of human rights and the stability of business environment are the main drivers to tourism development. World Bank survey about tourism related issues in small and medium local enterprises in the Caribbean found that high tax rates, unprofessional employees and macroeconomic instability were major problems in the tourism and hospitality industry. Thus, the existence of a favorable investment climate is important in attracting foreign direct investment in tourism sector (Demeritte 1998, Barouklaouf 2007, Tan et al. 2007). There are various studies in the economic literature on the impact of tax breaks on tourism investment. Some researchers believes that there are low correlation of tax incentives with investment in tourism industry, while others emphasized the of tax incentives in tourism development policies. Trade regulations have the potential to reduce or increase the earnings from tourism service export. Chen and Deverux (1999) concluded that tourism revenues would decline if import subsidies and export taxes were applied. In addition, an increase in transport costs for travellers entering and leaving has a negative impact on the development of tourism and leads to a decrease in demand for tourism.

5. CONCLUSION

The result of our research, indicates that the export of goods and services are very important in the economic development of any country. According to the official statistics, Azerbaijan's exports of goods and services have expanded and increased in recent years. At present, Azerbaijan's priority challenge is diversifying exports and reduce economy dependency on oil

export. We think that tourism industry has enormous potential in the development of the country's non-oil sector, export diversification, increasing foreign exchange earnings, employment generation, improving the welfare of population and the sustainability of economic development. The existence of strong and experienced global competitors, and need for large investments, the development of tourism industry is not covers only one sector, it could affect to many related sectors. For this regard we consider that it is necessary government participate directly and indirectly in developing this sector by using tax breaks and subsidies. Thus, high-quality tourism services may result from environment protection, improving essential infrastructure and expanding linkages between the tourism sector and related sectors. Those are a key factors that influence the choice of tourism destinations of foreign and domestic visitors. For this reason, the formation and development of tourist clusters consisting of the all interested parties can be a more effective tool in achieving the intended goals. Government stimulating activities in formation and development of such clusters would have a positive impact on their more effective operation.

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PROBLEMS OF EMPLOYMENT OF YOUNG LABOR FORCE IN AZERBAIJAN

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ABSTRACT

The article emphasizes the importance and urgency of ensuring the effective employment of young people in the development of the economy in modern times. The problems faced by the young labor force in the labor market in the Republic of Azerbaijan have been widely analyzed. Also, these problems are classified and directions for their elimination are indicated. The need to increase the competitiveness of the young workforce in the labor market was substantiated, and ways to implement it were indicated. It was noted that the reforms implemented in the country since 2016 have entered a new qualitative stage and the main goals are reflected in the "Strategic Roadmaps for the national economy and key sectors of the economy." The main strategic goals and priorities are to provide employment for the population, including youth, the economy with a competitive workforce, the development of social dialogue through institutions that ensure the implementation of flexible labor market policies, and the growth of inclusive employment. Based on this, the following results were obtained in the article devoted to the study of problems in the field of youth employment:

- *Achieving the strategic goals and priorities reflected in the "Strategic Roadmaps for the national economy and key sectors of the economy", innovative development of the economy raises the level of education of young people, increases their professional requirements;*
- *The delay in the transition to the "education-research-innovation" format in higher education institutions, the lack of a system of vocational education that meets modern requirements, and therefore the very low level of professionalism has a negative impact on youth employment;*
- *The lack of the ability of most young graduates to realize themselves in the labor market and the experience and professionalism required by employers makes it necessary for the state to implement incentive programs for the recruitment of young people;*
- *Scientifically substantiated proposals to improve the preparation of young people for the transition to the labor market have not been developed, strategic directions for the transition of young people to the labor market have not been identified;*
- *About 25-30% of the population engaged in economic activity in Azerbaijan is a participant in the informal labor market, most of whom are young people. In order to improve the employment of young people, there is a need to take serious measures to prevent informal employment, etc.*

Keywords: Labor market, Young labor force, Youth labor market, Youth employment, Youth vocational education, Vocational education institutions, Informal labor market, Hidden unemployment, Staff training

1. INTRODUCTION

Young people, who make up a significant part of the working age population, play an important role in economic development and are considered the main innovative potential. Therefore, the pace of development of the whole society and the living standards of the country's population largely depends on the level of inclusion and integration of young people in all spheres of socio-economic life, as well as their active participation in public life. As a result of changes in the labor market, such as the changing structure of labor demand and increasing flexibility in working life, the situation of young people in the labor market has become more difficult.

Young people who start working without the necessary information, knowledge and skills are generally at risk of long-term unemployment or are low-paid, socially disadvantaged workers in the informal sector. In modern times, the demands of the labor market are changing so rapidly that it is impossible to succeed in labor activity only by being satisfied with the knowledge and skills acquired in youth. Therefore, given the current changes in the world economy, the development of technology, ensuring the competitiveness and mobility of the workforce in the international labor market, it is important to increase the intellectual and creative potential of human capital.

2. PROBLEMS ASSOCIATED WITH VOCATIONAL EDUCATION IN ENSURING YOUTH EMPLOYMENT IN AZERBAIJAN

The transition of young people to independent working life is a complex and multi-step process. According to Professor Tofiq Quliyev, the success of this process depends on the education system, career choice, labor market requirements, and social background of the individual and so on. The study of the social behavior of young people in relation to education and employment is relevant in terms of the formation of the labor market and the provision of effective employment of young people. Here the ratio of the needs of the labor market for workers with different levels of specialization in one or another profession, as well as the tendencies and plans of young people in their future choices are important. The point is that vocational education has a strong and important impact on economic development. Vocational education is even more important for developing countries like Azerbaijan. Thus, the task of vocational education in Europe, to put it simply, is to adapt the knowledge and skills of citizens to the updated technology in 3-5 years, while in Azerbaijan to ensure the adaptation of acquired specialties and skills acquired in a planned economy for a long time is to do. According to the World Economic Forum's Global Competitiveness Report (2019), Azerbaijan ranks 58th out of 141 countries. Azerbaijan "labor market" (21st place / 40th place in 2018), "business dynamics" (23/31), "food market" (23/37), "infrastructure" (38/46), "skills" (48/54), "public institutions" (49/58), "market scale" (67/65), "innovative potential" (68/71) are in the top half of the rating. In terms of competitiveness indicators such as "ICT potential" (73/69), "financial system" (96/96), "health" (98/91), "macroeconomic stability" (103/126), Azerbaijan is in the second half of the list. According to the Human Capital Index (2019), Azerbaijan ranks 41st, this is a positive indicator. However, the World Bank's report on the per capita wealth of 141 countries released a few years ago showed that the share of natural resources in total resources in Azerbaijan was 54 percent, physical capital 23.6 percent, human capital 14 percent and net foreign assets 8.4 percent. In terms of the share of human capital in total wealth, Azerbaijan ranks 108th, this is a very low figure. In this regard, one of the most important areas for improvement against the background of the challenges of the transition to a model of productivity-based development is to further improve the level of knowledge of young people, i.e. the quality of human capital training. The analysis of the level of education of the population by age groups shows that secondary education prevails in all age groups. Thus, the calculations show that only 16.7% of the employed population has higher education, 11% have secondary special education, 5.5% have vocational education, and 66.8% have secondary and higher education has primary education. Among the employed population, 20.3% have higher education, 10.9% have secondary special education, 3.8% have vocational education and 65% have secondary and primary education. This is the most serious problem for young people in Azerbaijan. This is because research clearly shows that the current problem of youth unemployment in the country is not only due to the lack of jobs, but also due to the lack of vocational training and skills of unemployed and job-seeking citizens. This is due to the fact that it does not meet the requirements of the labor market.

For example, it is a fact that the market structures (and even state structures) operating in the country are staffed by professionals with experience and knowledge of the principles of market economy. On the other hand, there is an army of unemployed people with higher education in the country. Therefore, it is necessary to ensure the employment of unemployed and job-seeking citizens in the country, to provide them with relevant professions and specialties that are competitive in the labor market and meet modern requirements. The development of the non-oil sector requires an increase in the number of young people who have mastered modern professions. However, statistics show that although the number of vocational students has increased slightly over the past five years, the percentage of young people receiving vocational education has declined. This shows that the main problem of the youth labor market is related to education. This problem manifests itself in both higher education and vocational education.

Table 1: Education level of the employed population aged 15-29 distribution by (thousand people)

Age groups	Total	Including education:					
		high education	vocational	first profession	exactly average	overall average	Primitive
2012							
Busy population - total	4445,3	722,7	457,9	238,6	2710,5	275,6	40,0
15-29 of them are young people including:	1107,1	241,5	130,3	44,8	552,7	136,5	1,3
15-19 years old	83,9	0,8	3,4	1,3	62,8	15,5	0,1
20-24 years old	414,0	67,3	46,4	17,4	229,4	53,0	0,5
25-29 years old	609,2	173,4	80,5	26,1	260,5	68,0	0,7
2018							
Busy population - total	4879,3	814,8	536,7	268,4	2932,5	287,9	39,0
15-29 of them are young people including:	1244,4	255,8	136,1	47,5	694,9	108,1	2,0
15-19 years old	91,1	-	5,5	2,4	67,9	15,1	0,2
20-24 years old	444,0	77,1	50,4	20,3	250,1	45,3	0,8
25-29 years old	709,3	178,7	80,2	24,8	376,9	47,7	1,0
As a percentage of the total number of employed population and youth							
2012							
Busy population - total	100,0	16,3	10,3	5,4	61,0	6,2	0,8
15-29 of them are young people including:	100,0	21,8	11,8	4,0	49,9	12,3	0,2
15-19 years old	100,0	1,0	4,1	1,5	74,8	18,5	0,1
20-24 years old	100,0	16,3	11,2	4,2	55,4	12,8	0,1
25-29 years old	100,0	28,5	13,2	4,3	42,7	11,2	0,1
2018							
Busy population - total	100,0	16,7	11,0	5,5	60,1	5,9	0,8
15-29 of them are young people including:	100,0	20,6	10,9	3,8	55,8	8,7	0,2
15-19 years old	100,0	-	6,1	2,6	74,5	16,6	0,2
20-24 years old	100,0	17,4	11,3	4,6	56,3	10,2	0,2
25-29 years old	100,0	25,2	11,3	3,5	53,2	6,7	0,1

Source: Official website of the State Statistics Committee of the Republic of Azerbaijan
(<https://www.stat.gov.az/source/demography/ay/>)

The problem in higher education manifests itself in the problem of training specialists who meet the requirements of the labor market. Thus, the dynamic development of the country's economy has increased the needs of the labor market for highly qualified personnel. Unfortunately, many universities in the country are not able to train personnel that can fully meet modern requirements. One of the main reasons for this is that many universities still do not have higher education at the level of modern requirements, and the second main reason is the admission of young people with low levels of knowledge to universities in order to complete the plan. The economic activity of young people varies according to age and level of education. Thus, while 20-24 and 25-29 year olds have higher education, 15-19 year olds have higher economic activity. Among economically active young people, the share of those without any profession is highest among 15-19 year olds, relatively low among 20-24 year olds, and lower among 25-29 year olds. Analysis of the employed population by age group shows that the 25-29 age group has the highest employment rate among young people. While this indicator has been declining year by year for 20-24 year olds, it has increased for 15-19 year olds. The analysis of the level of education of the employed population by age groups in the table shows that secondary education is predominant in all age groups. Thus, only 16.4% of the employed population has higher education, 10.7% have secondary special education, 5.3% have vocational education, and 68% have secondary and primary education. It should be noted that vocational schools are considered the main force of the economy in Europe. Therefore, Western governments create all conditions for the development of vocational schools for quality and secure education, allocate the necessary funds. In Europe, at least 20-25 percent of teenagers go to vocational education every year, while in Azerbaijan this figure is less than 10 percent. However, research shows that in the next 10 years, more than half of the world's jobs will be filled by mid-level professionals, rather than highly educated professionals. Therefore, in recent years, the country's leadership has made a number of decisions on the development of this area. These problems can be divided into several areas. First of all, we can note the decrease in the number of vocational schools and students in the country. It should be noted that currently there are 111 vocational education institutions under the Ministry of Education. Of these, 14 Vocational Education Centers, 28 vocational high schools, 37 vocational schools, 2 Vocational Training Centers are currently being improved by the State Agency for Vocational Education, but the number of students has not only increased, but decreased. Due to the declining number of students in vocational schools, most industrial enterprises and companies have difficulty finding skilled workers. For example, the HR department of Accord, where we were conducting the research, said that they mainly prefer professionals with certificates and diplomas. But it is very difficult to find such staff.

Table 2: Vocational schools and those studying there

Years	Number of vocational schools and lyceums	Students
1991	176	82188
1995	160	27689
2000	110	22944
2013	108	30 644
2015	113	25414
2017	112	23814
2019	111	23915

*Source: State Statistics Committee of the Republic of Azerbaijan.
<https://www.stat.gov.az/source/education/>*

Another major problem is that the training of staff in vocational schools in our country does not meet modern requirements. Thus, although the State Agency for Vocational Education currently provides vocational education in 161 specialties in 9 areas, these are mainly specialties in service, construction and agriculture. Vocational schools do not have sufficient opportunities to train personnel in specialties that meet the modern requirements of the industry and work with the latest technologies. One of the reasons for this is the weak material and technical base of most vocational schools, which is extremely outdated, and another reason is the lack of qualified teachers to teach students modern professions. In general, the most serious problems in the field of vocational education in Azerbaijan are non-compliance of material and technical and educational base with modern requirements, uselessness of teaching equipment, machines and mechanisms, extremely low salaries of engineers and teachers, lack of necessary knowledge and skills of graduates and other problems have been identified. The amount of funds allocated from the state budget still does not allow building vocational education at the level of modern requirements. Thus, only 1.7% (54 million manat) of education expenditures in the 2019 budget was allocated for vocational education. This does not allow improving the quality of vocational education at any level.

Table 3: Vocational training of personnel

	2005	2010	2014	2015	2016	2017	2018
Vocational training - total	5254	4792	6914	7453	4815	4502	5629
From them:							
Redesigned	2143	1503	2687	4029	681	1180	804
They have improved their skills	5196	3389	4136	3888	11147	7102	3302
Out of the total number of employees who have been trained and retrained:	10450	8181	11050	11341	15962	11604	8931
Directly in the enterprise	4540	2153	4091	4164	7324	2117	2847
Abroad	123	118	49	33	28	119	44
In educational institutions	18	186	1695	4002	1344	3838	1437
In advanced training institutes	86	218	607	441	694
in refresher courses	5129	2924	6659	5089	3909
Women	1501	712	665	440	751	488	1012

Source: State Statistics Committee of the Republic of Azerbaijan

3. CHARACTERISTIC PROBLEMS OF THE SYSTEM OF VOCATIONAL EDUCATION AND TRAINING IN AZERBAIJAN

One reason for this is that the private sector has not yet participated in the financing of vocational education. Companies in European countries are interested in the professionalism of the person who produces their products. Therefore, it is interested in recruiting students from vocational schools and selecting successful staff from among students. Therefore, they pay for the furnace school, place orders and participate in the training of students they plan to hire in the future. That is, a private company is closely involved in the financing of vocational education. In Azerbaijan, however, employers are not interested in operating at a level that meets existing standards and having high human resources, as they enter foreign markets not with industrial products, but rather with natural resources. In our country, private companies not only allocate funds for vocational education, but also welcome internships. As can be seen from the table above, the number of its own employees is very small compared to the number of such labor resources. This shows the indifference of the private sector to stove education. In this regard, the change is that vocational schools should monitor the labor market, monitor and strengthen cooperation with the private sector.

Due to the lack of such monitoring from time to time, there is no information on the number of real jobs, specialties, professions in the labor market. Monitoring is carried out formally. Monitories receive information from the employment service. In the country, 5-6 percent of 100 unemployed apply to employment services. In this case, it is impossible to determine the real demand. It is no coincidence that there is a big difference between the number of job seekers in the country and the number of people sent to vocational training by employment services compared to the number of unemployed without any specialization.

Table 4: Those sent for vocational training by employment services

They have passed vocational training		Total	Including		
			Prepared for the first time	Redesigned	Those who improve their skills
2000		1394	1260	52	82
2002		2321	2008	183	130
2003		2206	2028	103	75
2004		2111	1925	58	128
2005		1542	1434	20	88
2012		3150	1041	1680	429
2015		4147	3697	52	398
2016		3352	2908	33	411
2017		3561	3154	109	298
2018		2559	2213	29	317

Source: State Statistics Committee of the Republic of Azerbaijan

However, only 10 percent of the 201,000 people registered as unemployed in the Employment Service have a technical vocational diploma. According to experts, teenagers are less likely to go to vocational schools because they do not guarantee that they will find a job. An analysis of official statistics shows that one in five technical graduates has a chance to find a job. A measure of the quality of technical vocational education and the degree of mastery of the knowledge taught there could be statistics showing the frequency of employment of graduates. Unfortunately, neither vocational schools, nor the ministry, nor the State Statistics Committee conduct such an analysis in Azerbaijan. In general, as shown in the Strategic Roadmap for the Development of Vocational Education and Training in the Republic of Azerbaijan, the current system of vocational education and training in our country is characterized by the following characteristic problems:

- Lack of updated and flexible regulatory framework for initial vocational education;
- Obsolescence of material and technical and educational base;
- Non-compliance of educational programs, textbooks and teaching aids used in the vocational education system with modern requirements;
- Lack of a progressive mechanism for evaluating and monitoring the activities of vocational education institutions;
- Incomplete compliance of the existing management in the vocational education system with the principles of market economy and insufficient efficiency of the mechanism of its financing from the state budget;
- Non-participation of employers in the financing of vocational education institutions and the lack of an appropriate legislative framework for this;
- Unsatisfactory level of training and salaries of staff working in the vocational education system;
- Poor vocational guidance in general education institutions;

- Non-compliance of graduates with the requirements of the labor market;
- Existence of the first vocational education institutions carrying out parallel training in the same professions;
- The vast majority of educational institutions are used for other purposes.

The following strategic goals have been identified to address these issues:

- Provision of improved normative-legal, economic and information base of vocational education;
- Formation of a new positive image of vocational education;
- Establishment of a management structure of vocational education institutions based on improved public-private partnership;
- Establishment of a network of rationalized and optimized number of state vocational education institutions;
- Increasing the attractiveness of the vocational education system for the private sector;
- Formation of vocational education institutions with modern infrastructure, material and technical and educational base;
- Achieving funding for the vocational education system based on the new economic model;
- Training of engineering and pedagogical staff who can meet the requirements of the labor market in the system of vocational education;
- Improving the employment of graduates of vocational education institutions;
- Inclusion of vocational education in the list of priority areas as the next stage of education.

The work carried out by the State Agency for Vocational Education in this direction indicates an increase in attention to vocational education. However, in parallel with this work, vocational education institutions must use the most modern forms of competitive training. For example, in developed countries, the brand of most vocational schools is found. It was accepted that if vocational schools train people to work in production, if they are engaged in this work, they should gain this image. This should be done in Azerbaijan as well. It could also be the brand of the graduate studying there to help him find a job tomorrow. In Europe, vocational schools are considered the main force of the economy. Therefore, Western governments are taking advantage of every opportunity to provide quality and secure education. In order for this education to be effective in Azerbaijan and for teenagers to be interested in it, the skills of starting a business in the specialty taught must also be instilled in vocational schools and lyceums.

4. PROBLEMS WITH INFORMAL LABOR MARKET AND WAGES IN YOUTH EMPLOYMENT

One of the most serious problems related to youth employment is the informal labor market. The high number of workers in the underground labor market or in the informal sector poses a serious challenge to the country's youth employment policy. The fact that hundreds of thousands of people are engaged in informal employment means that labor legislation does not apply to these people. The employment of such workers is beyond the control of both the state and trade unions. However, if we take into account that 1,729,600 of the economically active population are engaged in agriculture, and most of them are engaged in labor activities without entering into formal labor relations, there is no doubt that this figure is much higher. It is true that those to whom land certificates were issued in Azerbaijan are listed in the employment law as employed people. However, because most young people living in rural areas do not have land in their name, they are either unemployed or work in the informal sector. In general, experts estimate that about 25-30% of the population engaged in economic activity in Azerbaijan is a

participant in the informal labor market. Thus, the share of the informal sector in the economy is on average 18.4 percent in the developed European Union and 8.6 percent in Australia, Canada, Japan, New Zealand and the United States. The majority of participants in the informal labor market are young people. Work needs to be done in this area to improve youth employment. It is no coincidence that over the past year, the Ministry of Labor and Social Protection has taken serious measures to prevent informal employment. One of the most serious problems with youth employment is the low level of wages paid to them. This causes young people to work in several jobs at the same time. As a result, their opportunities to increase their professional level and become professionals in one field are limited. One of the factors that negatively affect the employment of young people is the seasonality of jobs. Seasonal or temporary jobs make up a significant part of the country's workforce. The majority of seasonal workers are employed only in certain parts of the year, while in other periods they are virtually unemployed. Such jobs include tourism complexes, a number of recreation centers, in other words, enterprises that do not work with the same tension during the year, and so on applies to jobs. The majority of those working in such places are young people, and at the end of the season they are forced to become unemployed. Due to the seasonal nature of many agricultural activities, this has a negative impact on the full employment of young people living in rural areas. To solve the problem, it is important to develop the agro-industrial sector in the regions. Unequal distribution of the population by zones and pseudo-urbanization are among the factors affecting youth employment. The concentration of the bulk of the labor force in the capital Baku and the Absheron Peninsula has a negative impact on both the economic development of the country and the employment of young people. At the same time, the inequality in the geographical size of the labor force is deepening. Although a lot of work has been done to solve this problem since 2003 within the framework of State Programs for Regional Development, the problem has not been fully resolved. The influx of young people in the capital is still high.

5. CONCLUSION

As these and other problems have a negative impact on the employment of young people, it is necessary to carry out large-scale work to address them. Among them are the following:

- Training of competitive young personnel meeting the requirements of the national and international labor market, increasing the level of education and the number of vocational students among the youth;
- Promotion of development in higher education institutions in the format of "education-research-innovation", adaptation of primary vocational and secondary special education to the requirements of the labor market;
- Increasing the level of employment of young graduates in accordance with their specialties, creating favorable conditions for young people to get jobs in enterprises and organizations, regardless of the form of ownership;
- Strengthening the propaganda work on the activities of the first vocational schools in secondary schools in order to attract young people to the first vocational schools, the recognition of certain advantages for graduates of vocational schools;
- Improvement of the vocational training system to increase employment opportunities for young people graduating from primary vocational schools in the labor market;
- Implementation of active measures to attract graduates and students of higher education institutions to jobs in their specialties (for example, holding fairs with the participation of employers) for graduates of primary vocational and secondary vocational education institutions;
- Creation of the necessary living and employment infrastructure in order to stimulate young people to go to regions with labor shortages;

- Increasing the number of professional and knowledgeable young people in the civil service and management, the formation of a modern way of thinking in young people, their involvement in management and research activities;
- Development of entrepreneurship among young people, development of self-government and economic self-sufficiency skills of young people;
- Establishment of a system of social partnership of employers with educational institutions, adaptation of educational results to the requirements of the labor market and development of a mechanism for internship and employment of school dropouts, envisage certain benefits for employers to hire young people with no practical experience;
- To ensure that young employees acquire new knowledge and experience in accordance with innovative development, to organize internships and internships paid for by the state in order to increase the practical skills of young people;
- Implementation of innovative ideas and creative initiatives of young people, creating a basis for their application in practice, increasing the number of young people working in the field of science and technology, etc.;
- Establishment of an information system on the demand and training of personnel in the labor market, acceleration of the establishment of the National Information System in the field of employment; search activities.

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VALUATION OF RESEARCH PERFORMANCE AND SCIENTOMETRICS INDICATORS

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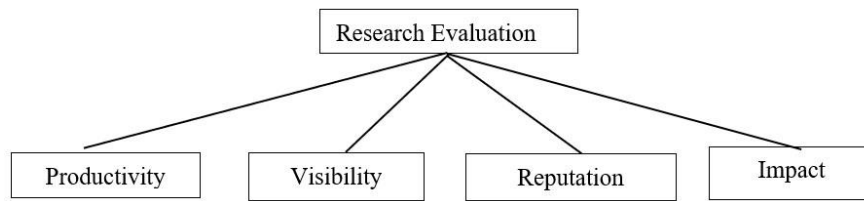
ABSTRACT

In modern times, the main purpose of scientific activity is the use of new technologies and innovative steps to acquire new knowledge and improve the quality of life. There are several methods to convey the obtained results to users. At present, the evaluation of scientific results with scientometrics indicators is especially relevant. At all stages of management of scientific activities and stimulation of scientific achievements, these methods are used. From the first days of its implementation scientometrics methods have been the main subject of continuous and intense discussions and have been assessed differently in the scientific community. In the article, the advantages of the methods and the inconsistencies that may occur during their implementation have been elucidated. In order to eliminate these discrepancies, scientific organizations cooperate with various scientific bases in addition to applying modern methods. Moreover, various indicators are developed and practically tested in scientometrics. This is one of the factors that positively affect the evaluation of the effectiveness of scientific activity. As a result, the evaluation of the effectiveness of scientific activity depends on the use of different indicators and the purpose of their use. The involvement of professionals in this process is important. The efficiency and productivity of research depends on its qualitative and quantitative indicators. These indicators can be adjusted through various scientific databases, such as "Web of Science" database of Clarivate Analytics Company and SCOPUS database of Elsevier Company. In international scientific databases available worldwide, automatic statistics of researchers' citation indicators (H-index) is provided through "Web of Science" (Clarivate Analytics Company), SCOPUS (Elsevier) and GoogleScholar systems. In the article, based on the different features and scientometrics indicators of these bases, possible comparing methods of the effectiveness of scientific activities have been analyzed and statistically assessed.

Keywords: *Citation, Impact factor, Scientometrics, Scientific Databases, Statistics*

1. INTRODUCTION

In order to analyze academic achievements, it is important to analyze each author's research work in terms of quality and quantity. This factor is the main criterion in the evaluation of scientific activities in Azerbaijan as well as all over the world. The reason changed this factor is that the scientific research conducted by researchers is disseminated to the public through articles. Historically, new scientific indicators have created conditions for the implementation of new methodologies. As science, technology and innovation policy has developed, scientific methods have been used in research evaluation in the USA and then in European countries after 1960-1970. In 1960, the Institute for Scientific Information (ISI) has been founded by Eugene Garfield in the United States. The Institute for Scientific Information has started to apply new methods in this field by evaluating scientific activities from various aspects. Before the implementation of the scientometrics methods, the following aspects should be analyzed to evaluate the research of a higher education institution, research group or researcher (Figure 1). These aspects are interdependent and interrelated. When assessing research, it is important to analyze it in terms of productivity, visibility, reputation, and impact to identify the strengths and weaknesses of the research.

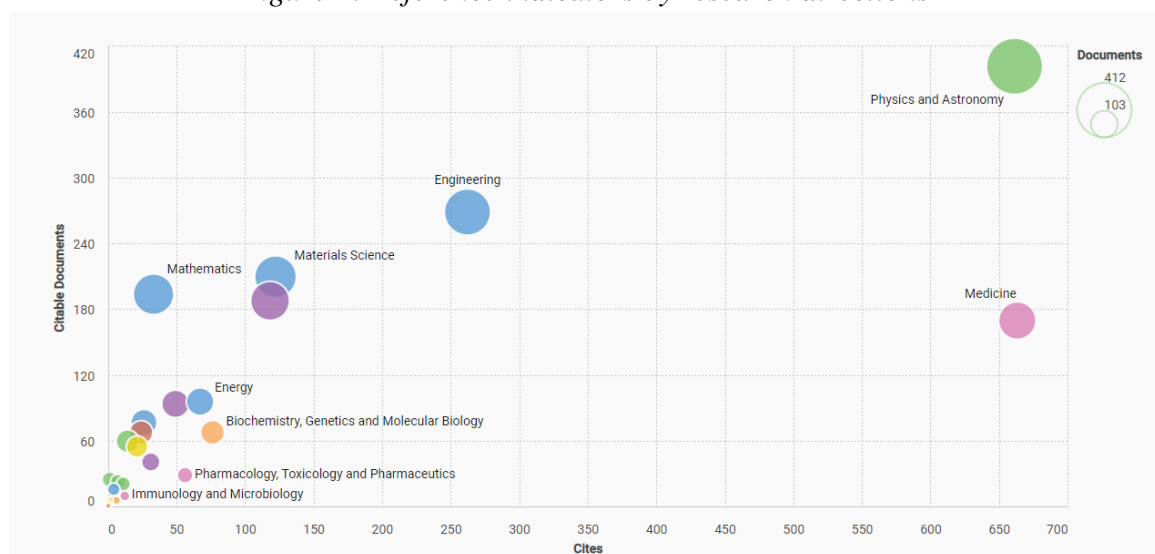
Figure 1: Assessment aspects of the research

Source: Research Evaluation Metrics (page 2)

The scientific methods applied to calculate the effectiveness of scientific thought and the efficiency of various scientific units (higher education institutions, groups, individuals) in terms of the number of published scientific articles and citations in a current period are extensively researched in the article. At present, scientometric methods are used to assess the scientific quality of universities, researchers and journals. For an accurate and correct scientometric research, it is important to clearly state the source of data about the publication and references. Different databases using scientometric methods are created on different principles. Thomson Reuters (Science Citation Index (SCI), Social Science Citation Index (SSCI), Arts&Humanities Citation Index (A&HCI)), Elsevier (Scopus), Google (Google Scholar Citations), Microsoft Research (Microsoft Academic Search) and other databases are included scientific databases.

2. RESEARCH EVALUATION METRICS AND RELATED INDICATORS

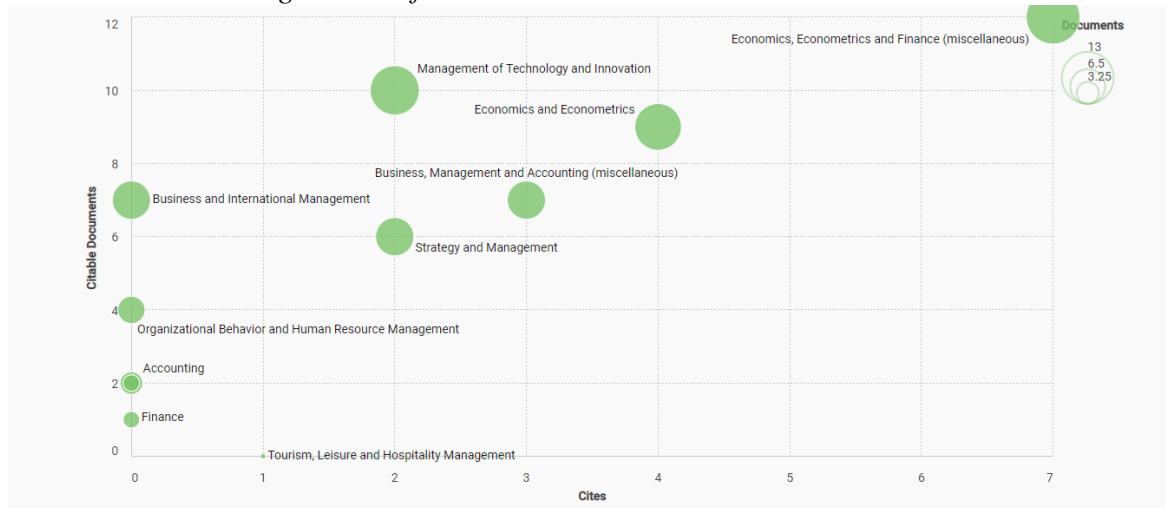
The reference has an important role in the evaluation of the research by the scientometric method. Citation analysis is the most important method in calculating the impact of scientific publications. This is a key indicator of increasing the scientific activity of the university. The implementation of this analysis contributes to the improvement of reference indicators and the formation of new scientific disciplines and research groups (2). Through reference tools and many reference databases, it is possible to immediately prepare scientometric profiles and scientific reports of the country, higher education institutions, research groups, journals and scientists. Analysis of references is not limited to calculating the number of authors' articles. The analysis of references allows determining such relations between articles, on the basis of which it is possible to select clusters of related works on the theme. Due to this, a map of science can be compiled.

Figure 2: Reference indicators by research directions

Source: <https://www.scimagojr.com/viztools.php>

In the Figure 2, during the comparative analysis of the Citeable Documents and Cites indicators of research directions in Azerbaijan, it is stated that the scientific directive indicators of Physics and Astronomy are high. If we apply this analysis on economics, we will get the diagram shown in Figure 3.

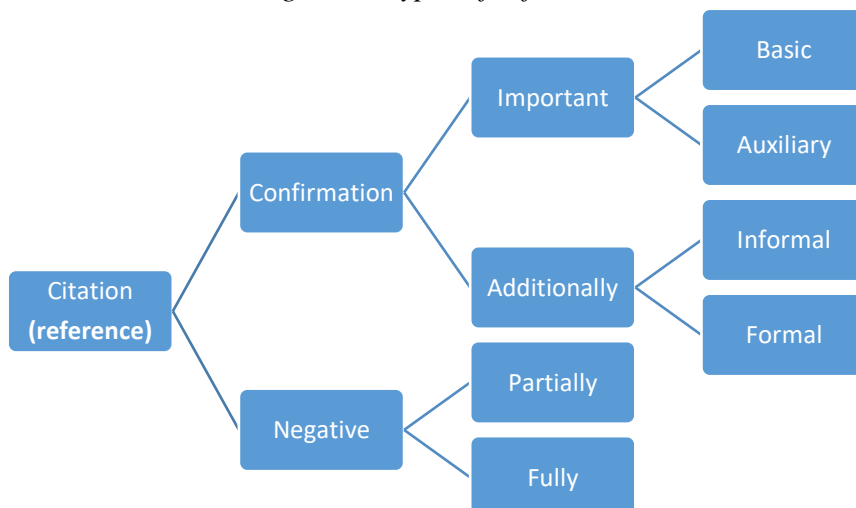
Figure 3: Reference indicators on economics science



Source: <https://www.scimagojr.com/viztools.php>

According to the data in Figure 3, it can be said that economics and econometrics is mostly cited in the field of economics in Azerbaijan. The reference indicator of a scientific publication is measured by the Citation Index (CI). The citation index is one of the most widely used scientometric indicators and is used to scientifically evaluate scientific results. It should be noted that the number of references is not an indicator of quality, but rather an indicator of usefulness and reputation (1).

Figure 4: Types of reference



The metric indicators of the reference indicators of scientists include H index, i10 index, eigenfactor score and so on. Although the number of publications and citations of two scientists from different research fields is the same, the assessment of the author's scientific activity is carried out differently.

According to the H index, which is the quantitative characteristics of efficiency based on the distribution of references to the scientist's works, the effectiveness of scientific work can only be compared within the same field of knowledge. The H-index is calculated by the author through a comparative analysis of quantitative and qualitative indicators. Thus, if we evaluate the total number of articles written by the author as N_p and the number of citations as h , then we get:

$$N_p - h \leq h.$$

Table 1: Number of publications and citations

Paper	1	2	3	4	5	6	7
Citations	130	85	24	15	9	4	1

The highest (upper) value of the Hirsch index is limited by the total number of works of the scientist, that is, even if the highest reference to publications is N , the Hirsch index will never be higher than N . In the example, the author's H index is 5. H-index of 5 if 5 of 7 papers have at least 5 citations each and the other 2 papers have ≤ 5 citations each. i10-Index-the number of publications with at least 10 citations (4). In the Google Scholar scientific database, scientific publications are calculated on this index. Among the research fields of economic science in Azerbaijan for 2018-2019, the H-index varies between 2-8. The highest H-index is in the field of economics and econometrics, and the lowest is in the field of accounting (Figure 5).

Figure 5: H-index of research directions



Source: <https://www.scimagojr.com/viztools.php>

To evaluate scientific activity, it is important to review the citation analysis of journals. Clarivaty Analytics' JCR and Elsevier's Cite Score are journal evaluation metric. Using this method, it is possible to determine the impact factor of the journal:

$$\text{Journal Impact Factor (JIF)} = \text{Cite Score} = \frac{\text{Cites to recent items}}{\text{Number of recent items}}$$

Cites to recent items- number of citations to this journal in 2019. Number of recent items - the total number of articles published in the journal in the last two years.

If the number of citations in the journal in 2019 is 292, and the number of articles is 132, then:

$$JIF = Cite\ Score = \frac{292}{132} = 2.21$$

In order to evaluate the journal scientifically, it is classified by quartiles. Q1 journals are journal with the highest index and Q4 journals are included in the emerging journal list.

Table 2: Quartiles of journals

Quartile	% range
Q1 – first quartile	99-75
Q2 – second quartile	74-50
Q3 – third quartile	49-25
Q4 – fourth quartile	24-1

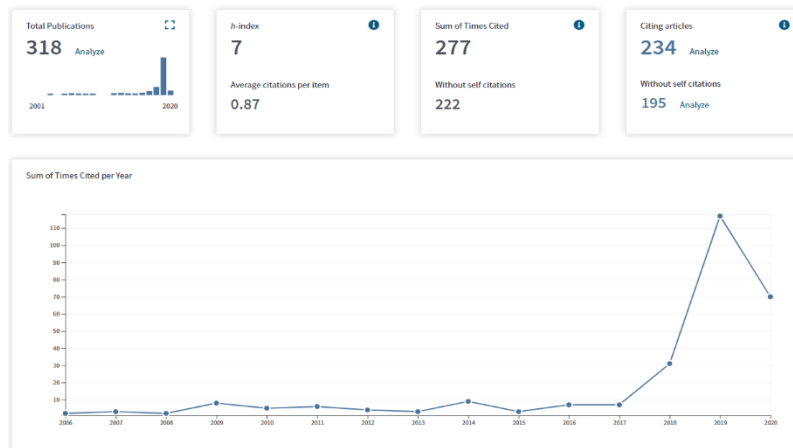
The emerging journal list will not be used as an impact factor. However, each journal in this new index had been evaluated every year and those qualified will be transferred to SCIE.

3. INNOVATIONS IN MEASURING SCIENCE AND SCHOLARSHIP

The fact that information and communication technologies are one of the main factors affecting the development of society in modern times has created conditions for the application of new methods and technologies in the assessment of scientific activity. These include authoritative and international databases such as Web of Science Core Collection (Clarivaty Analytics) and SCOPUS (Elsevier), which contain electronic publications with international summarization and indexing systems (databases). The main provisions of the Regulations on the Supreme Attestation Commission under the President of the Republic of Azerbaijan include the publication of the researcher's articles in periodical scientific publications in the Web of Science Core Collection (Clarivaty Analytics) and SCOPUS (Elsevier). Moreover, due to granting universities the status of research universities, decisions are made by the university administration to stimulate researchers to publish at least 10% of the number of articles published in international journals (Web of Science, SCOPUS) by staff of higher education institutions in the last calendar year. In this regard, the salaries of the teaching staff are determined according to "Rules on the differential salary system based on the assessment of the activity of the teaching staff at the Azerbaijan State University of Economics (UNEC)". In this system, 70% of the assessment of UNEC teaching staff activity is scientific activity indicators of that staff. Moreover, in order to motivate the researcher, it is planned to give the status of "research professor" to the teaching staff whose articles are most cited. According to this law, a person who receives a "research professor" will receive a special salary in a special way. The implementation of these laws has affected the performance of the university (Figure 6) over the years as follows.

Figure following on the next page

Figure 6: Report reflects citations Azerbaijan State University of Economics (UNEC)



Source: http://apps.webofknowledge.com/summary.do?locale=en_US&errorKey=&viewType=summary&product=WOS&search_mode=CitationReport&page=1&qid=2&SID=F18722ogPHMOnU8B7Ys

According to the data in scheme, it can be stated that the university's scientific indicators have increased due to the reforms and decisions made in recent years. Furthermore, the mentioned innovations can be applied to motivate the scientific activity of scientists and researchers using modern technological innovations. At present, there are easy ways to register references in reputable scientific databases that contain electronic publications. Clarivaty Analytics (EndNote), Elsevier (Mendeley) and Google Scholar Library are among these services. These services include the ability to add automatic references to the article, to collect the author's bibliography on research directions in the profile and the automatic reference to these scientific works, if necessary (Table 3).

Table 3: Reference management tools

End Note	Mendeley	Google Scholar Library
Referance storage and automatic reference updating	Search a lot of online resources for	Search online scientific resources
Annonate and search pdf text, annotations	Search, open and download	Adding scientific resources to your library
Webpage reference capture	Create bibliographies	My citations-contains article you have cited
Composite references	Share artcles, references with colleagues	Cited by me-cuontain your profile article
Multiple bibliographies capability	Manage your reseach from	

For distinguishing authors with the same name and surname and observing the scientific effectiveness of the researcher, the researcher should register on ResearcherID and ORCID systems and regularly upload new articles to the user profile (3). When a researcher applies for the publication of a new article, the editors of the journal first look at the author's scientific profiles, and this indicator plays an important role in their decisions. ResearcherID belongs to the Web of Science, and ORCID to the Scopus database. Web of Science journals look at the authors' ResearcherID, and Scopus indexed journals look at the authors' ORCID profiles. Some journals' manuscripts submission systems look at the author's user profile on both systems. In addition, Google Scholar and Publons provide this service to researchers. It should also be noted that researchers can increase the number of references when they share their research on social media.

Researchers can register on Research Gate, Academia.edu, SSRN academic social media, and share their articles with a wider audience. Academic social networks offer the following services to researchers (Table 4).

Table 4: Academic Social Networks

Research Gate	Academia.edu	SSRN
Add your publications, make your research visible	Add your publications, papers, presentations and research datasets	Add your publications to appropriate specialized research area
Connect with colleagues, peers, co-authors and specialist in your research area	Viewing your profile and documents	In all subject categories
Get stats about views, downloads and citations of your research	Following and followers	Top papers (10.000 papers), authors (30.000 authors) and Institutions (3250 institutions)
Post questions and answer	Interact with other researchers	

4. CONCLUSION

In Azerbaijan, every year cite index integrating into science and education sphere. Nowadays this indicator actively using in the next directions:

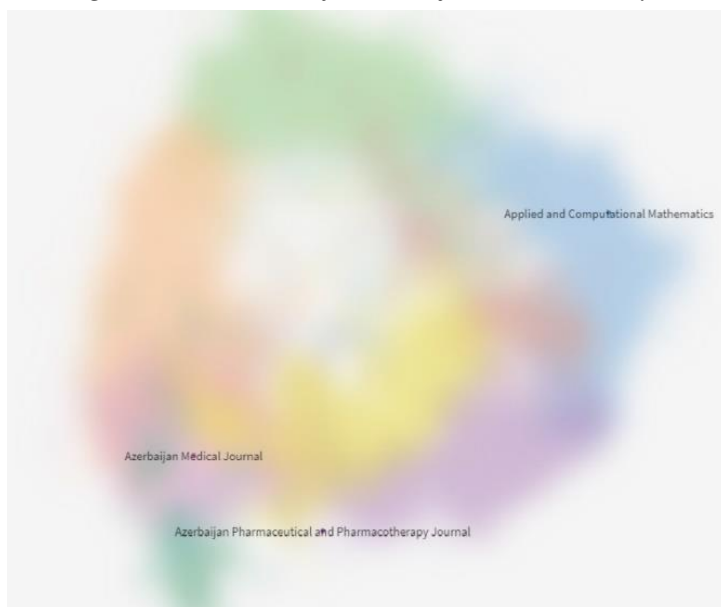
- For performance assessment of Azerbaijani scientists and science-educational organizations in general;
- For attestation of research and teaching academic staff and assessment of results of their scientific activity in science-education organizations;
- By publishers of scientific literature and scientific and technical periodic publications for demand forecasting of the concrete author from the target audience.

In this way, using scientometric methods is a quite useful and convenient tool for planning and assessments of scientific activity how in sphere of strategy for planning scientific research and regarding its current implementation. However, the existing objective shortcomings do not allow the use of scientometric indicators only for assessing the activity of a scientific institution or university and making any administrative decisions based on these indicators. Creating a national reference database at the state level to ensure competitiveness with countries around the world will create conditions for the wide dissemination and popularization of the scientific achievements of the country's scientists around the world. Moreover, it will help to improve the quality of scientific publications and articles and their proper evaluation. Analyzing the scientific reference database helps to obtain the following information:

- Determination of promising and developing fields of science;
- Determination of scientific trends in development or in decline;
- Determination of the effect level of the journals.

The most important issue is the inclusion of local journals in international summary and indexing databases. Currently, the situation in Azerbaijan according to the journal publication in the SJR system is as follows (Figure 7).

Figure following on the next page

Figure 7: Journals of Azerbaijan in the SJR system

Source: <https://www.scimagojr.com/viztools.php>

New reforms are needed in this direction, and it is commendable to benefit from the experience of the China Republic, which is currently one of the world's leaders in this field. It is recommended to take measures in the following directions to increase the activity of publications at the university level, as well as to better present scientific results in international reference indexes and achieve high results in this field:

- Strict regulation of the university's name as the author's place of work in the publications to avoid uncertainties and errors in indexing university publications;
- Inclusion of requirements for the availability of publications during tenders for replacement of teaching staff, which allows to increase the level of staff;
- Determination of additional payments and bonuses depending on the number of publications and references in international databases;
- Compensation for publications in rated journals, etc.;
- Teaching the use of electronic sources and scientometric tools for improving the skills of scientific and pedagogical staff and training of postgraduates and students in the basics of academic writing rules for planning their scientific activities;
- Expansion of the process of subscribing to electronic sources and modernization of research equipment which allow scientists to get acquainted with the most up-to-date scientific information and plan the direction of their research in accordance with modern world trends.

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THE APPLICATION OF THE INNOVATIVE METHODS IN THE EDUCATIONAL PROCESS

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ABSTRACT

In the modern era, the development of innovative methods has turned into one of the important indicators of intellectual and scientific potential of each country. At a time when scientific and technological progress covers all areas of life application of innovative methods during the lesson with a view to improving the quality of teaching in educational institutes has become one of the important tasks. Formation of the structure of innovative activity in education, world-class application are the priority areas of education. From this standpoint, electronic resources, equipment have been created for educational informatization in educational institutions; in a word, all conditions are created in order that educational institutions work in the electronic education system. The main goal of ongoing education reforms is the restructuring of the educational process, the application of innovative methods in training. Currently, the main task in the education system is to master new pedagogical technologies and their effective use, to improve the quality of education. In a word, creation of a new learning model using innovative methods meeting the requirements of the XXI century and its use in the educational process is a demand of the modern era.

Keywords: *The modern epoch, Innovative methods, Education system, E-education (electronic education), Educational institutions*

1. INTRODUCTION

Education in the modern era demands a new approach to teaching methods in educational institutions. Teachers try to stick to innovative teaching methods. To teach students to think independently, to develop communicative, creative skills, teachers need to learn and use new techniques. At this point of view, teachers, following to the requirements of the modern lesson, apply new technologies, frequently develop and effectively use these opportunities to conduct a quality lesson in classrooms. High-quality training directly depends on how deeply the teacher knows his specialty, has sufficient experience and abilities, and of course, on his activities. Effective use of information and communication technologies in the learning process is the main goal of the teacher. Using the opportunities of ICT in the lessons, the teacher can conduct a quality lesson. The use of ICT in lessons enriches the lesson, gives students the opportunity to carry out research, access to numerous information databases, and also helps to apply their knowledge into practice. An innovative teacher who owns the knowledge and abilities of the 21st century, using various ICT opportunities, can create a new model of the lesson, developing in a professional direction, integrate into world education. The responsibility of the teacher is to educate students. In other words, the teacher helps students in mastering the main components of the lesson, at the same time, finds practical methods and ways to master their knowledge and its application. And student is a researcher who discovers new knowledge. Applying ICT during the lesson, the teacher makes up a work plan, prepares materials for program, and shows presentations. The results obtained with the systematic use of information technology in training show that information technology completely changes the learning environment, creates the opportunity to elevate the level of training. As a result of the widespread and comprehensive application of information and communication technologies in the lessons, the student's worldview is completely changing, completely new realities, values,

socio-psychological environment are being formed. A modern lesson should be built in accordance with the level of training of students and the circle of their interests. It is very difficult to imagine a modern lesson without ICT. A modern lesson is, first of all, a teacher who has ICT capabilities and a computer, a projector, and an audience that meets modern requirements. Through information and communication technologies, students develop intellectual and creative skills, as well as the ability to work with various information technologies. A modern teacher to prepare a lesson that meets modern requirements, must effectively apply ICT. You should also give preference to the use of Internet resources during the lesson, as a result of which students learn the correct use of the Internet and master creative knowledge. Electronic visual aids are teacher's resources that provide methodological support in preparing for the lesson. Another advantage of the electronic lesson is that all stages of the lesson are reflected in the slides. And this in turn, increases the efficiency and interest in the lesson. The use of an electronic whiteboard in the lesson, which is one of the innovations of ICT, increases the attention and interest of students in the educational process, pushes for search. When interest emerges, whether weak or strong, all students are actively involved in the lesson process. Even the weakest student who does not decide to express his opinion willingly takes part in the lesson process with the use of modern teaching technologies. It should be marked that digital learning resources cannot be submitted in written form. Otherwise, they lose their didactic qualities. In the traditional methodology, the teacher gave certain knowledge and required it, however, using the interactive form of training, the student plays the main role and finds ways for mastering the knowledge himself. And this affects their learning motivation. In this situation, the teacher acts as an active helper and its main function is the organization and stimulation of the educational process. What opportunities does the use of information methods give during the lesson?:

- Improving the effectiveness of the lesson and the quality of knowledge;
- Striving for modern educational goals;
- Increasing the motivation of students;
- Make lessons emotional and memorable;
- Implementation of an individual approach in the lesson.

The use of computer technology in the lessons is among the innovative teaching methods. Today, we can say that all educational institutions are equipped with computers. The use of ICT by the teacher implements the acquisition of quality knowledge by students that meets modern requirements. Practical work in universities shows that students are better at visual information retrieval. No wonder it says that it is better to see once than to hear a hundred times.

2. MATERIALS AND METHODS

As the main material in the work, innovative methods in teaching are considered. Accordingly, the development of innovative processes is a way to ensure the modernization of education, improve its quality, efficiency and accessibility. In the work, we referred to the interactive method and the problem statement method.

3. RESULTS

Surveys have shown that innovative teaching methods encourage students to be active, proactive, reflective, and allow them to become involved in the educational result. The criteria for innovative teaching methods at the university are: the availability of a reflective type of thinking, the capability to design new forms of action, the ability to build productive communication in a group solution to a problem in an uncertain situation. The ability to self-development, self-education in innovative learning is becoming an important task. Education in this context is understood as a cooperative search and generation of a new image of reality.

An important objective of innovative learning is the creation of pedagogical conditions that allow students to feel involved in the educational outcome.

4. DISCUSSION

In modern conditions, various innovative processes are becoming more widespread in the educational system. In the literature of the concept of innovation is interpreted in various ways. In the encyclopedic dictionary, innovation is considered as innovation. So, R.N. Yusufbekova defines innovation as the content of possible changes of pedagogical reality that lead to previously unknown results, developing the theory and practice of training and education. In their works, M.V. Klarin, A.V. Lorensov, N.R. Yusufbekova, L.V. Romaniuk and others highlight the problems of creating, developing and spreading pedagogical innovations, considering them from different perspectives. Thus, T.G. Novikova emphasizes innovations depending on the educational field in which innovations are carried out, on the way innovations are carried out, on the width and depth of innovative activities, on the basis of the nature of the origin of the innovation. S.I. Hesse marks the need to use the method of pedagogical search, pedagogical research, pedagogical practice, that is, the foundation on which pedagogical creativity and experience can be based. So, the creative activity of the teacher is to rationally use in the educational process the methods that ensure the best achievement of the goal set. "The basis of innovative educational technologies applied in the educational process must constitute a social order, professional interests of future specialists, consideration of individual, personal characteristics of students" [6]. When teachers use innovative methods in the training process, they help develop new approaches to professional situations and develop creative skills of both students and teachers. The use of innovations in the educational process is shown through the use of different active forms and teaching methods, these include creating projects, preparing public speeches, discussing problems, artificially creating uncertainties or problem situations, preparing professionally directed videos and presentations, etc. At the present time, all educational institutions are moving from explanatory training to innovatively effective, that is, in the educational process, new computer and various information technologies, electronic textbooks, and video materials are put into practice that provide free search activity and propose development [7]. Today it is necessary to prepare students who totally meet the requirements of our time. From this point of view, teachers should arouse great interest among students, show ways of efficient use of ICT resources and correctly guide students in this field [1]. Also, through technology, it is necessary to induce students to awareness, analysis, exchange of opinions. The modern era requires training through attraction. And as the Chinese aphorism says: "Tell me - I will forget. Show me - I will remember. Attract me - I will learn." The teacher's aim is not only to demonstrate something, but to develop students' creative activity. The educational process using ICT should be organized so that the student actively participated in the lesson, saw the fruits of his work and appreciated it. Practice shows that using the same methods makes a lesson boring. As an advantage of the new teaching technologies, Professor EG Asimov shows: "...the lesson takes place in a full active environment, not only the teacher, but also the students are in search of creativity, an independent form of thinking, initiative, desire for innovation is being formed" [1]. New teaching technologies differ from traditional ones in a number of particular qualities: attracting students to research activity, creating a problem situation by a teacher, obtaining knowledge independently by students. To work with modern teaching methods, the following should be taken into consideration:

1. For active training, the definition of forms of work;
2. Stages of an active lesson;
3. The structure of the active lesson.

In the lessons, teachers use the individual form of work, work in pairs, work in large and small groups. With any form of active learning, the steps should be followed. Motivation should be used when starting the lesson. Then create a problem in motivation, in connection with the problem, students express their opinions, move out assumptions. In the organization of the research, to solve the problem, students should be given a task, in advance for each group to develop tasks on the cards. The teacher chooses the form of work himself. In connection with the tasks given in the exchange of information, students conduct an exchange of opinions among themselves, put forward independent proposals. Surely, the answer of each group is not the same. It is noted which group gave more complete and more accurate answer. At the stage of summing-up, the teacher expresses his attitude to opinions, if there are mistakes, he makes corrections, gives direction, and then makes a general conclusion. For the development of creative abilities, it is expedient to conduct work on the painting in the lessons of the Russian language. In this case, the teacher can suggest the following tasks.

Task - Work on the painting:

1. Give a description of the painting in written form;
2. Give a description of the painting in oral form;
3. Name the painting;
4. Describe the painting in the form of dialogue.

Another equally cognitive work in the audience is the task of working with postcards.

Task - Working with the postcards:

1. Using the postcards, make up a text;
2. Name the text;
3. Divide the text into semantic parts;
4. Make questions to the text.

Contribute lessons using the method of syncwine for the development of cognitive and creative abilities. When composing a syncwine, you should choose a topic so that it is interesting to students. The work of the syncwine method helps the teacher understand the individual abilities of each student. In turn, the method of syncwine contributes to the fact that the student aspires to independently and beautifully express their thoughts. A student tries on a topic to find its main elements, to give their analysis, but at the same time, he takes the key principles of writing a poem as a basis. Thereby, the development and expansion of the student's creative abilities is in progress. Work on the method of syncwine allows students to comprehend and remember the material of the subject. But the teacher can change the form of work according to the method of syncwine. In this case, students will already compose a story based on the finished poem.

Task - Work on the method of syncwine:

1. Make up a story according to the elements of syncwine;
2. Use words and phrases used in syncwine;
3. Edit the finished syncwine.

When choosing the form of a lesson, teachers should take into account the interests of students, for the ability to use ICT at a high level, they should enrich the technical support with the necessary materials, have a creative approach to the lesson, determine the targets of the lesson, create an interactive learning process so that students could gain knowledge through research [8].

The teacher should be able to see the inner world of students, deeply feel the problems they faced, perform the functions of an organizer, coordinator and partner in the learning process, finding solutions, be patient with the mistakes made by students.

5. CONCLUSION

In any professional activity of a person “innovations are present and therefore become the subject of study, analysis, implementation” [5]. Innovations cannot emerge on their own, they are a kind of result of scientific research, the pedagogical experience of teachers and entire collectives. What is innovation? Innovation - is the result of activities to update, transform previous activities, leading to the replacement of some elements by others, or to complement existing ones with new ones [3]. Innovation in the education system is manifested in the introduction of changes in the objectives, methods, content and technologies, forms of organization of cooperative activities of teachers and students, as well as a system for monitoring and controlling the quality of education, and in general for the management system. The use of innovative methods in the educational process gives positive outcomes. They contribute to the development of students' independence in the process of knowledge of linguistic material. With the help of training programs and applications, it is possible to expand the frontiers of knowledge, to form new methods and methods of self-learning and self-realization. In addition, the implementation of a computerized test of knowledge helps to implement the principle of individualization of education [2]. In the Russian language classes, we conduct media lessons. Such classes provoke the interest of students, allow you to focus their attention on the right moments, stimulate activity, and identify creative abilities. An interesting lesson promotes to a faster and easier assimilation of language material. Internet tests are also carried out both to test students' knowledge on specific topics, and to identify existing gaps in a long-studied material, self-assessment of abilities. One of the most perspective and popular information technologies in the study of the Russian language is multimedia (multimedia from English multi - many, media - medium), which allows you to create entire collections of images, texts and data, accompanied by sound, video, animation and other visual effects (Simulation); include an interactive interface and other control mechanisms [2,83]. Presently, there are lots of different ways to provide information using multimedia tools. The most common today is a set of equipment - a multimedia projector and a computer. The electronic educational-methodical complex (EEMC) is a comprehensive training program system that provides the regularity and completeness of the didactic cycle of the learning process. It provides "theoretical material, provides training, educational and information retrieval activity" [3,76]. The teacher's electronic portfolio is aimed to organize productive interaction. The main unit of the educational work of teachers and students here is not the next portion of information, but the situation in its subject and social certainty, the students' activities obtain features in which the peculiarities of future professional activity are shown [4]. To summarize, I would like to emphasize that the goal of applying ICT in Russian language lessons is to improve the quality of education, improve the quality of teaching Russian language, educate the young generation with a highly intellectual level, being able of ensuring the future development and progress of a country with a scientific worldview and the ability to think independently, demonstrate creative activity. The use of information and communication technologies has a positive influence on the quality of training. At present, in the educational process, students need more opportunities to express their thoughts independently. The use of ICT in lessons enriches the lesson, gives students the opportunity to conduct research, access to numerous information databases, as well as helps to apply their knowledge into practice. The use of ICT in the process of a lesson with other teaching methods makes the lesson extraordinary, interesting, memorable and raises the authority of the teacher in front of students.

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SPECIALITY LANGUAGE IN THE RUSSIAN LANGUAGE CLASSES FOR STUDENTS OF ECONOMIC FACULTIES OF HIGHER SCHOOLS

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ABSTRACT

Economic development in Azerbaijan requires highly qualified specialists. Foreign language proficiency is a very important aspect in the training of specialists. The Russian language is one of such languages. Russia is a close neighbour of Azerbaijan. The Russian language proficiency will be needed for the future economists- Azerbaijanians in their professional life to realize collaborative productive projects. So study of the Russian language is included in the curriculum. However, the analysis of the quality of knowledge, skills of many graduates of Azerbaijani schools shows that most pupils' Russian speech is underdeveloped, especially in rural schools. This fact necessitates the serious improvement of setting of university Russian language teaching. One of the important links in specialist training is professional training of economists whose knowledge is demanded in almost any production and who often come into contact with foreign partners based on their professional duties. The professional language differs from the everyday conversational language in a certain way. First of all this difference manifests itself on the lexical level. With the development of international relations in the different fields of production there have been significant changes in the lexical system of both the Azerbaijani and Russian languages. Many international financial- economic terms occurring in the business documentation by which economic partners exchange among themselves have entered the Russian language. It follows that economists must own an appropriate Russian professional vocabulary. Students- economists could use appropriate methodically processed minimum of terminological vocabulary in order to learn about the terminological layer of the vocabulary of the modern Russian language. The article contains the system of exercises that introduces the necessary terminological vocabulary to students.

Keywords: *Economists, Professional vocabulary, Specialists, The modern Russian language, System of exercises*

1. INTRODUCTION

A language is a result of the complex cognitive activity of a man, creative person and, of course, the whole people. The famous Austrian thinker Martin Heidegger became famous for his statement that “language is the house of being”. Strongly rejecting existential truth of person’s attitude to the subject- object world the European philosopher discovered connecting components of being and thinking in the language. A person lives in the house of language with all his dreams and hopes depending on his cultural level, attitude to life, mentality, belief etc. Using a language a person becomes “a really living being” from the truth keeper, according to his words. Thus a language acts as the most important and probably the first means of communication and transmission of cultural heritage. Hence any nation’s language is reflection of their centuries – old, cultural heritage, form of existence and treasure of people’s memory. This is a product of culture, its part that is an original chronicler in the formation and translation of cultural codes. In light of the above, linguistics takes avant-garde methodological positions in the system of any humanitarian knowledge, and study of human culture without its help is impossible. So the nation’s cultural archetype as if serves the functional peculiarities of any group’s language. The fundamentals of such an approach were laid in the works of such outstanding scientists as V.Humboldt’s, A.A.Potebnia and some other Russian and European

scientists. V.Humboldt wrote: “The borders of my nation’s language mean the borders of my world view” (3) V.Humboldt’s words mean that a language cannot exist beyond communication, it is not dead weight at the bottom of the certain people group’s associative consciousness. Conversely, a language can function only in the social environment symptomatically reflecting the vocabulary of the different segments of the population. This is political, economic, historical-literary, ideological, culturological, sports, military, scientific, artistic vocabulary etc. The vocabulary of representatives of the above spheres of the social being, firstly, characterizes the people’s certain cultural level; secondly, it is an additional indicator of their professionalism in the field. At the same time at the current stage of development the sovereign Azerbaijan Republic needs highly qualified specialists both in economic sphere and other ones. In XXI century Azerbaijan is wider than ever before open for successful integration into global space with access to the European and world markets and communities. First of all this demonstrates greater demands on training of competitive skills who are able to represent economic interests of the state in the different international forums and who can perfectly speak the leading foreign languages besides their native language including Russian which is the means of international communication in the CIS countries. At present Azerbaijan maintains close trade and economic relations with Russia that is one of the best investment countries. A necessary condition for successfully managing the different profiles of the chief occupation is development of the scientific style, i.e. speciality language by future specialists. Future specialists in the sphere of the republican economy are first of all young people, more specifically, students. Nowadays to teach Russian as a foreign language to the Azerbaijani students is rather difficult, painstaking, and gradual work for teachers – Methodists in the profile higher schools. The dynamic time of change in Azerbaijan’s economy requires narrow specialization. So help is necessary – strong educational and professional support. It must not be immanent fully depending on subjective will of management of Economic Institute, it must be formed on the scheduled basis. Training basis in teaching Russian becomes one of the important links of the general pedagogical progress during the period production modernization, growth of scientific and technological progress. These are methods of providing the language contacts between the employees of economic sphere in the near future as well as ways of practical realization of professional economic training in Azerbaijan. A large number of international financial and economic terms, lexemes related to the business correspondence, formal protocols entered the Russian language. Economic partners are able to exchange necessary information using this vocabulary. This means that students of economic higher schools with the Azerbaijani education must have certain Russian vocabulary.

2. MATERIALS AND METHODS

The materials for analysis and selection of necessary and sufficient terminological vocabulary are dictionaries, manuals in the Azerbaijani and Russian languages used by students-economists. Method of observation, method of lexical-semantic analysis, painting of teaching texts are used in the article.

3. RESULTS

The aim of the article is to address the following challenges:

- To set boundaries of the terminological vocabulary for Azerbaijani students of economic higher schools;
- To indicate the ways of variation of terminological units;
- To compile a special system of exercises that will help students to separate conversational Russian from the scientific and artistic language;
- To select the most current and acceptable economic terms easily remembered by Azerbaijani students;

- Linguistic and regional material under the programme is systematized on the basis of the above-mentioned challenges; the common teaching methods of the Russian language are developed appropriately.

4. DISCUSSION

In the modern methodology of teaching foreign languages the process of mastering the skills of non-native speech is more expedient to be considered first of all in terms of psychological theories of teaching. The term “teaching” is interpreted as progressively increasing changes in the learners’ behavior and activities under the influence of successively ongoing training. Teaching a foreign language ought to be arbitrary informed, organized and focused learning. It becomes clear if one considers that the modern Russian language is studied by Azerbaijani students as any foreign language, as means of communication. With a general communicative orientation of teaching two main areas can be distinguished in this process:

- Training in productive types of speech activity;
- Training in receptive types of speech activity.

However, regardless of which direction is preferred the principle of communicativeness is still objectively leading. Actually the scope of its action covers teaching oral forms of communication and writing. At present most commonly realized conscious- practical teaching method includes productive and receptive types of speech activity. So combination of communicativeness and consciousness is characteristic of this method from the standpoint of the psychological theory. Among the problems which, according to some methodologists’, psychologists’, psycholinguists’ opinions should be solved on the basis of the psychological approach the following are usually distinguished as the main ones:

1. The problem of selection and organization of educational material;
2. The problem of supply of teaching material by the teacher;
3. The problem of monitoring the effectiveness of learning.

All these problems relate to the branch of knowledge that is called “pedagogical psychology”. Psychological motivation causes learner’s focused activity. I.A.Zimnaya calls it the “trigger mechanism”, and the success of training depends on it (6). Some leading Azerbaijani teachers-methodologists note that high initial motivation for learning foreign languages forcing a student to choose this particular one often decreases due to the known detrimental phenomenon of interference, i.e. the difficulties encountered. They can be of a very different nature. For example, difficulty in mastering the orthoepic features of the Russian language in comparison with the quite familiar norms of the native language, i.e. the Azerbaijani language (let’s say, pronunciation of the sounds *ц* [ts], *щ* [ʃ], jotted /non jotted *а*, *о*, *у* [u], *е*; confluence of consonants). The famous modern linguist L.Zinder notes: “There are more than there hundred open syllables in Russian, and they are repeated in texts so often that actually make up more than fifty percent of the total number of syllables occurring in them” (7). There may also be difficulties in mastering grammar features of the Russian language (for example: aspect category of the Russian verb or gender category of Russian nouns and coordination issues related to it). The famous Russian linguist G.A.Zolotova asks the following question in her monograph “Communicative grammar”: “Why do we face such a phenomenon in some texts when an action is considered to be more historical in comparison with the adjacent action”? Two types of sentences with the different aspect-temporal paradigm are given as examples by her: Here he is going to the blue sea in comparison with his own action: So he has gone to the blue sea (5). Here is our own answer to the question above: for what purpose must Azerbaijani students know this? Aspect-temporal form of the Azerbaijani verb is more simplified than the Russian one.

Although there is certain analogy between the verbs (идёт “is going” and ушёл “has gone”), (едит “is doing”, ел “has done”), (present and present perfect tense), these systems are radically different. Having faced some above-mentioned difficulties of the contextual surrounding of Russian verbs and also other lexemes in learning foreign language a student often loses interest in classes. In our opinion, the teacher main task is to maintain motivation, to be able to form it creating the prerequisites on the basis of which students will have a personal interest in work. Communicatively aimed teaching of a foreign language first of all requires that a student can understand and correctly solve tasks facing him at each concrete lesson. This will give grounds for strengthening personal orientation and help a student to understand why he/she carries out certain educational activities. “It is necessary to “survive” learning, not “to serve” it in order not to master material formally; learning must enter the life, it must be meaningful for a student”, - wrote A.A.Leontyev (9). Speaking of studying the Russian language in non-philological higher schools of humanitarian profile the concept of learning content of training in our case is related to the student’s profession. A person who wants to learn how to conduct the process of business communication conflict-free and productively must know the language well. Exchange of information is possible only when a communicator and recipient have a unified system of codification and decodification, i.e. when the participants of the group process “speak the same language”. Knowing the meanings of the same Russian words people, according to the famous modern linguist methodologist and psychologist G.I.Andreyev, “can understand them differently” (1). It is unacceptable to insult business partners or interlocutor inadvertently because of poor knowledge of the foreign language. In other words, we are talking about observance of speech etiquette or awareness of the deep meaning of a word while maintaining national dignity of a native speaker of the Russian language. So serious attention should be paid to working with vocabulary among Azerbaijani-speaking students of economic universities – Actually terminology occupies quite a large part of the active vocabulary in the texts on speciality. Ye.M.Galking-Fedoruk emphasizes: “It is known that a term is such a word that corresponds to any precisely defined concept from the field of science, technology or art” (3). A more advanced version is offered by the linguist N.S.Valgina who writes: “The terminological vocabulary includes the words that perfectly, accurately and clearly denote concepts in any field of science, technology, production, agriculture, economic and social life, literature and art” (2). Each new word must be understood by students. To that end, semantization of new words is carried out in the audience for acquaintance with the text. New words derived from the readable text or microtexts must be learned in orthoepic and graphic variants. Appropriate training in the forms of exercises should be carried out for this. The following exercises are recommended:

1. Choose from a series of words those that correspond to the proposed situation. For example, to select among the mass of physical terms the economic ones: light, register, force, customs system, energy, heat, consignment note, body, mass, debit, speed, market, conditions, field, boiling, process, tariff, hardness, work, bank, fragility, document, fiction, trade transaction etc. Note: all words are scattered; the correct answers are put in italics;
2. For this sample to form sentences using the proposed words (what is the purpose of introducing customs system?; what are the main responsibilities of the account? etc.);
3. Fill in the blanks with the appropriate words in these sentences: Legal liability (service) is required to complete these documents. We visited a firm for temporary storage of papers (service). The correct choice of a word or expression is underlined;
4. Replace the selected word with a synonym in the sentence. Subsidiary, investment, foreign company (or firm). Particular attention in working on vocabulary should be given to exercises to form word combinations according to the laws of semantic compatibility and in compliance with grammar standards.

It can be the following exercises:

1. Find definitions for the words: market, customs, insurance;
2. Select the verbs that can be used with the words: customs, deposit, duty;
3. Make attributive word- combinations from these words;
4. Group these words by topic etc.

The given examples of exercises are preparation for constructing statements in the form of micro - and macrottexts. While doing these exercises students must be able to manage the semantics of statement in the prepared form of speech. From the practical guide on foreign trade transactions we have chosen the fragment for work on the terminological vocabulary related to implementation agreements:

1. Implementation or trade agreements.

These are the agreements that formalize relations on a reimbursable sales of goods and other objects of foreign trade turnover and which are concluded with the direct method of international trade. They form core of trade. These include:

- Contract for the international sale of goods (article 454 of the Civil Code of the Russian Federation);
- Supply agreement (article 506 of the Civil Code of the Russian Federation);
- Contract of wholesale sale (article 822 of the Civil Code of the Russian Federation);
- Exchange agreement (article 567 of the Civil Code of the Russian Federation).

A distinctive feature of the agreements of this group is that their parties can only be business activities (organizations – legal persons and individual entrepreneurs etc.). According to this text students can perform the following tasks:

1. Read the text, find out the meaning of unfamiliar words;
2. Rewrite the names of the implementation contracts and explain their difference;
3. Explain, what is included in the concept “trade intermediation”;
4. Try to explain in Russian: what is the difference between mediation and implementation agreements?

Another task can be proposed to enter terminological vocabulary, for example: Write out misunderstood words from the text and find out their meanings on the dictionary. Or:

1. Read the text. Determine the topic of the text;
2. Write out the basic words in each paragraph;
3. Try to understand incomprehensible words (phrases) without a dictionary. Then check correctness of your understanding (translation) on dictionary;
4. Choose the antonyms for the words reimbursable, foreign trade (transactions), sale, subject, individual;
5. Choose synonyms to the words: agreement, exchange, core, foreign trade;
6. Make sentences in which the words from the antonymic pairs and synonymous series are used;
7. List all types of contract referred to the text. Write down them. Try to give an example for each type of contract;
8. Write down the basic concepts of the texts. Give their grammar characteristic;
9. Retell the text (with your words; close to the text) on the basis of the written main concepts of the text;
10. Create your own microtexts on the basis of the written terms and concepts.

5. CONCLUSION

Summarizing the above we can draw the following conclusions:

- 1) Our own methodological and pedagogical practice, in particular, showed that vocabulary work organized by this way creates the most optimal conditions for learning lexical terminological units and formation of associative relations, learned words and reduce the interference of the native language when forming Russian sentences;
- 2) Our proposed system of lexical-grammatical and stylistic exercises does not give information on grammar, spelling, stylistics in finished form;
- 3) It is explained to students in the process of reading and is fixed when doing training exercises;
- 4) All recommended exercises are communicative and aimed specifically at the comprehension of language units. In this case for a teacher who teaches Russian as a foreign language is not a substitute for a teacher of special disciplines.

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ASSESSMENT OF EFFECTIVENESS OF SOCIAL POLICY OF THE STATE

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ABSTRACT

The creation of an independent state usually takes place initially against the background of social and economic reforms in the country and is accompanied by a decline in real incomes of population and an increase in poverty. The period of improvement of the main socio-economic indicators of the population depends not only on external factors, but also on consistent and skillful government policy. Of course, first of all, special attention is paid to social policy, the main priority of which is the provision of income of the population in a fair manner. This thesis, which at first glance seems so contradictory, has its justification, since population, who have given their consent to be citizens of an independent state, must have all kinds of right to achieve a certain level of welfare. From this point of view, the use of forecasting tools is an important element of the Republic social policy. The results of the study, especially the monitoring of the population's income, make it possible to minimize, eliminate the influence of negative factors on social and economic processes and to stimulate positive factors. The purpose of the study is to assess the effectiveness of public social policy by using economic and mathematical modeling. In the course of the study the effectiveness of the state social policy was assessed by using the example of the Azerbaijan Republic. By means of economic and mathematical modeling there was determined the interdependence between the indicators of satisfaction of the population achieved by means of the social policy and fulfillment of social obligations and migration processes, which are an indicator of dissatisfaction of population. The model includes the following indicators:

- *emigration and immigration;*
- *the number of the employed population;*
- *average amount of salary;*
- *number of pensioners;*
- *average amount of pension;*
- *number of students in specialized secondary and higher educational institutions;*
- *amount of annual scholarship allowance paid to students;*
- *number of registered unemployed people;*
- *the amount of unemployment benefit*

The study has revealed that average amount of salary and average amount of pension had the greatest impact on indicators of migration movement. The methods such as system approach,

logical generalization, economic-statistical and economic-mathematical methods have been used in the study. The practical significance of the study is that the results of econometric modeling of migration processes, carried out on the example of the Republic of Azerbaijan, can be used in the design and implementation in the future long-term development strategy for the social policy of the Government of the Republic. The scientific novelty of the study is that there has been carried out assessment of effectiveness of social policy on the example of the Republic of Azerbaijan with application of econometric modeling of migration processes. Relevant recommendations have been made on the formation and development of the management system for a national social policy in modern conditions.

Keywords: *social policy of the state, effectiveness, assessment, migration, economic and mathematical modeling*

1. INTRODUCTION

While conducting research on the example of the Azerbaijan Republic, let's clarify that the application of economic models and methods at this stage is unacceptable due to the insufficient time interval. However, in the process of formation of an independent republic, currently is recommended to collect and systematize socio-economic indicators for the future. It is recommended to estimate the effectiveness of state social policy in the example of the Azerbaijan Republic. By supporting of economic-mathematical modeling, it is attainable to connect between migration processes and the fulfillment of social obligations, which is an indicator of satisfaction or dissatisfaction of the population with the implemented social policy. In order to carry out econometric modeling of demographic processes, statistical data on a number of demographic and socio-economic indicators were obtained between 2009-2018 and allowed to make relevant calculations using economic-mathematical modeling tools. The application of direct stochastic factor analysis methods is the optimal solution, because it is feasible to effectively determine the composition of impact factors with a fairly high probability, determine the types of dependencies (regression equations), define coefficients of the regression equation, determine the density of relationships between indicators and determine the effect of each factor on the result obtained.

2. SCIENTIFIC AND THEORETICAL APPROACHES TO THE ESSENCE OF SOCIAL POLICY

The narrow concept of social policy "regulating the relations of society and becoming an integral part of the state domestic policy in the interests of the main social groups of the population, and is embodied in its social programs and applications" [1, p. 79]. In our opinion, these approaches are formed under the influence of a relatively calm international political and economic climate, but have already lost their relevance. In modern conditions, state social policy has a significant impact on the well-being of an individual and society as a whole. The content of the concept of "social policy" is multilateral as in other scientific categories. In science, different approaches to defining the essence of public policy based on the goals of state programs is determined depending on the ability to maintain relations between social groups to ensure social security in the formation of economic incentives for participation in social production. Thus R. Barker considers social policy as a function of society. In his work he gives the following definition: "Social policy is the activity and principle of the society that regulates the relations between individuals, groups, citizens, social institutions" [2, p. 38]. V. Skuratovsky defines social policy as the trend of deep development in all areas that determine the development of social life and social security of man, as well as the influence of regulatory bodies. In scientist's opinion: "This policy can identify and resolve objective and subjective contradictions in the economy, politics, social and moral relations, development and activities that affect social welfare and human security" [3, p. 98].

Simultaneously, I. Grigorieva narrowly studies social policy and considers it "a set of measures taken with the help of state funds and non-state actors to determine the needs and interests of citizens, social groups and local communities" [4, p. 20]. According to V.V. Derega: Social policy is a system of measures of socio-political life institutions aimed at ensuring the optimal development of the social sphere, improving welfare and meeting the needs of society as a whole and the individual [5, p. 9]. V.S. Vasilchenko believes that social policy is the activity of state and public institutions, groups and individual social policy entities aimed at realizing the social needs of man, ensuring the vital activity and development of social existence based on the principle of social justice and unconditional protection of human rights and freedoms [6, p. 286]. According to S.M. Chistov, social policy is a system of management, organizational, regulatory measures, actions, principles and foundations aimed at ensuring the optimal social level and quality of life, social protection of low-income groups, social security of society [7, p. 113]. According to G.T. Zavinovskaya, social policy as a system of management and organizational tools, purposefully promoting the activities of the population, comprehensive development, ensuring living and working standards, as well as the organization of social protection [8, p. 132]. According to M. Hill, it is expedient to include the decision-making process in social policy [9, p. 1]. In spite of the different formulas, all scientists agree that social policy is in principle unrealizable without the participation of the state. The diversity of views are related to different approaches to the realization of social needs based on the study of selected priority social groups. Scholars interpret the concept of social policy based on the objectives of state programs: "the state's social policy is one of its activities in regulating the socio-economic conditions of society. The essence of social policy of the state is to maintain relations between both social groups and strata of society, as well as to provide social security in the formation of economic incentives to participate in social production" [10, p. 21]. However, there are scientific views that the authors cannot agree on, as such approaches to the problem of ensuring social justice in society are unacceptable. Thus, there is an opinion that social policy affects all areas of life of members of society: goods, housing and infrastructure services, employment, income, etc. cover the decisions and measures applied to the provision [4, p. 15]. At the same time, this problem is related to purely social decisions that support sections of society that are unable to play an active role in market relations due to their position [4, p. 16]. The interpretation of social policy as one of the areas of macroeconomic regulation that ensures the well-being of the population is very widespread in the economic literature [11, p. 297]. In this regard, the content of social policy is traditionally defined as "a set of socio-economic measures aimed at reducing inequality in the distribution of income and property, protection of the population from unemployment, raising prices, etc." [12, p. 121]. In a more narrow sense, social policy is a system of measures aimed at implementing social programs [13, p. 113]. Another point is a characteristic feature of Western social policy, which emphasizes the economic determinant of social policy and defines it as "the interference of governmental and non-governmental bodies in the functioning of the free market in relation to the needs of social protection and public welfare" [14, p. 16]. Moreover, in the works of Ukrainian and foreign scientists, social policy is sometimes equated with social protection [15, p. 10], regulation of social and labor spheres [16], social security system [17, p. 12], reflects different approaches to the theoretical and methodological analysis of social policy as a complex, multilevel phenomenon. Based on the above material, it can be clarified that the development of social policy should be based on state regulation of relevant institutions. In addition to providing equal opportunities for each member of society to identify, develop and ensure the generally accepted material and moral priorities and values, attention should also be paid to the moral component. The current policy towards these members of society automatically marks the "poor", insults the dignity of man, instills in the minds of "poor" unity, which means "harm".

Therefore, socio-economic measures aimed at solving the problems of the most vulnerable segments of the population should not harm human dignity, but increase their significance, for society as a whole. The priority of social policy is based on the urgency of essential and long-term goals and their dominant role for Azerbaijan. Social policy in Azerbaijan includes measures aimed at the effective management of potential opportunities to improve the living standards of its population, the development of each person in production, distribution and market relations [18, p. 208].

3. ANALYSIS OF MIGRATION INDICATORS IN THE ENDOGENOUS VARIABLE MODEL IN AZERBAIJAN REPUBLIC

In the endogenous variable model of Azerbaijan Republic indicators are reflected as immigration – Y_1 ; and emigration - Y_2 . The following key components have been identified as exogenous variables:

- total number of employed population - X_1 ,
- average salary per employee - X_2 ;
- the size of the average pension per pensioner - X_3 ;
- total number of students in secondary and higher vocational education institutions - X_4
- total number of pensioners - X_5
- total number of registered unemployed - X_6
- total amount of social benefits paid for unemployment - X_7

Table 1: Preliminary data for calculations

Years	Y_1	Y_2	X_1	X_2	X_3	X_4	X_5	X_6	X_7
2005	2,0	2,9	4062,3	123,6	28,5	370,5	1399,2	317,8	249,6
2006	2,2	2,6	4110,8	149,0	41,4	379,2	1284,5	291,2	306,5
2007	2,0	3,1	4162,2	215,8	62,9	385,4	1270,8	281,1	366,6
2008	3,6	2,5	4215,5	274,4	95,8	389,6	1275,1	262,2	424,4
2009	2,3	1,4	4271,7	298,0	100,4	394,0	1308,4	260,2	454,3
2010	2,2	0,8	4329,1	331,5	112,9	397,0	1292,2	258,3	476,4
2011	2,2	0,5	4375,2	364,2	145,1	402,0	1277,6	250,9	531,6
2012	2,2	0,2	4445,3	398,4	152,0	409,0	1272,1	243,1	563,4
2013	3,1	0,8	4521,2	425,1	170,5	421,0	1277,1	236,6	595,2
2014	1,9	0,8	4602,9	444,5	173,4	421,0	1290,9	237,8	607,2
2015	2,7	1,6	4671,6	466,9	177,6	419,0	1300,0	243,7	608,4
2016	3,2	1,7	4759,9	499,8	192,2	408,6	1315,2	252,8	675,7
2017	3,1	1,9	4822,1	528,5	208,4	404,3	1318,4	251,7	681,5
2018	3,2	1,6	4879,3	544,6	221,4	407,1	1295,5	253,8	764,2

Source: [19]

From the point of view of modern economic theory, mathematical methods and models are a natural, necessary tool for scientific research. The use of mathematics in economics allows us to solve the following problems:

- to emphasize and formally describe the most important, significant connections of economic variables and objects;
- it is possible to obtain equally suitable results from well-formed initial data and connections in accordance with the initial conditions prepared for the studied object;
- mathematical and statistical methods allow to gain new knowledge about the object;
- the application of mathematical language allows to accurately and concisely express the provisions of economic theory, to form its concept and results.

Entirely, the ratios of immigration indicators to emigration indicators in the Republic of Azerbaijan during the analyzed period are given in Table 2.

Table 2: Ratio of immigration to emigration in the Republic of Azerbaijan in 2005-2018

Years	Y1 – immigration	Y2 – emigration	Y1/ Y2, in percent (%)
2005	2,0	2,9	69,0
2006	2,2	2,6	84,6
2007	2,0	3,1	64,5
2008	3,6	2,5	144,0
2009	2,3	1,4	164,3
2010	2,2	0,8	275,0
2011	2,2	0,5	440,0
2012	2,2	0,2	1100,0
2013	3,1	0,8	387,5
2014	1,9	0,8	237,5
2015	2,7	1,6	168,8
2016	3,2	1,7	188,2
2017	3,1	1,9	163,2
2018	3,2	1,6	200,0

Source: [19]

In the first years of the study period - 2005-2007 - emigration was significantly higher than immigration, but the largest peak leaving the country was observed in 2007. This is related to the somewhat unstable economic situation in the country, where the economically active population goes abroad in search of work. The gradual decline in emigration has occurred since 2008 (144.0%). Thus, since 2008, there has been a sharp decline in emigration, i.e. the number of people leaving the country for permanent residence, and this case lasts until 2015. The number of people leaving the country in 2015 doubled compared to 2014 and increased slightly in the next 2 years (2016 and 2017) to 1.9 thousand, only in 2018 it decreased again to the level of 2015 (1.6 thousand). Analysis of the situation in the country in 2013, 2016-2018 shows a positive growth trend in almost all macroeconomic indicators, which has had a positive impact on the financial situation of the population, i.e. there was a significant increase in the number of permanent residents. In general, the management of the republic's economy allows us to say that there are serious changes in the direction of stabilization. That is why in 2012, the highest peak of immigration over emigration reached 11 times. In 2018, this advantage indication is 2 times.

4. DETERMINATION OF THE DOUBLE- DEPENDENCY OF THE COUNTRY MIGRATION INDICATORS ON SOCIO-ECONOMIC INDICATORS

Using the economic package Eviews, the double-dependency of the given Y1 - immigration, Y2 - emigration indicators (X1 - X7) was determined on the socio-economic indicators. In this case, reference was made to the indicators of the last 10 years (2009-2018) at (Table 3). It should be noted that migration indicators for the entire analyzed period are practically not related to such indicators as the total number of employed population, the total number of students in secondary and higher vocational education institutions, the total number of registered unemployed.

Table following on the next page

Table 3: Preliminary data for calculations

Years	Y1	Y2	X1	X2	X3	X4	X5	X6	X7
2009	2,3	1,4	4271,7	298	100,4	394	1308,4	260,2	454,3
2010	2,2	0,8	4329,1	331,5	112,9	397	1292,2	258,3	476,4
2011	2,2	0,5	4375,2	364,2	145,1	402	1277,6	250,9	531,6
2012	2,2	0,2	4445,3	398,4	152	409	1272,1	243,1	563,4
2013	3,1	0,8	4521,2	425,1	170,5	421	1277,1	236,6	595,2
2014	1,9	0,8	4602,9	444,5	173,4	421	1290,9	237,8	607,2
2015	2,7	1,6	4671,6	466,9	177,6	419	1300	243,7	608,4
2016	3,2	1,7	4759,9	499,8	192,2	408,6	1315,2	252,8	675,7
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2018	3,2	1,6	4879,3	544,6	221,4	407,1	1295,5	253,8	764,2

*Source: [19]**Figure following on the next page*

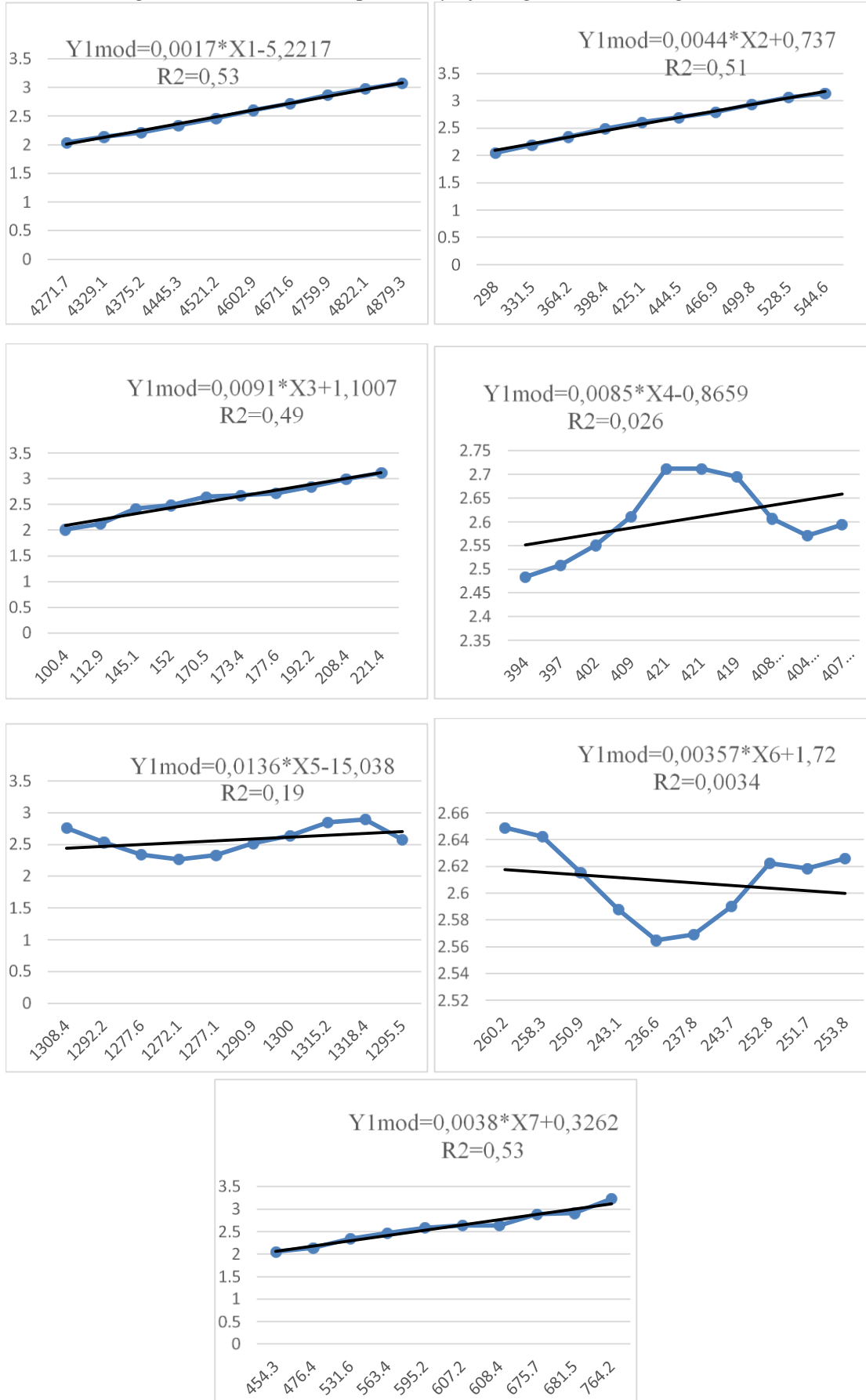
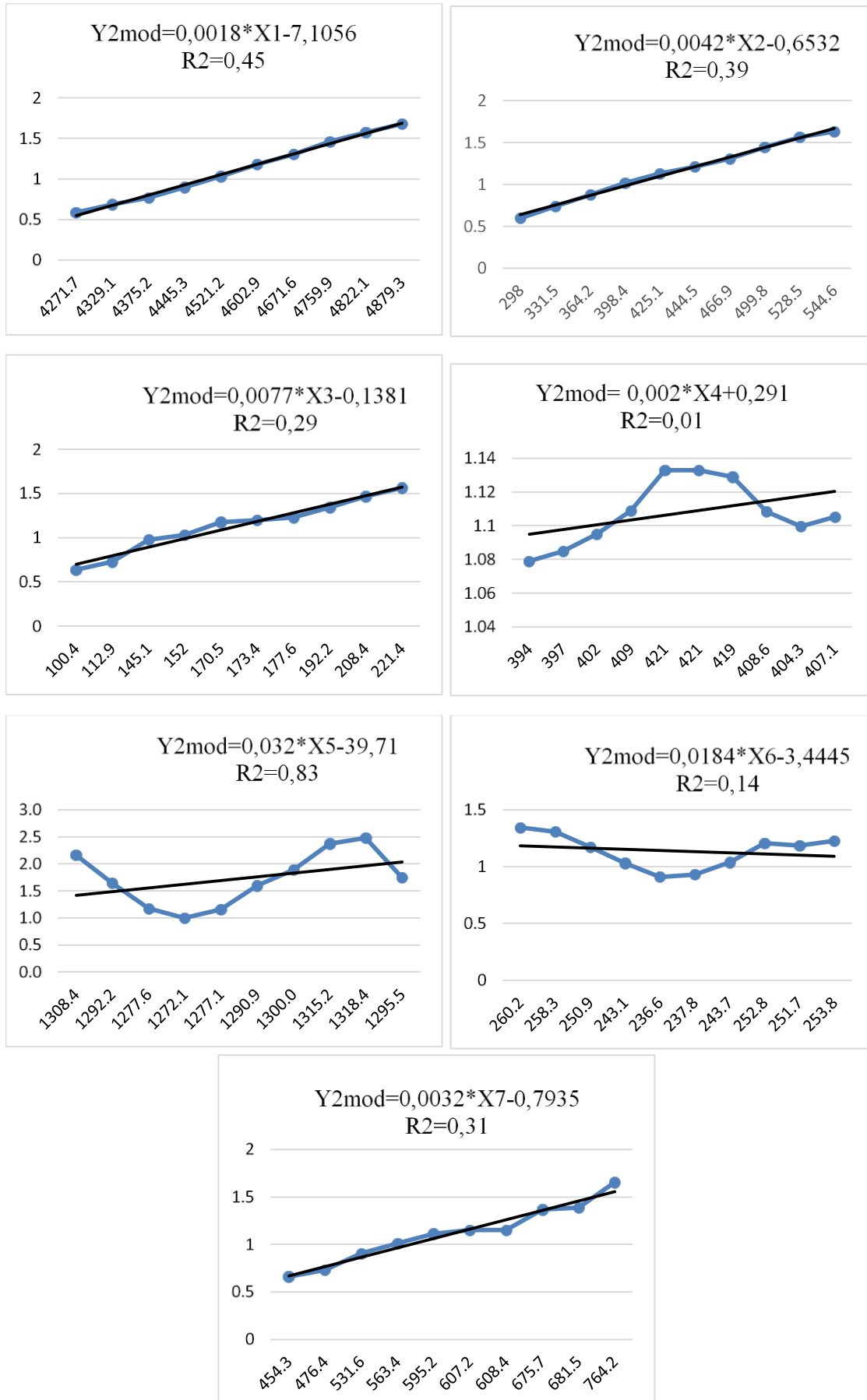
Figure 1: The double-dependency of the given Y_i - immigration

Figure 2: The double-dependency of the given Y2 - immigration



The dependence of the country immigration processes on the same indicators (X1 - X7) is closely linked with the following indicators: the size of the average pension per pensioner, the total amount of annual social benefits paid per person for unemployment. There is an average dependence rate between immigration and the total number of employed people, the size of the average wage per employee. From 2009 to 2018, there is a completely weak link between the immigration of the republic and the number of retirees. There is a relatively regular correlation between the indicators of emigration processes, the size of the average wage per employee, and the total number of retirees. Some dependence is observed on indicators such as the total working population and the average pension amount.

5. ESTABLISHING AN IMMIGRATION MODEL

The lack of double-dependency can be explained by the change in the reaction of the population of Azerbaijan Republic to certain events. Therefore, changes in economic indicators in year of *i* may be reflected in emigration / immigration indicators after a certain period of time. In addition, this change is not stable throughout the period and is characterized by a "delayed" reaction of the population to political and socio-economic changes in the country. In connection with the analysis of demographic and socio-economic data for the Republic of Azerbaijan for 2009-2018, using the economic package Eviews, we can calculate the following indicators by constructing regression models of double dependence:

- indicators of regression statistics;
- indicators of variance analysis;
- indicators of reliability intervals;
- residues of regression line selection;
- balances and normal probability.

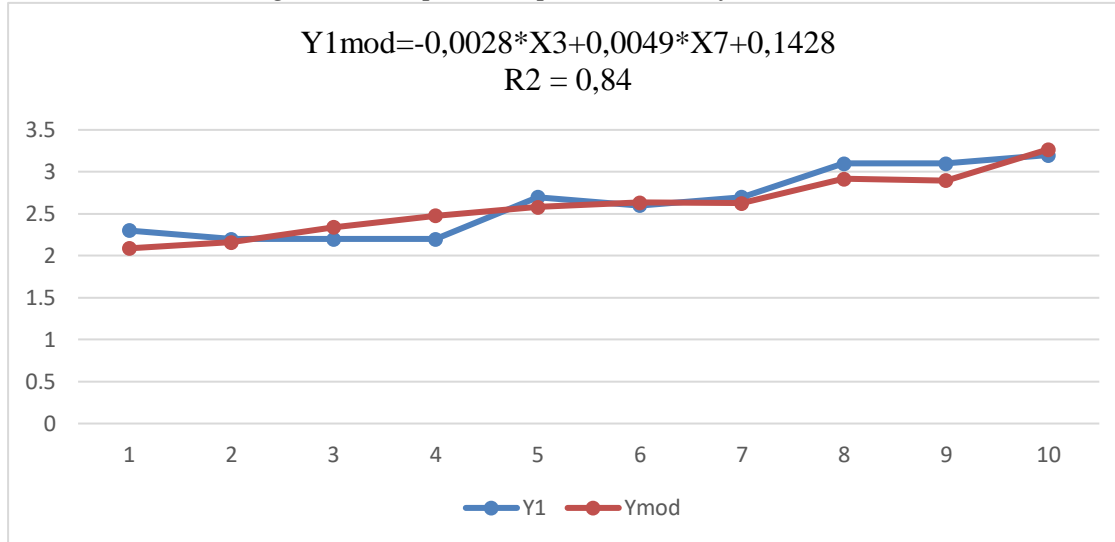
Table 4: Correlation

	X3	X7	Y1
X3	1		
X7	0,983381	1	
Y1	0,890076	0,914121	1

Table 5: The final result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X3	-0.002773	0.008652	-0.320513	0.0002
X7	0.004944	0.003516	1.406113	0.0005
C	0.142828	0.737490	0.193668	0.0009
R-squared	0.837994	Mean dependent var		2.630000
Adjusted R-squared	0.791707	S.D. dependent var		0.400139
S.E. of regression	0.182620	Akaike info criterion		-0.319495
Sum squared resid	0.233450	Schwarz criterion		-0.228719
Log likelihood	4.597473	Hannan-Quinn criter.		-0.419075
F-statistic	18.10418	Durbin-Watson stat		1.537606
Prob(F-statistic)	0.001711			

Figure 3: Graphical representation of the data – Y1 Mod



6. ESTABLISHING AN EMIGRATION MODEL

Correlation as a method of processing statistical data is widespread in economic, technical, social and other sciences. As a statistical tool correlation shows the efficiency, the relationship between two variables using the correlation coefficient and does not talk about cause-and-effect relationships. It is clear from this correlation matrix that only the variable X5 has a very high effect on immigration. There is a moderate correlation between immigration and the variable X2. The value of the determination coefficient (R-square = 0.93) shows that 93% of the change in the number of immigrants arriving in the country during the research years can be explained by the change in the factors included in the model. After selecting the linear regression equation and estimating its parameters, the significance of both the equation as a whole and its individual parameters is assessed. As a whole estimating the significance of the regression equation is carried out using **Fisher's** criterion, and this is called **F-statistics**.

Table 6: Correlation

	X2	X5	Y2
X2	1		
X5	0,363385	1	
Y2	0,620888	0,913246	1

Table 7: The final result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X2	0.002236	0.000719	3.108246	0.0171
X5	0.027373	0.003702	7.394810	0.0002
C	-35.26326	4.689485	-7.519644	0.0001
R-squared	0.930265	Mean dependent var		1.140000
Adjusted R-squared	0.910341	S.D. dependent var		0.556177
S.E. of regression	0.166537	Akaike info criterion		-0.503871
Sum squared resid	0.194143	Schwarz criterion		-0.413095
Log likelihood	5.519353	Hannan-Quinn criter.		-0.603451
F-statistic	46.68992	Durbin-Watson stat		2.458753
Prob(F-statistic)	0.000090			

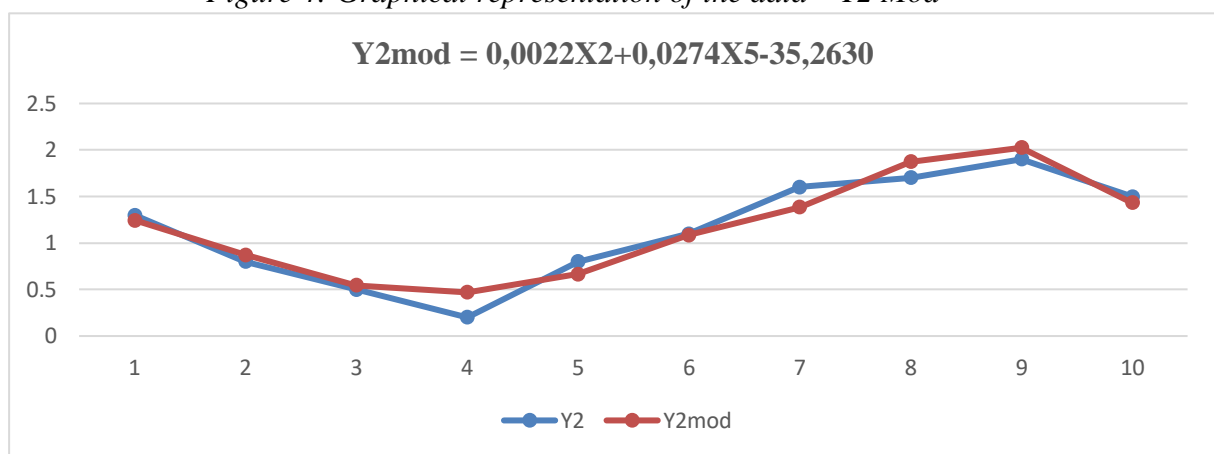
As can be seen from the table, since Fisher's F-statistic probability value is much larger than the significance level of 0.0001, the calculation determined by the model $Y_{mod} = 0.0022X_2 + 0.0274X_5 - 35.2630$ is statistically reliable. The fact that the Durbin-Watson (DW) statistic is equal to 2.4588 means lack of 1st order autocorrelation, which is desirable. Note that the value of Durbin-Watson statistics can be changed between [0; 4]: a value close to zero indicates a positive autocorrelation, and a value close to four indicates a negative autocorrelation. The fact that the value close to 2 indicates that there is no autocorrelation.

According to the Durbin-Watson table, we obtain:

- $dL = 0,4660$
- $dU = 1,3330$

Thus, because of the inequality $2 < DW < 4 - dU$ was true for us, the hypothesis H_0 was accepted, there was no autocorrelation.

Figure 4: Graphical representation of the data – Y_2 Mod



We can say that the resulting model of $Y_{mod} = 0.0022X_2 + 0.0274X_5 - 35.2630$ is adequate.

7. CONCLUSION

Indicators such as wage increases, increased pensions, and providing additional jobs during the research period hardly helped the return of emigrants. This is explained by the fact that the growth of indicators is insignificant, taking into account inflation. The political situation in the unrecognized state " scares" people, and positive progress in the social sphere is not a sufficient incentive to return home. This is particularly right for young people and qualified personnel. The social processes observed in the republic for certain period of time prevent the decision to leave the country merely among people of retirement age, as confirmed by the studied models. The analyzed models showed a certain positive trend in the fluctuation of the growth rate of emigrants over immigrants, considering the use of monetary indicators in arbitrary units (US dollars). The most unfavorable periods for demographic indicators were 2005-2007 and 2015-2016, which were mainly due to rising prices and a decrease in the competitiveness of local products in foreign markets and a regular impact on the decline in incomes of the population as a whole. This, first of all, leads to a steady decrease in the number of able-bodied people. The results of the models obtained during 2012-2014 are the result of the work carried out by the government. Although there was a negative tendency in migration processes in 2015-2016, this tendency has been stopped since 2017, as complex measures have been taken to stimulate the growth of jobs in the social sphere of the country and to unite the most capable workforce. The decision to support the state's production systems and the vital activities of the republic helped to significantly reduce emigration. Econometric modeling of migration processes in the

example of the Republic of Azerbaijan has special importance in the implementation of the development strategy of the state social policy. In the formation and development of the social policy management system in the Republic of Azerbaijan, it is recommended to use the experience gained in developed countries in solving problems related to the object of analysis, which ensures the maintenance and improvement of socio-economic indicators, as well as a priority in the distribution of the republican budget, considering the principles of social justice and economic efficiency.

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AZERBAIJAN NATIONAL ECONOMY'S INNOVATION CHANGING: IN CASE OF AZERBAIJAN-GERMANY ECONOMIC RELATIONSHIP

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ABSTRACT

This paper considers Azerbaijan national economy's innovation changing in 2013-2018 in case of Azerbaijan-Germany economic relationship. Germany is the 4th partner of Azerbaijan in import and 6th partner in export in 2018. Azerbaijan exports the oil and agriculture goods to Germany and imports the meat, milk and bakery goods, either furniture, car details and goods of metallurgy, machine-building, pharmacy industries. Azerbaijan has created some enterprises in agriculture sector for milk and vine processing, also has modernised some enterprises in different fields of economy – metallurgy, machine-building industries, and in railway sector by Germany investments. Manufacturing innovations, innovations in banking, innovation methods will development Azerbaijan national economy by partners from Germany. These innovation changes are based on Azerbaijan strategy of development: 1) to produce new qualified goods for realizing in European market; 2) active financing methods for external trade strengthening by state marketing policy; 3) strengthening positions in realised market. This development strategy includes all types of innovations-creating new goods by using new technologies, implementing new materials and energies, using new methods of management and operations. State marketing policy supports middle and small entrepreneurship to exist their goods to European markets implementing different realisation methods like as exhibition, state financing, financing by bank sector, tax free privileges about 5 years and etc. Authors have suggested some recommendations for strengthening of innovation implementation to Azerbaijan national economy by technological changes, state marketing policy, new marketing strategies and tactics, some financial privileges.

Keywords: *import-export operations, investments to Azerbaijan economy, innovation changings, marketing strategies for innovation strengthening, state marketing policy*

1. INTRODUCTION

The integration ties between Azerbaijan and Germany are very dynamic, and the forms of their integration ties and international cooperation include: mutual trade; industrial relations based on specialisation and cooperation; interaction in the field of finance and credit; cooperation in the field of scientific and technological activities and innovative transformations; interaction in the field of investment activity; organization of the joint formation and use of information systems; cooperation in the field of infrastructure development; cooperation in the field of advertising business, etc. In the modern world any state is faced with the problem of increasing the scientific, technical and technological levels of production, on which both the quality and competitiveness of products, goods, services and markets for realisation of scientific and technical products. The necessity of Azerbaijan national economy transformation, implementation of new high technologies from Germany, markets' research, search and investigation of possible exploitation of new resources and the targeted implementation of scientific and technical potential of Azerbaijani-German joint ventures predetermine not only

the importance of innovative development, but also solve some problems of azerbaijani goods' realisation using marketing strategies. This is what makes the real work focused and relevant.

2. ANALYSIS OF FOREIGN ECONOMIC RELATIONS OF AZERBAIJAN WITH GERMANY IN THE FIELD OF INNOVATIVE TRANSFORMATIONS

The main partners of Azerbaijan in foreign economic operations are Russia, Turkey, China, Germany, USA, Italy, Israel, Czech Republic, India. As can be seen from Azerbaijan statistics Germany, on average, takes fourth place among importing countries and average fifth place among countries exporting scientific and industrial products to Azerbaijan (Foreign Trade of Azerbaijan, 2019). Azerbaijan imports to Germany mainly white oil (therapeutic oil and without impurities). And in connection with the violation of the supply of oil and gas to Europe from the Russian Federation since 2014, Azerbaijan has also supplied crude oil to Germany, the volume of which gradually began to decrease over the years due to oil products (mainly from kerosene fuel). For the period 2014-2018 Oil imports to Germany decreased almost 2.5 times (from \$ 1,885.1 billion in 2014 to \$ 756.9 billion in 2018). Table 1. shows the dynamics of Azerbaijan's exports to Germany for the period 2014-2018.

High-tech products	2014	2016	2017	2018	In 2018 in relation to 2014, in %
Kerosene fuel for jet engines		182,3	1267,8	4272,4	Increased 24 times
Fruit and vegetable juices	151,1	284,5	349,6	223,3	154,4
Canned fruits and vegetables	1958,9	122,3			

Table 1: Export of the main high-tech products from Azerbaijan to Germany for 2014-2018 (in thousands of US dollars)

(Source: Foreign Trade of Azerbaijan, 2019, p. 82-204.)

The volume of kerosene fuel in exports during the same period increased 24 times. Azerbaijan also supplies to Germany the fresh fruits, salmon fish, fruit and vegetable juices and canned goods. As you can see the main types of export products of Azerbaijan are not only fuel, crude and white oil. Azerbaijan exports to Germany also the agricultural and fishery products, as well as agricultural processing products. Germany imports to Azerbaijan the cattle, meat products, dairy products, bakery products. Germany also has importing the products of high-tech science-intensive industries as well as: high-quality furniture and spare parts for cars, metallurgical, chemical, pharmaceutical, machine-building industries (see Table 2.).

Table following on the next page

High-tech products	2014	2016	2017	2018	In 2018 to 2014, in%
Medications	13426,3	16298,5	19306,1	25541,7	190,3
Cement and clinkers from them	1304,0	406,1	463,0	471,7	-63,8
Lubricating oils	2141,0	7100,4	8592,1	9401,8	439,1
Synthetic detergents	882,9	1797,5	2508,6	1849,1	209,4
Rubber tires	1001,8	2367,0	2989,3	1152,9	115,1
Hot rolled steel	28257,9	1927,5	-	3234,5	-88,5
Ferrous Tubing Fittings	557,5	5660,9	1118,6	1042,2	186,9
Bulldozers, excavators and other road-building machines	7201,8	743,0	301,5	2500,7	34,7
Electric transformers	203,8	190,9	187,0	289,7	142,2
Tractors	8287,9	4172,3	1051,8	1430,7	-82,7
Buses	1972,1	2288,2	1851,8	407,3	-79,4
Trucks	12727,4	3770,1	7314,9	14583,7	114,6
Special purpose vehicles	18063,4	-	1801,0	3977,5	-77,9
Gas, energy and liquid meters	338,6	207,3	-	1638,4	483,8

Table 2: Import of the main high technology products from Germany to Azerbaijan for 2014-2018 (in thousands of US dollars)

(Source: Foreign Trade of Azerbaijan, 2019, p. 82-204.)

According to the Azerbaijan-Germany business forum, Germany opened 400 representative offices and firms in Azerbaijan and more than 19,000 people work there. German investors for 2014-2018 spent 18,000 thousand US dollars to modernise Azerbaijanian enterprises. Such objects include industrial parks, the Baku-Tbilisi railway, the Sumgait-Garadag industrial park, industrial facilities in Neftchala, Samur. 82 residents of Germany work in Azerbaijan, who invested \$ 5.7 billion in industrial enterprises in Azerbaijan (Forum of Azerbaijan-Germany business forum, 2019). Table 3. demonstrates the import of engineering products in Azerbaijan. As can be seen from the table, a significant part of imported machines and mechanisms is imported from Germany (code 8481, 8433, 8403, 8454, 8437, 8434).

Table following on the next page

No	Code	Name of production	Cost of imported products for 2017	Trade balance	Annual increase in value for 2013-2017,%	Share in world imports,%
1	2	3	4	5	6	7
1.		All machinery: Of them:	8766,5	5031,1	-5	0,2
2.	8479	Machines and mechanisms with individual characteristics	72,7	-69,7	9	0,2
3.	8481	Valves, pipes and similar equipment for boilers	180,1	-178,7	6	0,2
4.	8433	Equipment for collecting and cross-section of grain, elevators, including machines for collecting grass, straw, and also for silage	79,7	-79,1	8	0,4
5.	8492	Equipment for grain processing, as well as mechanisms for gardening and logging	35,7	-35,7	30	0,5
6.	8403	Non-electric boilers and its spare parts for central heating	20,9	-20,8	38	0,3
7.	8454	Cows used in the metallurgical industry and the field of metal cutting, molding machines	11,9	-11,9	30	0,4
8.	8437	Machines and mechanisms for cleaning, processing and sorting seeds, grain plants, and cleaning legumes	7,8	-7,8	25	0,4
9.	8435	Presses used in the production of wines, ciders, fruit juices, threshers and similar machines and mechanisms	3,1	-3,1	28	0,9

*Table 3: List of imported engineering products in Azerbaijan for the period 2013-2017, thousand US dollars
(Source: www.trademap.org)*

According to the forum (Azerbaijan-Germany business forum, 2019), Azerbaijan-Germany joint enterprises produce approximately \$ 5.6 million each year. About 110 thousand tons of products were produced in metallurgy. Germany residents are actively working in the field of light industry, tourism, the banking sector, as well as in agriculture. Germany residents are actively developing new products in the field of creating robotic dairy farms and processing industries at Azerbaijan agricultural enterprises in the production of fruit juices from pomegranate, apples, cornel, quince and other fruits, as well as in the processing of nuts (butter and jam from walnut, almonds, hazelnuts, etc.). The cooperative ties of Azerbaijan with Germany in the field of agriculture are expanding. Germany helps Azerbaijani farmers and livestock owners use the uptodate technologies. Azerbaijan's livestock farmers imported tens of thousands of cattle from Germany to improve cow breeds. Every year imports of grain (about 200 thousand tons for all years of cooperation) and potatoes (150 thousand tons) are increasing. It should also be noted the update of equipment in the field of agriculture. Until 2018 Azerbaijan farmers could update the agricultural machines and mechanisms (tractors, combines, and other equipment) privately using leasing operations through banking operations. Since 2018 the state structures of Azerbaijan have committed themselves to updating agricultural equipment to all Azerbaijani farmers. In addition, new technologies for the production of mineral fertilizers are being created jointly by German chemical companies.

3. THE STRATEGY OF INNOVATIVE DEVELOPMENT OF AZERBAIJAN AND ACCESS TO FOREIGN MARKETS

It should be noted that the main development strategy of Azerbaijan is based on three main tasks: 1) production of products that have no analogues in quality and taste parameters; 2) trade financing; 3) realisation of products with the gradual strengthening of market positions. All these strategic directions involve high-quality innovative transformations in all sectors of Azerbaijan national economy. Based on the foregoing, Azerbaijan's top priority strategic goal is to capture the CIS markets with high-quality industrial goods and agricultural products. In this regard, the priority task is the development of viticulture with the help of advanced agrochemical industries and franchises from Germany. It is planned to increase the productivity of this sector tenfold with the help of active state regulation. One of the tactical objectives of this strategy is to familiarize Chinese consumers with viticulture products of Azerbaijan which has been developing with the support of AZPROMO since 2016. Another direction is the formation of branded stores with Azerbaijanian viticulture products in various European capitals - in Spain, France, Italy, Germany and other countries. The main task is the active advertising of products through exhibitions and sales houses at the representative offices of Azerbaijan. For 2019 Azerbaijan participated in 9 international exhibitions that covered 17 European countries. Of particular note is the PRODEXPO exhibition in Moscow, in which new high-quality and competitive Azerbaijanian goods demonstrated. These scientific and industrial products were franchised from Germany, which combines the latest innovations both in industrial production and in the implementation of new methods of production functioning - for example, organisational design using quality management. At this exhibition about 40 large business structures of Azerbaijan were presented, which signed agreements on the supply of agricultural products to various regions of Russia and the CIS countries. With the help of German enterprises, which are part of Global Engineering Alliance, Azerbaijan has created fully automated lines for the production of milk, wine and vegetable oils, over the past 5 years, "turnkey" 7 fully automated dairy farms have been created for the company "Atena" LLC, which serve 5000 cows. The automated system includes all processes from milking cows to finished dairy products - packages of milk, packages of sour cream, cottage cheese, as well as packaged blanks of different types of Azerbaijani national dairy products (shore, kesmik, ayran). Also, with the help of German entrepreneurs, more than 5,000 types of scientific and technical products are produced in Azerbaijan - acceptable technologies for the agro-industrial complex, chemical products, heating systems and water supply units with a closed water circulation system. An analysis of the innovative activity of enterprises of different ownership forms has confirmed the general trend of increasing market requirements for increasing the competitiveness of domestic products, especially in sectors oriented to the foreign market (fuel, metallurgy, petrochemical, etc.) (Shamkhalova, Khanlatzadeh, 2016). The limited financial resources of enterprises engaged in innovative activities put forward an approach based on the inevitability of state financial support for innovations and their economic incentives, at least at the stages of creating a plan and its project reinforcement. The state budget expenditures required for this are paid off by additional revenues due to the growth of production and increase of its efficiency provided by the use of innovative technologies. (Asaul, 2005, p. 423). Entrance to the foreign market of Azerbaijan scientific and industrial goods mainly depends on supply and demand of the foreign market. It is impossible to imagine an innovative product or the introduction of innovative technologies in order to create an innovative product without large capital investments, investments, subsidies from the state and private banks, as well as working capital of economic entities themselves (Abasova, 2013). Along with the high growth rate of production and sales (approximately 15% sales growth was observed in 2019), the process of bank payment through on-line processes is ongoing. Germany partners help to improve the financial support infrastructure also - banking, insurance operations are conducted according to

modern data protection and software security requirements, which speeds up the payment process. In fact, evaluation of economic efficiency of a business requires calculation of costs related to different activities of it. The value of each activity for the business can be defined by calculating costs attributed to it (Hamidov, Rzayev, Huseynli, Shamkhalova, 2016, p.52-54). Except of the financial support infrastructure supporting some managers and specialists, also scientists and teachers from Germany are actively organising the training process of specialists for agriculture and the agro-industrial complex at Ganja State University. The first graduates are already working in joint Azerbaijan-Germany enterprises in the field of agriculture and processing of agricultural products. The selection of priority innovation areas is the main stage of foreign economic innovation processes. In the countries of the European Community, specialization is also observed in priority innovative areas. For example, the UK specialises in medical instrumentation, France in the transfer of technology and security systems in the field of nuclear research, Germany in the development of security systems for personal computers and software, etc. According to S.H.Abasova (Abasova, 2015) the following actions are the priority innovative directions for Azerbaijan:

- adaptation of the energy sector to modern requirements, the search for new energy sources and the possibility of their operation;
- development of the agro-industrial sector and the modernisation of processing technologies in this area;
- innovative measures and technological innovations in the chemical industry, especially in the production of mineral fertilizers to meet the needs of agriculture;
- innovative transformations in the development of agricultural engineering, machine tool, shipbuilding, automotive, in the production of air and floating equipment;
- innovative measures in the service sector (innovations in the field of medicine, pharmaceuticals, banking services, insurance, television and radio broadcasts, the Internet network and in the activities of search servers, etc.);
- finding the innovative potential of the artificial satellite of Azerbaijan and the possibilities of developing information technologies by mobilizing all resources.

Support for entrepreneurs and business executives is one of the key points in the state regulation of foreign economic innovation processes in Azerbaijan. Without legal and financial support of the state, it is very difficult for entrepreneurs (domestic and foreign) to cope with the task of introducing technological innovations, because this requires large capital investments, the search for investments, as well as various kinds of legal and financial support, organisational character. Entering to foreign sales markets is also impossible to imagine without government intervention. The state administrates, regulates, coordinates foreign economic activity, provides business executives with privileges in various fields - exemption from taxes, reduction or absence of customs duty, right to intellectual and industrial property, etc.

4. MARKETING STRATEGIES FOR THE RELEASE OF SCIENTIFIC AND TECHNICAL PRODUCTS TO FOREIGN MARKETS

Entrance to the external market takes place through mechanisms and market segments. Marketers in this case turn to countless strategies for pushing and attracting services and products. State marketing occupies a special place, which promotes the pushing of the republic's scientific and technical products in European markets and strengthens its position in old sales markets, especially the CIS countries. S.H.Abasova (Abasova, 2014) conditionally divides these state marketing strategies into 4 types, which can also be analysed and assessed by their capabilities using SWOT analysis. The marketing strategy of stratification requires large financial costs, which are necessary for radical and basic innovations that have no analogues in the world.

Monopolist producers also spend a lot of money on large-scale marketing research and on an advertising company. In the United States, the state also encourages medium-sized businesses that introduce the latest developments and distribute completely new scientific and technical products and services to new markets (pilot companies like as ‘swallow’, venture companies) (Yudanov, 2005). Due to the fact that the marketing strategy of stratification requires large investments in innovations of a radical nature, it is located in the Strength quadrant of SWOT analysis. Diversification marketing strategy is based on market research with the goal of breakthrough entry of new products into old markets. Manufacturers monopolists (enterprises like as “lions” which use to strong behavior for consolidate their position at market) (Yudanov, 2005), middle innovative and entrepreneurial structures (companies after named “patients” which suggest only exclusive goods and companies after named “commutations” which produce and sale a new goods based on strange ideas (Yudanov, 2005)) are working to improve the design, technical and economic properties of goods. They search for new consumers, apply an advertising company at the regional, federal and local levels. It should be noted that new events are not always successful. In this regard, this marketing strategy is located on the Weaknesses quadrant (Abasova, 2015). Differentiation marketing strategy explores new markets for traditional products based on combined innovations. This strategy addresses to conventional, tried-and-tested advertising, but covers a wide range. It is expanding the range of markets that you can get additional profit without any special expenses for studying the tastes of consumers. Consequently, gaining additional profit at a fast pace is typical of the Opportunities quadrant. The elimination marketing strategy predetermines those products that are gradually being phased out of the old sales markets due to a decrease in consumer demand and the gradual retirement of consumer groups aged 70 years and above. The elimination marketing strategy involves providing traditional high-quality goods without elements of novelty. Therefore, this strategy is located in the Threat quadrant. In the Threat quadrant the market is so saturated with products that it is impossible to use any market segment there to improve. The Weaknesses quadrant has a small market share, although breakthrough innovations spread new products in this quadrant. The quadrant “Strength” is most attractive to investors because in this sphere are placed the most suitable radical technologies that have no analogues in the world.

Table following on the next page

S - Stratification Strategy	W - Diversification Strategy
<ul style="list-style-type: none"> • The import of elite cows from Germany in a large volume determines the creation of effective up-to-date technologies in the production of high-quality milk with a different assortment of fat content and dairy products not only for the domestic market, but also for the markets of the CIS countries; • Creation of a full cycle of “science-production-consumption-implementation” in all joint ventures in the field of agriculture; • State marketing actively uses the strategy of creating new markets and a breakthrough strategy of reaching leadership positions through scientific and technical products in the field of metallurgy, mechanical engineering and the chemical industry; • Use of international advertising using pull strategy. 	<ul style="list-style-type: none"> • investigation of market supply and demand, the competitiveness of products creates a reserve for the introduction of innovations such as the exploitation of new types of resources or raw materials for reproduction, which greatly depends on the responses of segments of new markets; • implementation of R&D in the laboratories of the Sumgait Technology Park with the help of German specialists for the production of pipes for oil and gas production, which are implemented in the CIS countries, Latin America; • state marketing actively uses the dependence strategy and the separation strategy to develop new markets, where minor improving and combined innovations have changed the design, technological characteristics of scientific and technical products (heating systems and industrial cooling systems, household appliances, information technology, etc.); • using regional and federal advertising process using various strategic marketing options - breakthrough, developing strategies for penetrating new markets.
O - Differentiation Strategy	T - Elimination Strategy
<ul style="list-style-type: none"> • Creation of a new type of industrial designs for serial production based on energy, material, metal-saving technologies can contribute to the development of industrial production in the chemical industry, in the field of household engineering and instrument-making by German manufacturers WILO and GEO; • Introduction of new types of banking and insurance operations in the infrastructure of the economy of Azerbaijan with the aim of entering the global world community; • Training and retraining of specialists in the field of agriculture, construction, metallurgy and mechanical engineering, as well as in the field of information technology in order to improve quality management; • State marketing uses a strategy of confrontation which provides for updating the assortment due to new simple types of scientific and technical products; • R&D of a full-fledged innovation market due to the stable functioning of the chain: "market demand - production growth - demand for innovation"; • Active use of international and regional advertising which are using push strategy. 	<ul style="list-style-type: none"> • it is impossible to replace all obsolete equipment in machinery, in metallurgy, in chemical industry; • unacceptable lending conditions, lack of own financial resources hinder innovative activity in Azerbaijan; • The financial sector of Azerbaijan national economy has ceased to fulfill the function of meeting the needs of the production process, its unity and continuity, including the innovation stage; • The noted features of the behavior of business entities are most acute in the innovation sphere, the specificity of which, in particular, lies in the fact that the long payback periods of innovative projects increase the risk of financial investments; • State marketing uses a traditional strategy (new scientific and technical products are created through advanced licenses) or a residual strategy through the sale of old, high-quality scientific and technical products; • The advertising process is either not implemented or is using old forms of attracting consumers.

Table 4: SWOT analysis of expert assessment of state marketing strategies for entering scientific and technical products of Azerbaijani-German enterprises to foreign markets (Source: compiled by the authors from the following sources (Abasova, 2014), (Abasova, 2015), (Anshin, Filin, 2003), (Shamkhalova, 2012,) (Shamkhalova, Khanlarzadeh, 2016), (Yudanov, 2005))

As can be seen from the above, the strategic marketing of a new product contributes to the adoption of segmentation and diversification strategies, which leads to an increase in the number of products offered by one firm or under one brand. This practice strengthens the interdependence between goods. Attempts by competing firms to enter a new strategic group always lead to increased competition. The different profitability of individual firms or a group of firms may be due to varying degrees of pressure from suppliers or consumers, and also from goods produced in other industries (Abasova, 2013). As you know a strategy for studying market dynamics, analysing competitors, analysing resources, analysing a reduction in production costs, using possible substitutes for parts and assemblies of products, as well as the products themselves, as well as choosing alternatives to one of the strategies: “cost leadership”, differentiation, market niche - are elements of market research products. To implement the strategic direction of scientific and technical development, it is necessary to consider and select priority areas for the development of science and technology, identify factors that impede their development, and create mechanisms to solve these problems (Shamkhalova, Khanlarzadeh, 2016). Transferring the Azerbaijanian economy to an innovative development path requires a long-term state strategy aimed at the efficient use of national resources along with the use of foreign innovative technologies, managerial experience and financial resources. A new approach is also required to assess the role of science and technology in social progress, the formulation and implementation of national goals. Only in this case the state policy in the field of science and innovations will really be a priority direction of its activities. Science should be constantly used to assess the state of the domestic economy, analyse the consequences of government decisions, programme and forecast economic and scientific-technical development.

5. CONCLUSION

Based on the foregoing the authors consider it appropriate to introduce into the practice of developing economic relations between Azerbaijan and Germany the implementation of innovative transformations of the following nature:

- 1) First of all, it is necessary to select priority innovations that have a great influence on the pace and proportions of the development of the Azerbaijan national economy. Radical innovation should replace improving innovation and be an object of state protectionism. First of all, radical, then improving and combined innovations of new generations are called upon to ensure the competitiveness of domestic products in the world market, the solution of pressing social and economic problems, a qualitatively new level of resource saving and a multiple increase in labour productivity;
- 2) It is necessary to develop a rational organisation of resource saving and functional support measures and a quality management system in Azerbaijan-Germany JV in the field of agriculture, chemical, metallurgical industries and machinery. Author suggest to develop staff retraining to ensure for efficient production in market conditions;
- 3) It is necessary to create the effective protective state mechanisms for property and copyright of legal entities in which the state assumes legal obligations and financial losses in case of failure of the venture business. Author suggest to introduce preferential interest rates for short and long-term bank loans in order to implementation of radical innovations. It will be better if a mechanism of preferential taxation introduces during the creation and development of new radically innovative products in machinery, chemical and metallurgical industries, robotics, space exploration and artificial satellite control. Author also suggest to constantly develop the implementation of the experience of advanced information technologies in the field of finance providing and borrowed funds;
- 4) The initial condition for the emergence of a full-fledged innovation market is the stable functioning of the chain: "market demand - production growth - demand for innovation".

It is necessary to extend the management system for adaption goods' assortments of machinery, metallurgical, chemical enterprises to market needs;

- 5) Author suggest to organise the attraction of financial resources for entering to the old sales markets with both improved and fundamentally new innovative products, the development of opportunities for obtaining new sales markets through the application of a strategy of attraction and implementation. It is necessary to develop and improve a full-fledged innovation market in which the chain will function steadily: "market demand - production growth - demand for innovation". The choice of marketing strategies and the development of various market segments offered by the authors contribute to the expansion of the range of products of joint Azerbaijan-Germany enterprises and the services offered in the infrastructure of the Azerbaijan national economy. State marketing of the stratification strategy actively uses the strategy of creating new markets and a breakthrough strategy of reaching leadership positions through scientific and technical products in the field of metallurgy, machinery and the chemical industry. And state marketing of the differentiation strategy uses a confrontation strategy, which provides for updating the assortment on a new simple types of scientific and technical products. State marketing of the diversification strategy actively uses the dependence strategy and the withdrawal strategy to develop new markets, where minor improving and combined innovations have changed the design and technological characteristics of the republic's scientific and technical products;
- 6) It is proposed to strengthen the state advertising with the aim of disseminating legal awareness of the subjects of the advertising market, regulating their legal relations and clear legal norms. In order to expand the market for products and services authors suggest to develop not only advertising at the local level, but internationally.

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THE MAIN COMPONENTS OF THE IMPLEMENTATION OF THE QUALITY MANAGEMENT SYSTEM IN TEXTILE ENTERPRISES

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ABSTRACT

The main components of the implementation of the quality management system in textile are examined. The QMS is a way to achieve certain results in the market. The article analyzes the components that play a key role in the successful implementation of the QMS, which enables the production of quality products in textile companies. These components are: management responsibility, resource management, product and process design in textiles, quality control in textiles, quality improvement, quality assurance, quality audit, quality system documentation, quality value. Various scientific literature related to the topic has been researched and analyzed in terms of textile enterprises of the main components of QMS. The importance of the QMS components analyzed in the article has been identified. This article can be used to analyze the current situation in the enterprise and to identify deficiencies in order to select the appropriate QMS for textile companies. The purpose of this study is to identify the components that are important for the successful implementation of QMS in textile enterprises and to determine the level of impact of these components on the enterprise. The purpose of the study was to identify the components that are important for the successful implementation of QMS and to determine the level of impact of these components on the enterprise. The structure of the article is based on the analysis of different approaches to the topic. In addition, this topic provides a useful framework for paving the way for the successful implementation of QMS in textile enterprises.

Keywords: *quality, Quality Management System, textile*

1. INTRODUCTION

In the face of increasing global competition, quality management has become an increasingly important factor for the leadership and management of the manufacturing industry. Quality management is a concept that is under the authority of the top management of the enterprise, defined on the basis of plans, goals and strategies of the top management. The quality system includes the organizational structure, responsibilities, procedures, processes and resources required to implement quality management. The quality management system should begin by developing a quality policy and setting goals. Then comes the creation of organizational structures and the definition of responsibility. Once the quality system is in place, problem areas are identified to develop development programs. Then the developed programs are implemented and the progress is monitored regularly. The effectiveness of the system is finally assessed by inspection and the quality system is reviewed and adjusted, and the remaining steps are repeated [1]. In order for the quality management system to be successful, it must have some principles. The principles of the quality management system are to establish an effective and efficient quality management system and to meet the requirements of the standard. It contains the necessary principles for businesses that want to go beyond and succeed. These are the main factors of the quality management system determined for textile enterprises as a result of the research: management responsibility, resource management, product and process design in

textiles, quality control in textiles, quality improvement, quality assurance, quality audit, quality system documentation, quality value.

2. THE MAIN COMPONENTS OF THE IMPLEMENTATION OF THE QUALITY MANAGEMENT SYSTEM

The basis of a quality management system is the creation of a competitive product that meets the established requirements and meets the needs of customers. [2, p.13]. The following are the factors that affect the successful implementation of a quality management system in textiles.

2.1. Management responsibility

The textile industry is one of the largest industries that manages a complex system, including human labor, raw materials, machinery and equipment. In this context, the production of quality products in textile companies is the direct responsibility of the management. Top management in textile enterprises should ensure the following:

1. quality vision, mission, policy definition
2. making quality management decisions
3. determination of the working group responsible for quality
4. quality planning
5. employee motivation
6. take into account customer feedback

Management is responsible for defining and updating the organization's quality vision, mission and policy. Quality planning plays a key role in the success of quality-related activities. Planning determines what and how to achieve. Strategic plans prepared before starting any quality activity determine its success or failure in the market. In textile companies, senior management and middle management are responsible for providing corporate employees with quality and legal and regulatory requirements. The establishment of goals and quality objectives by identifying their understanding about their daily work and ensure its implementation. Decision making in the quality management system in textile companies requires great responsibility. Management decisions relate to the organization's coordination and core activities. There must be an organizational structure responsible for quality within the enterprise. This structural unit needs to be strengthened to be able to make important decisions. Quality planning is an important business process. Key activities included in quality planning include identifying customer specific requirements, identifying critical product or process characteristics, identifying and obtaining raw material sources, improving the use of statistical methods and tools, applying preventive and predictive maintenance, and identifying sources for feedback on critical process outcomes. Before demanding productive work from employees, it is necessary to properly explain to them what they will do. The first step is to develop job descriptions. Work instructions should be prepared as necessary to complete the procedural requirements and to ensure that critical work areas are implemented consistently. Managers are responsible for identifying where job descriptions are needed in their areas of responsibility and for establishing systems for the preparation, review, distribution, improvement and monitoring of job descriptions. Employees need to adopt the right leadership style to motivate. Performance results in the production of clothing, on which organizations are highly dependent on human labor, will create a competitive environment [3 p. 273-289]. The organization must accept that the purpose of all work and adjustments is to better serve the customer. This indicates the need to always know how well it is performing in the eyes of the customer through measurement and feedback. To meet customer demand, textile companies must fully understand the customer's current (and future) needs and expectations. Of course, in an ideal world, management should always try to exceed the needs and expectations of customers and then wait for the order.

Textile companies to identify customer and end user needs and expectations: identify their customers (including potential customers), identify key product features that the customer is looking for in textiles, identify and evaluate market competition, identify opportunities and weaknesses, identify financial and future competitive advantages should do.

2.2. Resource management

Textile companies must identify and provide all the resources (e.g raw materials, information, infrastructure, people, work environment, finance and support) required to implement and improve the quality management system and related quality processes.

2.2.1. Supplier relations

One of the sources of the poor quality problem in the textile industry is the quality of raw materials. The main raw material (cotton fiber) for the textile industry is supplied by local factories. Modern quality approaches have proven to be an important component of supplier quality improvement activities. Key points for evaluating suppliers are the quality requirements of the product or service, the level of technical machinery, tools and manpower required, the commercial and financial capacity, the production capacity and the commitment to a coordinated supply program and the ability to meet the effectiveness of the quality assurance system.

2.2.2. Education and training

As a result of the research, it was determined that some courses in the corporate training program do not match the company's goals and current problems. In addition, customer requirements; Areas that need performance improvement are not clearly defined. For this reason, special quality education in the textile industry should be evaluated and clarified and answer the following questions: those who need education, competitive advantage of the course, expected benefits during training, number of participants and resources required for training. Studies by Clapperton and Gamlen (2010) have shown that the successful implementation of GMS depends on the people who use the system, and that only promoted employees can influence organizational development, cultural change, and provide the necessary training [4p. 48-51]. In addition, a simple and well-designed QMS will make it easier to understand and follow.

2.2.3. Facilities

Depending on the size of the textile company and the products it offers, the required facilities (e.g. workplaces and facilities) include factories, equipment, software, tools and equipment, communications, transportation and ancillary services. A successful testing and quality control program in the textile industry should take into account the following factors: organization of space and location, tests to be performed and equipment for this test, testing and evaluation staff, methods and procedures for evaluating and applying results.

2.2.4. Work environment

The working environment of the enterprise is a combination of flow depending on human factors(eg working methodologies, success and participation rates, safety rules and management, ergonomics, etc.) and physical factors(eg heat, hygiene, vibration, noise, humidity, pollution, light cleaning and air). All these factors affect the motivation, satisfaction and performance of employees and should be taken into consideration by management when evaluating product suitability and performance as they have the potential to increase the performance of businesses.

2.3. Textile products and process design

Most of the textile industry has three main types of businesses: spinning mill, weaving mill and textile finishing mill. These businesses produce textile fibers (eg cotton, fiber, polyester fiber, nylon fiber and acrylic fiber), fabrics (cotton fabric, nylon fabrics, blankets) and other products. Each department also has the opportunity to work independently. Innovation is very important to compete in the textile industry in the local and international market. When designing, there should be a balance between innovation and standard processes. On the one hand, designers may have to use historically proven materials and methods to check reliability, durability and diversity. On the other hand, innovative and recently developed new methods, materials or components should be used to protect the design process from stagnation.

2.4. Quality control of textile products

Processes in textile enterprises are integrated and mixed. Therefore, quality control in textiles is divided into three main departments: spinning, weaving and finishing quality control. Statistical quality control methods can be used effectively in determining the quality level of raw materials and finished products. They can also be used to control production processes in enterprises. In particular, control charts are useful tools that provide concrete evidence for any improvement process. The main elements of quality control: to help establish quality control at various points in the production processes; operation and calibration of technological control devices; assistance in investigating defects during production and resolving quality problems; implementing quality control measures for incoming stores; to organize the activities of a test laboratory to make the necessary tests and analyzes; organizing stage and inter-stage inspections or point controls when necessary, feedback on defects and customer complaints about the quality control department and others.

2.5. Improving the quality of the textile industry

Quality improvement begins with the active participation of customers, suppliers (sellers) and employees. Customer satisfaction is the basis of any quality improvement activity. As customers' needs change constantly, there must be a feedback mechanism to deal with changes that will further increase the company's mission. As suppliers supply raw materials to the business, the vendor-producer relationship is a component of quality improvement. Strong communication with suppliers ensures that quality material is delivered in the required time and quantity. Employees make quality improvements a reality. Employees should be encouraged to participate in the improvement process when they feel confident, properly trained and equipped. One way to encourage employees to participate is motivation. Motivation also improves the quality of work in an organization.

2.6. Quality assurance in the textile industry

In textile companies, organizational quality assurance / quality manager has the authority and responsibility to ensure that the requirements of the quality management process are met and maintained: as a continuous improvement mechanism, to report regularly to the management on the current performance of the quality system and the level of customer satisfaction; to ensure that the business unit complies with the valid requirements of ISO 9001 standards, to contact with foreign organizations on quality issues, make sure the business has implemented the latest version of ISO 9001, which supports quality guidelines.

2.7. Quality audits and reviews

Future changes in the quality management system in textile companies are provided by quality control and evaluation, which is the basis of the smooth functioning of the quality management system. Review should use audit results and ultimately lead to improvements in the quality

management system. The quality management system should be reviewed at all levels at least once a year to verify compliance with planned regulations, efficiency and compliance with the company's goals. In this case, any corrective action should be taken to identify any defects or potential hazards in the system. The results of these audits are reviewed by management to confirm compliance with sustainable development and quality system. Such audits should be recorded. Each company conducts inspections in the quality system in accordance with the specified specifications, depending on the status and importance of the activity. The audits of the quality system should be carried out by qualified professionals who are not directly responsible for the area being audited. In all cases where inconsistencies or analysis results are inconsistent, the participant will report the problem in writing and receive a report on the corrective action. Corrective action plan should be evaluated together with the functions responsible for carrying out corrective action.

2.8. Quality System Documentation

Quality system documents are one of the important components for the implementation of a quality management system. The quality function creates, implements and maintains a documented quality system to ensure that products and services meet specified requirements. This documented system should include this quality guide (quality policy guide, quality procedures guide) and operating instructions supported by the company's detailed procedures and specifications. The documented quality system should ensure that the following activities are evaluated in a timely manner to meet the specified requirements:

- a) Quality planning;
- b) Identify and facilitate controls, processes, controls, equipment, facilities, production resources, knowledge and skills that may be required to achieve the required quality;
- c) Update quality control, inspection and testing methods as required, including the development and purchase of new vehicles
- d) ç) Disclosure and documentation of acceptable standards for all features and requirements, including those containing a subjective element.
- e) Identify appropriate reviews at appropriate stages of product or service development;
- f) Identification, preparation and maintenance of quality records

2.9. Cost of quality

The value of quality costs incurred by the enterprise to prevent low quality, costs incurred to ensure compliance and assessment of quality requirements and the sum of other costs caused by low production. Poor quality means activities that do not add value, waste, error or failure that do not meet customer needs and requirements. According to Dale and Plunkett quality costs are widely accepted when: costs incurred at the product design stage, operation and maintenance costs of the quality management system, the cost of resources spent for continuous improvement, the cost of the system, malfunctions and other necessary costs and additional worthless assets training [5]. To study the cost of quality in the textile industry, it is necessary to identify the most expensive departments. Therefore, the most expensive departments are: production and technical department (spinning, weaving, training), quality control department, marketing and sales department, internal audit and planning and programming department. The implementation of the quality management system in textile companies affects all parts of the organization. When implemented properly, it results in a transition to a sustainable development atmosphere.

3. THE IMPLEMENTATION PROCESS OF QMS

The implementation process of QMS in the textile industry depends on the size of the company, the complexity of the process and the subtleties of the existing quality program. In the current

situation, there are three main stages that need to be taken into account when applying QMS in textile companies. These are: development stage, application stage and QMS maintenance stage. The development phase takes into account what is going on in the company's process. The development phase includes: management responsibility, appointment of a management representative, establishment / development of quality control department, QMS formation of the conduct group, conducting gap analysis, and redevelopment of existing facilities aimed at quality standards. During this period, responsibilities and authorities must be redefined. The management team must be trained before the implementation process begins. Main responsibilities of the management representative / quality manager:

- 1) To ensure the establishment, implementation and efficiency of quality system maintenance, such as production and technical department, marketing and sales department etc. to coordinate and operate other management functions such as
- 2) To conduct quality audits and to give performance reports on quality system management.
- 3) Coordinating the quality improvement program
- 4) Starting and planning periodic researches on the effectiveness of the quality system
- 5) Take corrective and preventive measures on identified actual and potential inconsistencies.

The executive team should include individuals from production and technical, quality control and other manageable key functional areas. Employee participation should also be considered. This team should: Develop a QMS implementation plan, coordinate the creation and processing of QMS documents. The last step is to maintain the quality management system. This step includes the development of a recovery program, the application and monitoring / evaluation of a recovery program, the testing and evaluation of its effectiveness, and the application of corrective precautions. The company will carry out an inspection to assess the status and effectiveness of QMS. The quality and consistency of QMS is maintained by using the information obtained, including the results of quality control system inspections and customer complaints. In order to take preventive measures, it is necessary to identify the root causes of inconsistencies and their dates of occurrence. Monitoring the effectiveness of corrective precautions is another important point in this phase. Finally, companies are constantly striving to improve the efficiency and appropriateness of a quality management system using the PDCA cycle or Deming cycle, quality policy, quality targets, control results, data analysis, corrective and preventive measures.

4. CONCLUSION

The results of the study show that all the factors that contribute to the successful implementation of the quality management system depend on the responsibility of management, the attention paid to the work. In this regard, it is necessary to emphasize the importance of the human factor in the quality management system in textiles. With this in mind, senior management should work to increase the knowledge and skills of employees through training, develop feedback mechanisms to measure customer satisfaction and needs, improve relationships with suppliers, and ensure the sustainability of quality improvement measures.

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THE IMPACT OF THE TRANSITION TO ELECTRONIC AUDIT ON ACCOUNTING BEHAVIOR

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ABSTRACT

An audit is an independent audit of the accuracy and fairness of accounting, accounting and financial statements of economic entities engaged in the production and sale of goods, services, and work. In some countries, an audit involves examining an entity and commenting on its financial statements. In our world, which is on the threshold of the 4th Industrial Revolution, as a result of the rapid development of technology, the electronification of the accounting and auditing process is one of the factors. The State Tax Service (former Ministry of Taxes) has been implementing the Automated Tax Information System in Azerbaijan for more than 10 years. The transition to e-audit will develop not only the field of accounting but also some sectors. As we know, electronic audit or other electronic sectors are more likely to be threatened by hackers, which is very important. To prevent this, more attention should be paid to the information technology sector. This, in turn, will lead to the solution of several problems. First of all, students studying in the field of information technology or additional education courses will start to provide better quality education, which will affect the overall welfare and living standards, increase the quality of education. We created a social survey using Google docs. The social survey remained active on the Internet for 30 days. As a result, we concluded that the public and the public can be better informed about this. For example, seminars and discussions can be organized, as well as information and articles about the pros and cons of e-audit; E-audit is currently a growing and globalizing system in countries. The transition to e-audit will increase transparency and, I think, will save companies costs.

Keywords: *electronic audit, e-audit, behavioral accounting, accounting*

1. INTRODUCTION

An audit is an independent examination of the accuracy and fairness of accounting, accounting, and financial statements of economic entities engaged in the production and sale of goods, services, and work. An audit involves performing procedures to obtain audit evidence about the

amounts and disclosures in the financial statements of the entity. The basis of the audit is the mutual interest of the state, the management of the enterprise, and its owners (depositors, shareholders). In some countries, an audit is an examination of an entity and the presentation of an opinion on its financial statements. In our world, which is on the threshold of the 4th Industrial Revolution, as a result of the rapid development of technology, the electronification of the accounting and auditing process is one of the factors. The State Tax Service (former Ministry of Taxes) has been implementing the Automated Tax Information System in Azerbaijan for more than 10 years. Automated Tax Information System is a large software and hardware complex consisting of central servers running a single database and application software, network equipment that allows users and taxpayers to connect to central servers, and process the data collected in the central database to obtain various reports and analyzes. Electronic audit is a tax audit performed by the taxpayer with direct or remote access to accounting information stored in electronic format through special software. Behavioral accounting is the behavior of people when they encounter an accounting event. The emergence of this term plays a major role in the behavioral economy. The main principle of the economy is "Homo Economicus", which refers to people trying to get the most out of resources. With globalization, accounting rules have become a common problem in every country, and to address this problem, the International Accounting Standards Committee has adopted International Accounting Standards and International Financial Accounting Standards that can be accepted and understood by the whole world. The Republic of Azerbaijan gained its independence in 1991 and in the first years of independence Azerbaijan traditionally continued the rules and principles of accounting inherited from the former Soviet system. has done. However, it adopted a law on amendments and additions to the "Law on Accounting" dated May 6, 2018, which states that the Accounting System in commercial organizations in the territory of the Republic of Azerbaijan should be established only on the basis of International Financial Reporting Standards. Electronic audit consists of the following stages:

- Identification of the business entity to be audited;
- Electronic audit planning and evidence collection process;
- Documentation and finalization of electronic audit results;
- Informing the business entity about the results of the electronic audit.

Each business entity, depending on its specific characteristics and areas of activity, must have the following electronic documents in the organization of accounting in order to carry out its electronic audit process:

- Statement of financial position, general ledger and balance of separate accounts;
- Profit (income) and loss statement;
- Cash flow statement;
- Statement of changes in equity;
- Accounting policy and explanatory notes;
- Electronic invoices, electronic tax invoices, payment orders, etc .;
- Schedule of sales operations (with disclosure of buyers);
- Schedule of purchase operations (with information on sellers);
- Schedule of banking operations (with disclosure of bank account turnovers and balances by months);
- Warehouse turnover schedule (with disclosure of inventories at the beginning and end of each month);
- Cash flow schedule (with disclosure of monthly cash flows and payments);
- Salary calculation and payment schedules of employees;
- Schedule of long-term asset movements (indicating monthly movements);

- Information table on debtors and creditors;
- And other necessary documents.

In addition to the above documents, documents may be required and analyzed at the end of the audit process.

2. LITERATURE REVIEW

It should be noted that the problems related to e-audit and e-audit have been little studied in the scientific literature. According to research by Brandon and others, "Each service is evaluated on the basis of three criteria that are important for behavioral accounting researchers: cost, flexibility, and access to interest groups." (Brandon, D.M., Long, J.H., Loraas, T.M., Mueller-Phillips, J. and Vansant, B., 2013.). We partially agree that, in fact, people's behavior does not pass unnoticed in an entity's accounting. Another study notes that the behavioral accounting research literature provides a framework that can be viewed as a whole, rather than in segments such as accounting subsections or research methods. The framework classifies BARs according to the focus of the study: individual, group, organization, or society in which accounting is available. (Birnberg, J.G., 2011.) As noted in this study, it is more appropriate to divide into 4 groups. Recommendations were made to increase the effectiveness of financial decisions, the limits of opportunities for psychological influence in making financial decisions within the authority, rights and responsibilities of the organization were identified. (Nuriyev, N. and Azizov, A., 2019.). The regulatory framework of existing audit standards and actual practices are validated through interviews and then synthesized to create evidence-based notes on the appropriateness of the methodology used. (Guliyev, V., Hajiyeve, N. and Guliyev, F., 2019.). He showed that the new realities of the XXI century have changed the attitude to traditional auditing, which requires the justification of the effect of work on the application of new information systems and the modernization of old systems, the complex automation of work processes. specialized solutions. Nevertheless, the demand for the development of business and IT strategies and feasibility studies is constantly growing. Projects related to the application of corporate knowledge come to the fore at all levels of government. (Lyudmila, K., Alexey, S. and Sevinj, A., 2019.). Estimating capacity. The information uncovered over the span of review help fabricate grounded estimates for the potential changes in the separate organization's key market pointers sooner rather than later. Subsequently, organizations get a chance to make alterations to their arranged pointers, and the strategies executed available for contacting them (Pickett, 2006, pp. 14-19). The office size has significantly positive relations with both audit quality and audit fees, even after controlling for national-level audit firm size and office-level industry expertise. These positive relations support the view that large local offices provide higher-quality audits compared with small local offices, and that such quality differences are priced in the market for audit services. (Choi, J.H., Kim, C., Kim, J.B. and Zang, Y., 2010.).

3. ANALYSIS

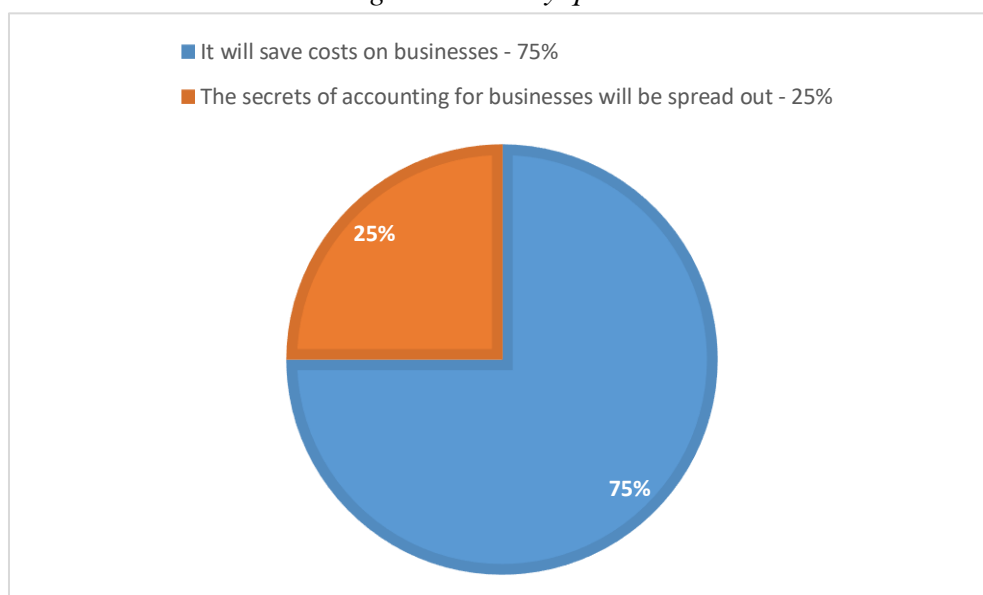
We created a social survey using Google docs. The social survey remained active on the Internet for 30 days, with 26 percent of respondents aged 20-30, 45 percent aged 31-50, and 29 percent aged 51-72. Of these, 44% are women, 56% are men, 31.7% are incomplete, 68.3% have higher education, 42.6% are accounting and auditing, 26.3% are finance, 15.3% are economics and 15.8% are business management. In our survey, participants were asked the following questions:

1. Your position at work?

Table 1: Survey question - Your position at work?

Position	Person	Percentage
General Manager	10	5.00
Executive Director	17	8.50
Director	5	2.50
Chief Accountant	24	12.00
Deputy Chief Accountant	4	2.00
Auditor	20	10.00
Accountant	44	22.00
Financial manager	10	5.00
Economist	17	8.50
Teacher	32	16.00
Senior Lecturer	12	6.00
Professor	1	0.50
Associate Professor	4	2.00
TOTAL	200	100

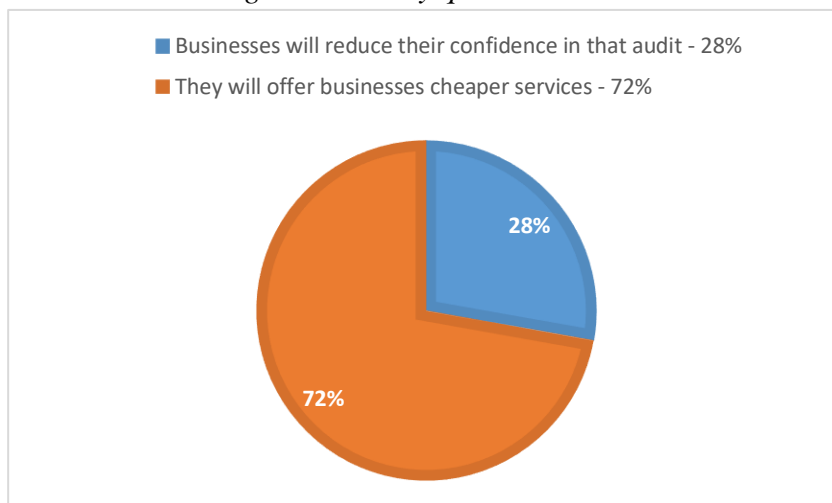
2. What is e-audit (e-audit)?
63.7% of the participants answered yes and 36.3% answered no. Note that these answers indicate that they did not know the full e-audit when they answered yes to the following questions.
3. How will the transfer of internal audit to e-audit affect enterprises?

Figure 1: Survey question 3 results

Conducting an internal audit to e-audit will save companies' costs because the company will outsource the service and will not have to pay for the maintenance of a separate department, and the acquisition of this service from consulting companies will bring together people with different knowledge and experience. However, the transfer of internal audit to e-audit does not reduce the risk that enterprises' accounting secrets will not be disclosed, as this information poses a threat to acquaintances and competitors in small countries such as Azerbaijan.

4. How will the transfer of external audit to e-audit affect enterprises?

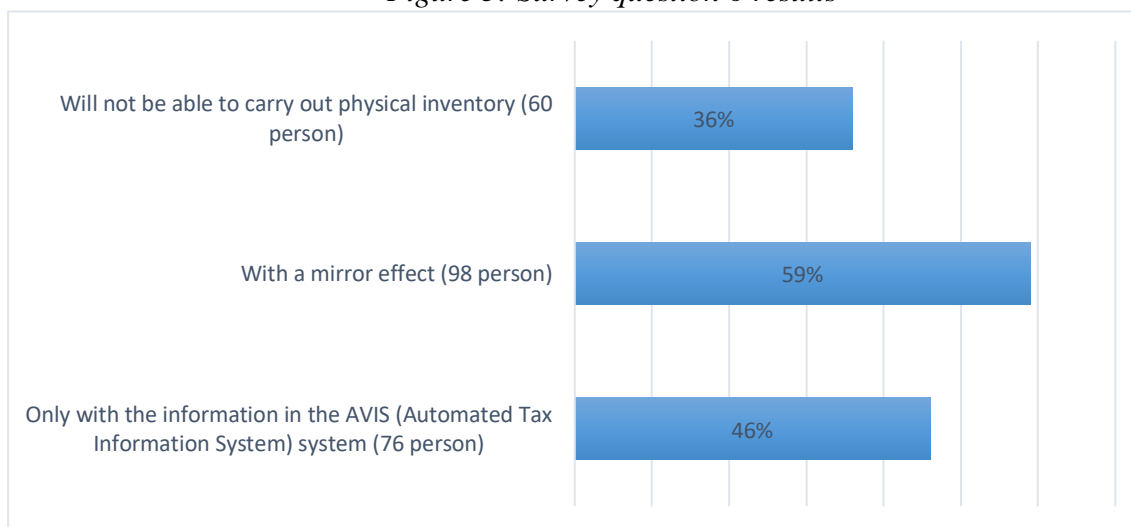
Figure 2: Survey question 4 results



It may be perceived that conducting an external audit to an e-audit will reduce the confidence of enterprises in that audit, as they will not be able to physically inspect documents and inventories. In another option, audit firms will offer cheaper services to enterprises, which is because they do not come to the enterprise and will carry out inspections by external electronic means.

5. Will the transition to e-audit reduce audit fraud?
33% or 66 people answered "Yes", 17% or 34 people answered "No", 50% or 100 people answered "Partially".
6. In what direction can control and inspection be carried out in e-audit? (you can choose several answers)

Figure 3: Survey question 6 results

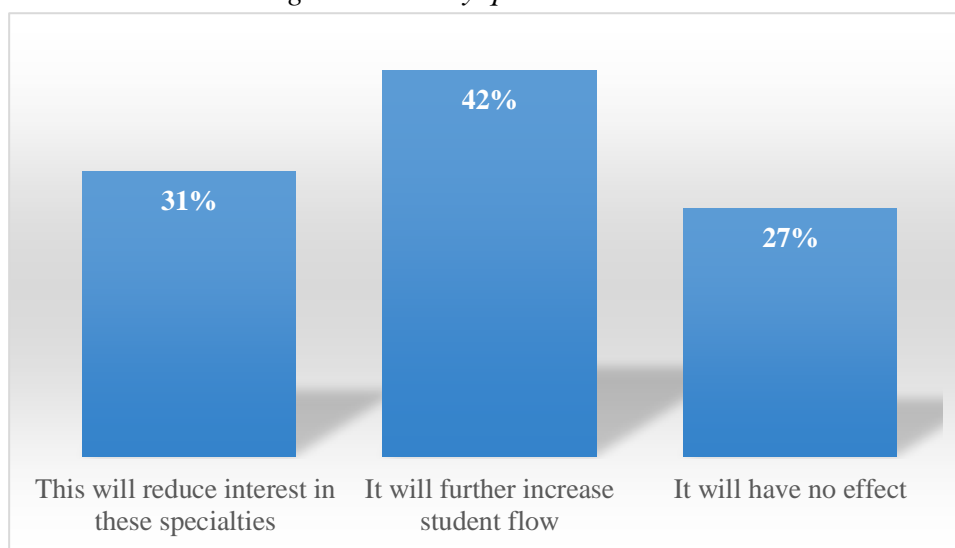


For more than 10 years, the Ministry of Taxes of the Republic of Azerbaijan (new name State Tax Service) has been able to control and inspect enterprises with the information in the AVIS (Automated Tax Information System) system applied to taxpayers.

At the same time, using this system, it is possible to conduct an annual electronic audit of enterprises through the mirror effect. However, it should be noted that 36% of participants said that they will not be able to conduct a physical inventory.

7. How do you assess the impact of the transition to e-audit on tax collection?
To this question, 22 percent or 44 people answered "Completely increase", 53 percent or 106 people answered "Partially increase", 25 percent or 50 people answered "Will not affect".
8. How will the transition to e-audit affect students majoring in Finance and Accounting and Auditing?

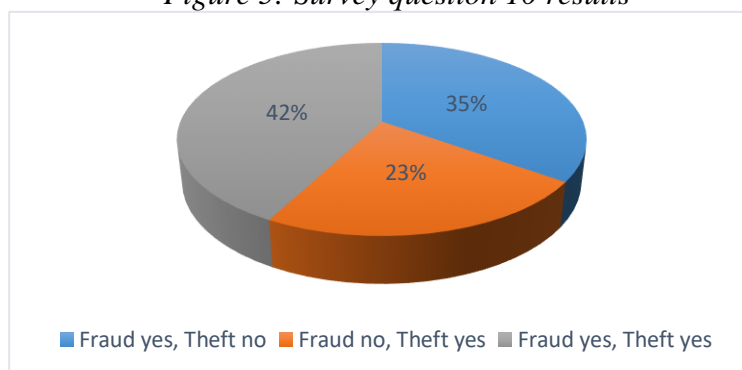
Figure 4: Survey question 8 results



The 4th Industrial Revolution and other similar processes will reduce the interest in these specialties (31 percent), further increase the flow of students (42 percent), will have no effect (27 percent).

9. Will e-audit reduce the company's costs?
67% (134 people) of the participants answered that they would partially reduce, 16% (32 people) would not reduce and 17% (34 people) said that they would reduce completely.
10. Will the mandatory state audit be able to detect fraud and theft through e-audit?

Figure 5: Survey question 10 results



35% of the participants answered Fraud yes, Theft no, 23% Fraud no, Theft yes and 43% answered Fraud yes, Theft yes. It should be noted that illegal businesses should be prevented, and continuous reforms in the tax system will ensure development in this area. The transition to e-audit will develop not only the field of accounting, but also a number of sectors. As we know, electronic audit or other electronic sectors are more likely to face the threat of cyber attacks. To prevent this, more attention should be paid to the IT sector. This, in turn, will lead to the solution of several problems. First of all, students studying in the field of IT or additional education courses will start to provide better quality education, which will affect the overall well-being and living standards, the quality of education. During the COVID-19 pandemic and in the post-pandemic period, the demand of companies for IT-skilled and well-versed workers has increased and will increase, which will create a competitive environment in these sectors.

4. CONCLUSION

Instruct people and businesses on the transition to e-audit and educate them about the process. For example, seminars and discussions can be organized, as well as information and articles about the pros and cons of e-auditing in the business world. There is a need to include e-accounting and e-audit in the curricula of educational institutions. The transition of internal audit to e-audit can further increase transparency for enterprises. It is necessary to completely computerize the accounting system to allow access to internal primary documents in the e-audit. E-audit is currently a growing and globalizing system in countries. The transition to e-audit will increase transparency and, I think, companies will be able to save costs. Legislation in the field of cyber security in the transition to e-audit and electronic in general should be improved.

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STEPS TAKEN BY AZERBAIJAN ON THE PATH OF INCLUSIVE EDUCATION

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ABSTRACT

One of the key issues in modern education of Azerbaijan is the process of increasing the participation level of all people with disabilities in society. That's why the application and formation of inclusive education has become a topical issue. Steps in this direction have been taken in Azerbaijan since 2004. The implementation of the "Inclusive Education Project" in Azerbaijan was launched in 2005. According to the resolution of the Cabinet of Ministers No. 20 of February 3, 2005, there was approved the development program for the organization of "Education of children with special needs (with disabilities) in the Republic of Azerbaijan". Three pilot projects on the organization of inclusive education have been implemented since 2005 with the financial support of UNESCO within the framework of the development program for the organization of "Education of children with special needs (with disabilities) in the Republic of Azerbaijan". 268 disabled children were involved in the implementation of these programs. The implementation of the project "Application of inclusive education at the level of primary education" has been started by the relevant order of the Ministry since the 2015-2016 academic year within the framework of joint cooperation with UNICEF. In order to organize the education of persons with disabilities in an inclusive environment in general education institutions, there was approved by the Presidential Decree dated December 14, 2017 "The State Program for the development of inclusive education for persons with disabilities in the Republic of Azerbaijan in 2018-2024". In this regard, various trainings are conducted in secondary and higher schools with the involvement of teachers. Internet portals such as "<https://www.inkluzivtehsil.az>", created for inclusive education, provide more public involvement in this work. The article discusses the projects and trainings about inclusive education, and their importance. In addition, successful teaching methods for the development of children and youth with disabilities are being studied.

Keywords: *disabled, education, inclusive, projects, teaching*

1. INTRODUCTION

Inclusive education is the development process of general education. Considering the importance of making education accessible for all in terms of meeting the different needs of all children, this form of teaching also provides education for children with special needs (with disabilities). In modern age, inclusive education means the process of getting educational for children in pre-schools and secondary schools, which also has special requirements. In accordance with teaching methodology, the inclusive education prevents any form of discrimination against children, allows even persons with various neurological or mental illnesses to get the perfect education and success. Its main task is to create a limitless environment for the vocational training of persons with disabilities. For children with special needs, it is more advisable to be together with their peers in order to get more qualitative education and to adapt to the society more quickly. The concept of inclusive education is based on the principle of human rights. In accordance with the Convention on Human Rights, states must create an education system in which every child will have the right to an education. Azerbaijan Republic signed the Convention on Human Rights in 1992 and undertook to protect the right of every child living in our republic to education. Every child has the right to get free education.

But persons with disabilities have faced a number of problems with getting an education for many years. Factors such as incomplete infrastructure, inconsistency of curriculum and education system to their special needs have led to their exclusion from education. Although such children get education in special educational institutions, it also have a number of unique disadvantages. So that, those who study in special educational institutions face difficulties in later integration into society. Their inability to adapt to society and exclusion from education also limits their job prospects. As a result, these persons get used to a passive life, deprive of opportunities for personal development, thus, a whole society loses potential human capital.

2. THE WORK DONE ON INCLUSIVE EDUCATION IN AZERBAIJAN

In many countries of the world (USA, Great Britain, Switzerland and etc.) children with special needs go to kindergarten and secondary schools along with peers. The development of the inclusive education is one of the main priorities of educational policy in many countries around the world, and is aimed at bringing the education system of any country in line with international principles and standards. Since independence, a number of reforms have been carried out in Azerbaijan, too.

2.1. State programs, projects and implementation

Starting with 2004 year a number of initiatives have been launched related application of inclusive education in Azerbaijan. According to the statistics for 2014-2015 years, the number of special schools and boarding schools for children with disabilities in the country was 5,496. Currently there are more that 60,000 children with disabilities in Azerbaijan, only about 12,000 of them are involved in education, so, the vast majority remain out of education [1]. According to the article 35 of the Law of Azerbaijan Republic on Children's Rights, the state is required to take appropriate measures to ensure that children with disabilities receive education in accordance with their abilities [2]. The article 41 of the same Law provides right to receive the necessary education and vocational training for such children. The State Program on Deinstitutionalization and Alternative Care and The project Draft State program on Inclusive education for 2006-2015 years, implemented to provide children with disabilities with appropriate education and, if possible, to involve them in the education system in an adequate manner, led to significant success in this area. Currently, there are special educational institutions in Azerbaijan for training of children with disabilities. In preschools, kindergartens, boarding schools and secondary schools there are organized Logopedic services for visually impaired children. In addition, some boarding schools provide educational services for children with various degrees of hearing impairment. The creation of library, the publication of textbooks in special fonts and in Braille for visually impaired persons are also commendable steps. Additions to the salaries of teachers and educators working in special educational institutions for children with disabilities, in the manner prescribed by law, should also be characterized as one of the positive steps taken in this area. Although inclusive education, which is expanding day by day in the world, has not yet been formed in our country, it is commendable that certain steps have been taken towards the establishment and development of this type of education. The Ministry of Education has prepared a draft State Program on the Development of Inclusive Education for 2012-2019 and submitted it to the Cabinet of Ministers. According to the press release of The Office of Deinstitutionalization and Child Protection, in 2012, within the pilot projects in the country inclusive education was implemented in 30 secondary and preschool educational institutions, and 298 children were involved in inclusive education in such institutions [1]. The article 1.4 of the Action Plan on implementation of the "State of Educational Development in the Republic of Azerbaijan" approved by the Decree No. 995 of the President of Azerbaijan Republic dated January 19, 2015 envisages preparation, approval and implementation of inclusive training programs and development for children requiring

special care. The project "Improving the skills of teachers in the field of inclusive education", started in May 2018, is scheduled for September 2020. The project "Improving the skills of teachers in the field of inclusive education" is implemented by the Regional Development Public Union (RDU) of the Heydar Aliyev Foundation with the financial support of the European Union and the project "Expansion of inclusive education in Azerbaijan" by UNICEF. In this regard, teaching opportunities and pedagogical resources of teachers in the field of inclusive education are being improved in Baku, Guba, Sheki, Jalilabad, Agjabadi and Shamakhi. The project works in 4 areas: improving the curriculum and materials on inclusive education; capacity building of teachers and support staff; creating resources for them; improving the policy on inclusive education and organizing public awareness events. Up to this day, there were conducted researches to assess needs in Baku, Agjabadi, Jalilabad, Shamakhi, Sheki and Guba. As well as, the international experts presented the strategy of teacher development in the field of inclusive education to the working group established in connection with the project. Training programs on inclusive education have been prepared and submitted to the relevant agencies, and Inclusive Education Centers have been established at the Azerbaijan State Pedagogical University and its branches in order to provide teachers and support specialists with access to inclusive education resources. Also, in frame of project, there were prepared information booklet and other educational materials about the concept of inclusive education, the legislative basis of inclusive education in the country. On the Internet portal www.inkluzivtehsil.az created within the project, it is possible to get training programs and self-assessment tests that serve to increase knowledge and experience in this field. Here you can get information about inclusive education centers and training teachers. The portal also has an online library module. It should be noted that the project is implemented in cooperation with the Ministry of Education of the Republic of Azerbaijan to support the implementation of the "State Program on the Development of Inclusive Education for Children with Disabilities in the Republic of Azerbaijan in 2018-2024". Up to this day, in the frame of project, there have been established 6 inclusive training centers at the Azerbaijan State Pedagogical University and its branches, more than 1,100 teachers and 1,135 students have been involved in trainings. There has been created and made available to the public a multifunctional portal on inclusive education. Training programs developed in accordance with best practices were included in the curriculum of initial pedagogical training and advanced training. Proposals have been prepared to improve the legal framework and bring it into line with the requirements of the International Convention on the Rights of Persons with Disabilities [6]. Other universities of Azerbaijan also support the development of inclusive education. Almost all Azerbaijani universities have inclusive education opportunities. In July 2015, there was established a center for students with disabilities at UNEC. The Inclusive Education Center supports students with disabilities. On September 20, 2019 an event was held at Baku Slavic University as part of the Inclusive Education Festival implemented by UNICEF and the Regional Development Public Union of the Heydar Aliyev Foundation in the field of inclusive education.

2.2. International projects

Within the framework of the Development Program of the Republic of Azerbaijan on Organizing of Education of Children Requiring Special Care (with disabilities) (2005-2009) 3 pilot projects were carried out through support of international and local non-governmental organizations. In connection with this 15 schools and 13 pre-schools applied inclusive education and 268 children with disabilities were engaged in inclusive education [6,3]. Despite the expiration of the projects, other students involved in inclusive education continue their education in institutions today. In 2015, the Ministry of Education of Azerbaijan Republic and the United Nations Children's Fund (UNICEF) analyzed the work done in the field of inclusive education and international experience, and as a result, the organization of education for persons

with disabilities has entered a new phase. At this stage, it is planned to carry out radical reforms in the field of special education, update the rules for the involvement of children with disabilities in education, their involvement in inclusive education in secondary schools and the introduction of new approaches in inclusive education. Thus, within the framework of joint cooperation with UNICEF, according to the order of the Ministry of Education the implementation of the project "Application of Inclusive Education at Primary School Level" was launched in the 2015-2016 academic year. According to the Action Plan of Project, professors of the German University of Oldenburg conducted two weeks training for primary school teachers and administrative workers of two chosen schools. For a week they were in Germany for exchange of experience. In the frame of project, measures to implement new approaches in the field of inclusive education were successfully tested in four experimental schools (220, 138, 252 and 202). In 4 pilot schools 54 children with disabilities were engaged in inclusive education. For the selection process, awareness-raising seminars on special and inclusive education were organized for parents of disabled children living in the area where schools are located, Logopedic service was established at pilot facilities. On February 1, 2019, the United Nations Children's Fund (UNICEF) and the Ministry of Education of the Republic of Azerbaijan organized training in the field of inclusive education for 28 teachers representing five higher educational institutions, including Azerbaijan State Pedagogical University, Guba and Sheki branches of the same University, Ganja and Sumgayit State Universities on February 4-8, and for a group of 50 trainers on February 11-15 in Baku [5]. These trainings were organized to increase the capacity of teaching staff to implement high quality inclusive education.

Table 1: Statistical Yearbook of Azerbaijan, 2015, p.215

	2006	2011	2012	2013	2014	2015
Number of special boarding schools for children with limited health	12	11	10	11	12	11
number of children in them, person	2915	2537	2159	2725	2653	2483
Number of boarding schools for mentally retarded children	2	2	2	2	2	2
number of children in them, person	298	267	300	310	297	314

3. THE WORKS TO BE DONE IN INCLUSIVE EDUCATION IN AZERBAIJAN

In order to organize the education of persons with disabilities in an inclusive environment in general education institutions, the State Program on development of inclusive education for persons with disabilities in Azerbaijan Republic in 2018-2024 adopted by Decree of President of Azerbaijan on December 14, 2017 [8]. There has been set up a working group to discuss issues related to the implementation of the program, draft documents, the results of research and studies, and prepare relevant proposals. In this regard, various trainings are conducted in secondary and higher schools with the involvement of teachers. The purpose of the State Program is to ensure the right of persons with disabilities to education on an equal footing with others at all levels of education and to create a barrier-free environment for their education. The plan set in the frame of project reflected in "Table 2".

4. CONCLUSION

It is important to ensure the social protection of children with disabilities, as well as their involvement in education and the provision of appropriate jobs after graduation. From this point of view, the widespread dissemination of inclusive education is a very positive point. The plans about the education of children with disabilities, the effective organization of their leisure time, food supply, treatment, logistics are important. Inclusive education leads to the adaptation of children and young people with disabilities to society, their involvement in certain social habits, knowledge and skills.

Table 2: ACTION PLAN on the implementation of the State Program [8]

Series	Activities	Period of execution	Executors
6.1	Improving the normative legal framework		
6.1.1.	Development of criteria, tools and methods for assessing developmental characteristics for the involvement of persons with disabilities in education	2018	Ministry of Education, Ministry of Health, Ministry of Labor and Social Protection
6.1.2.	Preparation of proposals on amendments to the Law of the Republic of Azerbaijan "On Education of persons with disabilities (special education)" , model charters, staff of educational institutions for the purpose of application of inclusive education in educational institutions	2018– 2019	Ministry of Education
6.2.	The content of inclusive education and the application of training technologies		
6.2.1.	Make appropriate changes in standards for all levels of education and additional education	regularly	Ministry of Education
6.3.	Increasing the material and technical base related to the organization of inclusive education		
6.3.1.	Installation of ramps, special elevators for persons with disabilities in educational institutions to ensure their unimpeded movement, equipping educational institutions with vehicles, rehabilitation equipment, and other auxiliary tools and technologies, didactic materials, providing visual, audio, and dactyl information retrieval.	2018- 2024	Ministry of Education
6.3.2.	Development and publication of teaching materials adapted for people with disabilities, methodical aids for parents and teachers within the funds provided in the state budget	regularly	Ministry of Education
6.3.3.	Implementation of e-learning programs used in international practice in inclusive education	regularly	Ministry of Education
6.4.	Personnel training related to the organization of inclusive education		
6.4.1.	Incorporation new modules on special education into the syllabus for teacher training and additional education	2018– 2019	Ministry of Education
6.5.	Organizational events		
6.5.1.	Establishing the training process in educational institutions in accordance with the requirements of inclusive education	regularly	Ministry of Education
6.5.2.	Establishment of training workshops in special schools, integrated and special boarding schools, primary vocational education institutions for persons with disabilities to acquire professional and labor skills	2020– 2024	Ministry of Education
6.5.3.	Taking necessary measures to ensure the participation of persons with disabilities in final and monitoring examinations, entrance examinations to higher and secondary special education institutions for the purpose of final assessment (certification) of knowledge of students on general education subjects in general education institutions;	2018– 2023	State Examination Center, Ministry of Education
6.6.	Activities related to monitoring		
6.6.1.	Development and application of quality criteria and monitoring mechanism of inclusive education in educational institutions	2018	Ministry of Education
6.6.2.	Creating a database of persons with disabilities involved in inclusive education	2018– 2020	Ministry of Education
6.7.	Awareness		
6.7.1.	Organizing public awareness work on the involvement of persons with disabilities in education	2018– 2021	Ministry of Education
6.7.2.	Preparation of social videos on the involvement of persons with disabilities in education and their social integration, organization of demonstrations in the media	2018– 2021	Ministry of Education

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ASSESSMENT OF THE ROLE OF SMALL AND MEDIUM ENTREPRENEURSHIP IN CREATING NEW JOBS

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ABSTRACT

In most developed countries of the world, the SME subjects have a leading position in ensuring economic growth and employment. Thus, according to the statistics of the World Bank, the share of SMEs in GDP and employment in the developed countries is more than 50 and 60 percent, respectively. Just for these reasons, both developed and developing countries try to achieve prompt adaptation of their economies to crises through SME. Countries such as the US and the EU countries have achieved significant economic growth thanks to the development of SME. Thus, 99 percent of enterprises are small and medium enterprises in the EU countries, which account for more than 60 percent of employment and GDP. In 2014-2015, the SME subjects accounted for 58 cents of each euro earned as income in the European Union. From this point, there is a need to study the role of small and medium enterprises in creating new jobs in Azerbaijan. The aim of the research is to study the role of the small and medium enterprises in creating new jobs in Azerbaijan, to analyze the current situation, and to make scientific and practical proposals and recommendations towards building of econometric models and improvement of operation of this system. To this end, the existing state of the small and medium entrepreneurship and their role in ensuring economic growth and employment are studied. The research was fulfilled under the research methods as a scientific abstraction and systemic analysis and logic generalization, statistic, econometric and optimization methods. Limits of the research: requires more extensive practical information. Practical importance of the research: may play a positive role in enriching scientific and practical knowledge of the specialists conducting researches towards increasing the role of the small and medium entrepreneurship in creating new jobs and working in this field.

Keywords: *Economic growth and social development, Employment, New jobs, Small and medium entrepreneurship, State support to small and medium entrepreneurship*

1. INTRODUCTION

The SME subjects have a leading position in ensuring economic growth and employment in most developed countries of the world. Thus, as reported by the World Bank, the share of SME in GDP and employment in the developed countries is over 50 and 60 percent, respectively.

Hence, developing countries take systematic measures in SME development to strengthen economic stability, increase competitiveness, and ensure economic activity. Consequently, competitive market relations are formed, creating a condition for the equilibration of the demand-supply in market, price stabilization, increasing the competitiveness of produced goods and services, the practical application of economic regulation tools, economic stability, and flexible absorption of external influences. Therefore, both developed and developing countries try to achieve prompt adaptation of their economies to crises through SME [Hajiyev. N. (2012)]. Countries like the US and the EU countries have achieved significant economic growth due to SME development. Thus, 99 percent of enterprises are small and medium enterprises in the EU countries, which account for more than 60 percent of employment and GDP. In 2014-2015, the SME subjects accounted for 58 cents of each euro earned as income in the European Union. Medium enterprises in developing countries act as key suppliers of employment. One of the global trends in the SME is the attempt to bring the small enterprises to the medium enterprises' level by ensuring sustainability. Thus, the aim is to achieve the enterprises' sustainability and, therefore, improve the competitiveness of enterprises. Global trends in SME include:

- based on the international experience, the high-risk factor for SME subjects limits their access to financial resources. As a result, both developed and developing countries apply a particular approach such as the establishment of a guarantee fund, the introduction of unsecured financing mechanisms, risk insurance, etc. concerning the financing of SME;
- states are taking various initiatives to support SME to act as suppliers of individual components of the products of multinational companies by joining global value chains. For this reason, transnational companies produce most of the components of their products by placing the order to small and medium enterprises in different parts of the world. Thus, SME subjects become participants in sectors that create high added value in the global value chain;
- to establish the centralized body providing service to SMEs subjects in many countries around the world to ensure the proper coordination of the support for SME subjects and to create a favorable environment;
- SME subjects create horizontal and vertical clusters to maintain their position in the markets and reduce production costs. In this regard, SME subjects achieve a scale effect by optimizing their costs through these clusters.

The development of small and medium entrepreneurship (SME) in Azerbaijan is of considerable significance in terms of economic diversification, increasing competitiveness, provision of employment, meeting the demand for consumer goods from local resources, and ensuring economic development. Thus, looking at the share of SME in GDP and employment in developed countries leads to the conclusion that one of the main forthcoming challenges is to make SME the key driving force in ensuring sustainable economic development in Azerbaijan [Muradov A.J., Hajiyev N.O.. (2014)].

2. THE CURRENT STATE OF SMALL AND MEDIUM ENTREPRENEURSHIP

Over the past period, several measures have been taken to support the development of entrepreneurship in Azerbaijan. For instance, “State Support Program for small and medium entrepreneurship in the Republic of Azerbaijan (1997-2000)” and “State Program for the Development of Small and Medium entrepreneurship in the Republic of Azerbaijan (2002-2005)” was adopted and implemented under the Decrees of the President of the Republic of Azerbaijan No. 610 of June 24, 1997 and No. 753 of August 17, 2002 respectively. Moreover, “State Program on the reliable food supply of the population in the Republic of Azerbaijan for 2008-2015” and “the State Program on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan for 2008-2015” approved by the decrees of the President of the Republic of Azerbaijan

No. 3004 of August 25, 2008 and No. 3043 of September 15, 2008, respectively, including “State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan for 2014-2018” approved by the Decree No. 118 dated on 27 February 2014, and “State Program on Industrial Development in the Republic of Azerbaijan for 2015-2020” approved by Decree No. 118 on 26 December 2014 imply taking measures to develop the entrepreneurship, to improve the business environment, and to improve mechanisms to protect the rights and legitimate interests of entrepreneurs. April 25 is celebrated as a “Day of Entrepreneurs” under Decree of the President of the Republic of Azerbaijan No. 1988 dated on 21 April 2016 to motivate entrepreneurs and increase their role in strategic issues such as ensuring the employment, increasing the non-oil exports in the country, and development of business environment. Furthermore, many measures have been taken: the suspension of inspections in entrepreneurship for 2 years, the reduction of the number of licenses and permits for entrepreneurial activities and the amount of fees paid, the simplification of permitting procedures, including the continuation of work to create an electronic portal in this regard, establishment of the Appeals Council in protection of the entrepreneurs rights, application of the “one window” principle in the transit of goods through the country, the provision of tax and customs concessions for 7 years to increase investment in the country, further expansion of electronic customs services to simplify customs procedures during import and export operations, minimizing the number of the required documents and procedures, establishment of “Green Corridor” and other international exit systems for vehicles and goods to cross the customs border, improvement of public procurement, establishment of call centers providing direct response to entrepreneurs' appeals, providing information and consulting services, etc. Ongoing comprehensive reforms, measures taken on the simplification of administrative procedures, improvement of legislation, improvement of investment climate, and the use of the institutional support mechanisms have further accelerated the development of entrepreneurship. As a consequence of the large-scale support measures, entrepreneurship is expanding in the country, new production and service areas are being established covering all regions, the country's competitive production opportunities are expanding, and the private sector's share in GDP and employment is growing [Muradov A.J., Hasanli Y.H., Hajiyev N.O. (2019)]. The World Bank's “Doing Business” report, one of the essential reports assessing the business environment, highlights the reforms that have taken place recently in our country as exemplary reforms. For instance, our country was one of the three countries conducting four or more reforms stated in the 2018 report; it was included to the list of top ten reformist countries of the world in the 2019 report and was ranked among the 20 most reformist countries in the report published for 2020. As a result of recent reforms, the business environment has significantly improved in Azerbaijan. Several reputable international organizations have reported it. Azerbaijan ranked 44th under the Index of Economic Freedoms in the world, rising 19 places in a year in a recent ranking of economic freedoms compiled by the Heritage Foundation.

3. GOVERNMENT FINANCIAL SUPPORT FOR ENTREPRENEURS AFFECTED BY THE CORONAVIRUS (COVID-19) PANDEMIC

In the range of the deep financial crisis caused by the coronavirus pandemic, the Azerbaijani government has launched support mechanisms for the country's entrepreneurs and has provided incentives in the Tax Code for economic activities affected by the pandemic. The list of those areas was given in the law; however, if new areas of activity are added during the tightening and easing of the quarantine regime, they will also be benefited from the concessions. According to the bill, entrepreneurs affected by the pandemic will be exempt from property and land taxes by 2020. It is also planned to give a 75 percent discount on profits to these entrepreneurs by the results of 2020. Under the 2019 results, the payment of income taxes by income taxpayers will be postponed from March 31 to September 1.

As micro-entrepreneurs belong to a particularly vulnerable category, regardless of their field of activity, the current 2% simplified tax rate in the Tax Code will be reduced to 1% this year. Particular types of taxes, such as the simplified tax on catering will be decreased from 8 percent to 4, and for entrepreneurs operating in the field of personal transport, the simplified tax rate based on the number of seats in the vehicle will be reduced by 50%. The 14% withholding tax on real estate leased from individuals in all business entities is reduced to 7%. Under the Action Plan approved by the Cabinet of Ministers on the implementation of the Order of the President of the Republic of Azerbaijan dated March 19, 2020, a total of 130,333 taxpayers suffered from the coronavirus (COVID-19) pandemic, out of 27,065 taxpayers and 103,268 individual (micro) entrepreneurs applied to the Ministry of Economy for partial payment of the wages of the hired employees and financial support as of May 12. As part of the payment of partial salaries of hired employees, 22,852 applications from 201,000 employees have been reviewed, approved, and submitted to the Ministry of Finance for transfer of the financial support to their bank accounts. The amount of financial support for applications approved so far is 91.81 million AZN, including 42.77 million AZN to be paid in the second stage. As of May 12, the State Treasury Agency of the Ministry of Finance paid 43.83 million AZN to 21,985 taxpayers on the salaries of 193,564 employees. In the context of the program of providing financial support to individual (micro) entrepreneurs, applications of 103,268 taxpayers were received, 94,490 of them were approved, and submitted to the Ministry of Finance for transfer of financial support to the bank accounts. The amount of financial support for the approved applications was 56.13 million AZN. As of May 12, the State Treasury Agency of the Ministry of Finance has already allocated 53.4 million AZN to the bank accounts of 88,873 individual (micro) entrepreneurs. The State Statistics Committee of the Republic of Azerbaijan reports that in 2015 the share of small enterprises in the non-oil sector was 5.8 percent in value-added, 0.7 percent in gross profit, 6.5 percent in the average annual number of employees and 9.2 percent in investments on fixed assets. This information covers legal entities and individuals who are considered to be small enterprises, and as of July 1, 2016, 83,017 units or 79.7 percent of enterprises operating in the country (Figure 3) fell to the share of these enterprises. Besides, as of this date, the central part of small enterprises in the country operated in trade (31.2 percent), construction (12.1 percent), agriculture (10.7 percent) and other services (13.5 percent). On the other hand, under official statistics, even though 12% of legal entities registered in the country were small enterprises as of January 1, 2016, their share in GDP was 4% in employment - 6.3% in the production of goods (services) - 9.6 percent. Obviously, the share of individual entrepreneurs and small enterprises in GDP, which is 99.2 percent of the country's entrepreneurship, is minimal. Therefore, the share of SME in the economy of Azerbaijan - in GDP, employment, and foreign exchange inflows can be increased. From this standpoint, it is worth noting that the SME's share in the future development of the country is of utmost importance. Azerbaijan has great potential and vast possibilities for the development of SME and the country's economy as a whole. Improving the overall business environment, providing more profitable and productive access to financial resources, ensuring the access of small and medium enterprises to local and foreign markets, and creating a skilled and qualified workforce are essential steps to be taken. The ongoing economic processes in the region and the world again emphasize the deepening of cooperation between SME subjects and entrepreneurs and increase state support. Accordingly, there is a necessity to make several changes to fully realize the potential of SME subjects for diversification of the economy. Although some progress has been made in improving the legal framework, some improvements still should be undertaken. Thus, the legislative framework on issues such as the private loan office, the register of encumbrances on real estate, and the regulation of secured transactions should be improved. Priorities should be identified for broader application of a unified approach, innovation, international standards on entrepreneurship, including SME policy, increasing the state support for export market

research, further expansion of financial, consulting and other support mechanisms, and establishment of the monitoring and evaluation mechanisms for government support instruments, and development of the entrepreneurship in the country should be strongly supported. Despite the fact that the measures have been taken in support of innovation and internationalization, activities in this area need to be intensified, clear strategies or coordination mechanisms should be established. At this point, the state policy on innovation is expanding the focus on the telecommunications and information technology sector. Moreover, support measures for internationalization should be further expanded to increase the financial services for exports and enable SME to benefit more from the global value chain. It should be pointed out that the development of SME in Azerbaijan is quite a significant issue. It requires a broad range of activities from macroeconomic policy to Azerbaijani citizens' approach, especially entrepreneurs and related government officials, and set clear goals. Therefore, the implementation of institutional changes supporting the development of SME and the creation of favorable conditions for their improvement is of strategic importance. To assess the current state of small and medium enterprises, first, a SWOT analysis should be conducted. Below is the SWOT analysis of the small and medium enterprises in the light of our research results.

- **Strengths:** the existence of legal framework in entrepreneurship; achieving significant progress in key indicators of global competitiveness; availability of opportunities to start a business quickly; constant expansion of the scope of “e-government”; achieving progress on reforms conducted for the effectiveness of the business environment in recent years (“one window” principles, “e-government”, etc.); simplification of foreign trade rules; availability of favorable infrastructure; state support for the development of SME; lower power supply prices in comparison with neighboring countries.
- **Weaknesses:** application of the state targeted policy of support to SME subjects based on various criteria; failure of public-private partnership and coordination in this area at a required level; weak communication between entrepreneurship subjects of different sizes; difficulties in accessing financial resources; insufficient development of products and services offered in the financial sector; weak monitoring and evaluation system to determine the impact of government support mechanisms on entrepreneurship; lack of highly qualified specialists; poor business skills, especially at the middle management level; weak cooperation between the public and private sectors and vocational education institutions; lack of a specialized government agency for SME coordination; lack of special norms supporting the participation of SME subjects in public procurement; limited number of government agencies and particular institutions supporting SME subjects; the difficulty of the rules for terminating business activities; lack of skills in the international trade; poor cooperation between enterprises operating in the field of research and innovation and SME subjects; lack of full access to consulting services for SME subjects; difficulties in accessing international and regional markets.
- **Opportunities:** increasing the access to finance, availability of opportunities to create the private loan offices and real estate encumbrance registers; increasing the level of using the potential of SME subjects in the development of the non-oil sector; involvement of SME subjects in public procurement and infrastructure projects; ensuring extra support to SME subjects by expanding the use of various international programs; establishment of centers for consulting services and obtaining the necessary documents for SME subjects from a single space; enhancement of the business and vocational education opportunities meeting the market requirements; establishment of training centers based on the “lifelong learning”

principle in various specialties; diversification of production areas and the economy; availability of potential workforce.

- **Risks:** the impact of possible external economic factors (financial crisis, declining demand in international markets, etc.); weak competitiveness of local SME subjects in international markets; SME subjects not paying enough attention to vocational education; application of rules restricting access to foreign markets by individual countries; difficulties in providing employment; reduction of the competitiveness of SME subjects that are not residents by tax concessions offered to residents in newly established industrial parks.

One of the main directions of the socio-economic policy implemented in the Republic of Azerbaijan in recent years is the development of the labor market and the efficient use of the workforce. The reforms in the country have led to fundamental qualitative changes in the economy, and dynamic economic development has been ensured. Relevant measures have been taken to ensure the economic development of the regions, further improve the social welfare and living standards of the population, and develop the country's economy, especially the non-oil sector. New jobs, enterprises, infrastructure facilities, etc. have been opened to provide employment [Almas L.K, Hajiye N .U.. (2014)]. In 2018, the country's economically active population was 5133.1 thousand people by increasing 753.0 thousand people compared to 2005, of which 4879.3 thousand people are engaged in the economy, and 253.8 thousand people are unemployed. In 2018, 2487.5 thousand people or 51.0% of the total number of people engaged in the economy were employed in production areas (agriculture and fisheries, industry, construction), and the number of people engaged in the service sector was 2391.8 thousand people, which is accounted for 49.0% of the employed population. In 2018, 1551.7 thousand people or 31.8% of the total number of people engaged in the economy fell to the share of hired-employees. The majority of hired-employees were employed in large and medium enterprises. One of the main directions of the socio-economic policy implemented in the Republic of Azerbaijan in recent years is the development of the labor market and the efficient use of the workforce. The reforms in the country have led to fundamental qualitative changes in the economy, and dynamic economic development has been ensured. Relevant measures have been taken to ensure the economic development of the regions, further improve the social welfare and living standards of the population, and develop the country's economy, especially the non-oil sector. New jobs, enterprises, infrastructure facilities, etc. have been opened to provide employment. In 2018, the country's economically active population was 5133.1 thousand people by increasing 753.0 thousand people compared to 2005, of which 4879.3 thousand people are engaged in the economy, and 253.8 thousand people are unemployed. Significant positive changes have been achieved in the labor market due to the reforms in the country's economy. For example, if in 2005 the share of public sector employees was 30.3% of the total number of people engaged in the economy, in 2018, this figure decreased to 23.7%, and the number of private-sector employees increased 1.3 times during this period. In 2018, 2487.5 thousand people or 51.0% of the total number of people engaged in the economy were employed in production areas (agriculture and fisheries, industry, construction), and the number of people engaged in the service sector was 2391.8 thousand people, which is accounted for 49.0% of the employed population. In 2018, 1551.7 thousand people or 31.8% of the total number of people engaged in the economy fell to the share of hired-employees. The majority of hired-employees were employed in large and medium enterprises. Successful implementation of measures envisaged in the state programs on socio-economic development of the regions of the Republic of Azerbaijan created the basis for providing sustainable development of the economy in the non-oil sector, launching a new production and processing enterprises as a result of economic diversification, directing the significant investments in priority areas and establishment of the

new enterprises and the new jobs. Of the 16,448 new enterprises and organizations created in the country in 2019, 84.6 percent started operating in Baku, 4.5 percent in the Absheron economic region, 3.6 percent in the Aran economic region, 2.2 percent in the Ganja-Gazakh economic region, 1.3 percent in Lankaran economic region, 1.2% in Guba-Khachmaz economic region, 1.0% in Sheki-Zagatala economic region, 0.5% in Upper-Garabagh economic region, 0.5% in Daghligh-Shirvan economic region, 0.5% in the Nakhchivan Autonomous Republic and 0.1 percent in the Kalbajar-Lachin economic region. During 2019, 29.6% (192,017 people) of new jobs have been created in newly established enterprises, and organizations, 26.2% in existing enterprises and organizations (50,270 people), 0.4% (706 people) in restored enterprises and organizations, 43.8% (84,123 people) were established for other activities. 55.5% of new jobs fall to Baku city, 1.7% to the Nakhchivan Autonomous Republic, 42.8% to other regions, including 16.3% to Aran, 6.9% to Ganja-Gazakh, 5.9% to Lankaran, 3.6% to Absheron, 3.3% to Sheki-Zagatala, 2.4% to Daghligh Shirvan, 2.2% to Upper Garabagh, 2.1% Guba-Khachmaz, 0.1% Kalbajar-Lachin economic regions. 45.8% of new jobs opened by legal entities were for providing administrative and ancillary services, 14.2% for construction, 8.9% for trade; repair of vehicles, 6.4% for the processing industry, 3.3% for public administration and defense; social security, .1% - agriculture, forestry and fishing, 32.8% for tourist accommodation and catering, 2.6% - vocational, scientific and technical activities, 2.2% for education, 2.1% for transport and warehousing, and 8.6% for other economic activities. In 2019, 27.0% of new jobs fell to non-state ownership, 73.0% to state ownership, including 10.8% to foreign ownership of non-state property, 0.6% to municipal property, and 88.6% falls to private property. During 2019, a total of 192017 new jobs were created in the Republic of Azerbaijan. It is worth to note that, 106557 of total new jobs created in economic regions were in Baku city, 6945 in Absheron economic region, 13171 in Ganja-Gazakh economic region, 6411 in Sheki-Zagatala economic region, 11395 in Lankaran economic region, 3963 in Guba-Khachmaz economic region, 31265 in Aran economic region, 4291 in the Upper Garabagh economic region, 124 in the Kalbajar-Lachin economic region, 4675 in the Daghligh-Shirvan economic region, and 3 220 were opened in the Nakhchivan Autonomous Republic. The share of SME in the economy of Azerbaijan - in GDP, employment and foreign exchange inflows can be increased much. From this standpoint, it is noteworthy that the share of SME in the future development of the country is of utmost importance. Azerbaijan has great potential and vast possibilities for the development of SME and the country's economy as a whole. Improving the overall business environment, providing more profitable and productive access to financial resources, ensuring the access of small and medium enterprises to local and foreign markets, and creating a skilled and qualified workforce are essential steps to be taken. The ongoing economic processes in the region and the world over again emphasize the intensification of cooperation between SME subjects and entrepreneurs and increasing state support. Accordingly, there is a necessity to make several changes to fully realize the potential of SME subjects for diversification of the economy. Although some progress has been made in improving the legal framework, some improvements still should be undertaken. Thus, the legislative framework on issues such as the private loan office, the register of encumbrances on real estate, and the regulation of secured transactions should be improved. Priorities should be identified for broader application of a unified approach, innovation, international standards on entrepreneurship, including SME policy, increasing the state support for export market research, further expansion of financial, consulting and other support mechanisms, and establishment of the monitoring and evaluation mechanisms for government support instruments, and development of the entrepreneurship in the country should be strongly supported. So far, over 35,000 entrepreneurs have received 2.3 billion AZN of soft loans with a total cost of 5.1 billion AZN of investment projects at the expense of the Entrepreneurship Development Fund under the Ministry of Economy. About 165,000 new jobs have been created by using these loans as a consequence of the implementation of investment projects.

72% of soft loans were directed to the development of the agricultural sector, 28% to the development of industry, and other areas. 75% of these loans fall to the regions and 25% to Baku settlements.

4. CONCLUSION

In regards to creating new jobs, we consider funding the investment projects on concessional terms in the following areas based on modern technologies related to the development of SME is expedient:

- establishment of dairy and meat breeding complexes;
- establishment or rehabilitation of poultry farms;
- establishment of meat cutting and processing enterprises;
- establishment of bakery factories;
- establishment of grain or seed farms;
- establishment of grapery farms and grape processing enterprises;
- creation of greenhouse complexes;
- creation of intensive horticulture (apple, pear, cherry, pomegranate, apricot, plum, etc.) or seedling farms;
- establishment of fruit and vegetable processing enterprises;
- establishing cold storage and grain storage complexes (logistics centers) for supply, storage, and sale of fruits, vegetables, and grain;
- creation of other industrial enterprises (light, mechanical engineering, etc.);
- development of small entrepreneurs (including people with disabilities, IDPs, youth, and women).

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REMITTANCES AND THE ECONOMY OF NEPAL: THE IMPACT ON EMIGRATION

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ABSTRACT

For a small landlocked economy, Nepal is the nineteenth largest remittance receiver in the world. With the growing remittance income, Nepal is progressing in its economic and social and demographic aspects, however, this phenomenon might have adverse effects on the country's economy and its development. With an increase in remittances, Nepal has been able to reduce its poverty with its illiteracy rate along with the living condition. Despite such progress, Nepal is in the verge of suffering from too much dependency in its remittances where the economy is unable to export but import substantial number of commodities. In addition, brain drain, lack of labour supply, threat to the food security, increase in conspicuous consumption patterns (drinking and partying), inability to develop a culture of saving and a sharp increase in the prices of domestic products can damage Nepal's economy in the long run. These factors can further effect Nepalese intentions to emigrate directly. This study will try to proclaim the good and the bad impacts of remittances in the case of Nepal.

Keywords: *Remittance, economic growth, emigration, consumption pattern, savings, Nepal*

1. INTRODUCTION

Nepal is a low-income country with one quarter of all people living below the nation's poverty line. For a poor small land-locked economy, Nepal has suffered greatly from a decade-long Maoist insurgency (1996–2006) that prolonged political instability which led to inefficient bureaucratic governance, slow economic growth rate, open corruption, high unemployment rate, and lack of youth (talent) exposure. In addition, devastating natural disaster of 2015 earthquake, has further led to over pollution, health insecurity and underdevelopment of the country. Presently, it is one of the least developed country of the world, with a population of around 27 million and a per capita GDP of US\$707 (World bank, 2017). Due to such circumstances, Nepalese population are compelled to consider international migration as a livelihood strategy, particularly for remittance (Kunwar, 2015). The nation of 27% million population has sent more than 10 percent of its people to work abroad, who are of productive age group, that is, from 20 to 40 years of age. An official figure shows that a total of 4.8 million Nepali men and women left the country in the fiscal year 2017-2018 (Department of Foreign employment 2018). It can be concluded that the numbers of Nepalese emigrants are more than the official data recorded by the Government of Nepal (Kunwar, 2015). Nepali migrant worker departures plunged 39.2 percent in the first seven months of the fiscal year, compared to a 4.9 percent drop during the same period last year (Nepal central bank, 2017). With more than 3 out of every household member working abroad (Taguchi, Lama, 2011). Nepal is among the nineteenth largest country to receive remittances. (World bank, 2018). Remittance income in Nepal has become a lifeline for economic development. By remittance we mean sending income in terms of money or goods in home by the migrants or workers who have their earnings outside their home country. Now-a-days, this source of foreign income has been growing rapidly in each year with \$8.1 billion in 2018 (Nepal Rastra Bank, 2018). Since long time in Nepal, many migrants have been transferring their income through the unofficial channels. Today due to the establishment of different agencies like Western Union, International Money Express (IME) etc. in several district headquarters of the country, the remittance flows have become popular for transferring cash or money in time to the recipients.

The Remittance accounts for an astounding 30.1% of the total GDP, which is higher than all the tax earnings combined at 23.8%. Inward remittance has helped Nepal rebuild itself from the devastating earthquake of 2015. Nepal received approximately US \$8.210 Million as Foreign Inward Remittance from around the world in 2018 (Asian Development bank, 2018). However, it is difficult to calculate the exact size of remittance flows in Nepal due to the emergence of unofficial channels even though it has recorded in balance of payments account. In this regard, it is estimated that unrecorded flows through informal channels are believed to be more than 50 percent of the recorded flows in developing countries (Ratha 2005).

2. SIGNIFICANCE OF REMITTANCE

2.1. Remittances and Economic Growth

According to the World Bank, remittances are personal transfers or compensation of workers. Remittances constitute an important source of savings and capital for investment in health, education, and entrepreneurship thereby enhancing productivity and employment, which culminate into economic growth. Remittances can also help in enhancing the growth of the financial sector on the notion that some of the remittances are converted and deposited with banks thus making the funds available for lending to the private sector and this, in turn, facilitate economic growth (Aggarwal et al., 2011; Misati and Nyamongo, 2011). If remittances are large, the recipient country could face an appreciation of the real exchange rate that may make its economy less competitive internationally. In case of Nepal, it is the top five recipient smaller economies, along with Tonga, Kyrgyz Republic, Tajikistan and Haiti. (Kathmandu post, 2017). The economic growth rates of some SAARC countries in 2006, found the highest growth rate (8.2 percent) of India and the lowest growth rate (1.9 percent) of Nepal. Sri Lanka has received the second position (7.0 percent) then Bangladesh (6.7 percent) and Pakistan (6.6 percent) (Gaudel, 2006). In such a circumstance, Nepal has reached the insignificant growth rate because of prevalence of the political conflict, unfavourable climate for agriculture and reduction in export of readymade garments and the aftermath impact of the devastating events of the earthquake. Despite the enormous benefits of remittances on the performance of developing countries, the impact of remittances on economic growth is still ambiguous (Kumar et al., 2018). Some literature noted that remittances exert a positive influence on economic growth (Catrinescu et al., 2009; Jawaid and Raza, 2012; Kumar et al., 2018; Meyer and Shera, 2017; Nyamongo et al., 2012; Pradhan, Upadhyay and Upadhyaya, 2008), other strands of literature emphasized on a negative or zero relationship between remittances and growth (Barajas et al., 2009; Chami, Fullenkamp and Jahjah, 2005; Feeny, Iamsiraroj and McGillivray, 2014; Lim and Simmons, 2015).

2.2. Remittances on Poverty alleviations

Poverty is defined by the World Bank as “encompassing not only material deprivation (measured by an appropriate concept of income or consumption) but also low achievements in education and health” (World Bank, 2000, p. 15; Moser and Ichida, 2001, p. 6). Remittances are typically helpful to meet specific needs of the respondents' family members and thus tend to increase their standard of living. In lower class or poor households, they may finance their remittances to fulfil their basic needs, such as in consumption, housing, children education and health care and to pay for loan. In middle class or rich households, they may provide either loan for individuals going abroad or capital for businesses and entrepreneurial activities. Remittances provide support for the welfare of the relatives left behind thus contributing to the eradication of poverty in the recipient country (Adams and Page, 2005; Gupta, Pattillo and Wagh, 2009). In a study, Ratha (2013) has shown that migration can have both positive and negative economic, social, and cultural implications for countries of origin. Apart from money benefit, remittances are also associated with more human development outcomes across several

areas including education, health and gender equality. Therefore, remittances are a lifeline for the poor people, thus increasing the income for individual and families. It is sensible to assume that the money transfer by the migrants to their family members back home have certain some inclusive effect on poverty alleviation because the poor people directly receives remittances. (Azam, M., Haseeb, M., Samsudin, S 2016). Majority of the international migrants; around 69.7% send their money to meet “the basic needs of the family” (Uruci and Gedeshi, 2003). Migration and remittances have an overall positive impact on long-run economic performance in the origin countries. (Rapoport and Docquier, 2005). Adams and Page (2005) provide evidence of the positive role played by the international remittances in poverty reduction developing country. Some similar studies include Acosta et al. (2006) in 10 Latin American countries, Adams et al. (2008) in Ghana, and Lokshin et al. (2010) in Nepal found that international remittances diminish poverty. Pant (2008) reveals the remittances have an encouraging effect on the economy including poverty and income distribution. The study of Waheed et al. (2013) shows that remittances play a positive role in poverty reduction in the case of Nigeria. Hongbo, states that migration, if governed honestly, can make an effective contribution to the economic and social development and play a crucial role in alleviating poverty. The World Bank (2013) reveals that remittances are increasingly contributing to foreign exchange earnings, economic growth and poverty reduction throughout the Europe and Central Asia. The poverty reducing and income distribution effect of remittances is also significant (Barham and Boucher (1998). Most of the recipients of remittances are often low-income families whose offspring left the country to work abroad. In this situation, migration is taken as a response to escape poverty at home and improve the income-earning capacity of the migrant by attempting to enter foreign labour markets in richer countries. Again, remittances assist in alleviating poverty of the family of migrants in the home country by supporting their income through transfers.

3. LITERATURE REVIEW

3.1. Remittance income in Nepal

Initially, remittance in Nepal was introduced with Gurkha remittances. 'The Gurkhas' were renowned for good qualities of soldiers. That is why British India formally recruited Nepalese youth as a regular army, which later divided into British and Indian army. Now-adays, Nepalese going abroad are not only for armies but also spread all over the world for work and mostly they are concentrated in Gulf areas in civilian front (Kshetry 2003). Any Nepali to go for work legally, he/she needs to get permission from the Department of Labour under the Ministry of Labor and Transport of the Government of Nepal (International Labour Organisation, 2017). From the official report of the Labor Department it is known that 107 countries are at the government list where Nepalese can go for work. But still some people are found going abroad without permission and working in the government restricted areas too. Because of this trend, data on foreign employed workers are not available in exact form. Majority of those who have left home for overseas job are eager to earn foreign currency by hard working to support their families. About the delivery of remittances, the World Bank has expressed the view that the procedure of receiving remittance in Nepal is the best one in compare to others. Remittance Transaction Company cannot receive cash directly from the Nepalese workers remaining outside. The workers must deposit their remittances in foreign commercial banks account and the transaction company through its account delivers the remittance services to the recipients at the cheapest cost (about 1 percent of remittance income) (Gaudel, 2006). Moreover, the Hundi system is almost closed due to the establishment of Remittance Company in Malaysian and Gulf countries. However, the system of Hundi is still working in Japan and Korea where most Nepali workers are living even if their visa date is expired. Over the past 15 years from 1991, international migrants' remittances have become increasingly prominent in our country.

The amount of remittances reflects only transfer record in the balance of payments. Unrecorded flows through informal channels are believed to be more than the recorded flows. Regarding the transfer of remittances in Nepal, the record of banking sector showed that Rs.15.9 billion was received in FY.2000/01. However, Hundi operators or money transferring agencies handled the bulk part of remittances. Considering the increasing number of workers, assuming four lakh per year going outside the country in this perspective, remittance received was estimated at Rs.50 billion in FY. 2001/02, (Kshetry 2003). In this regard, it is also estimated that more than 500 people per day are going abroad for foreign employment. From such migrants, about Rs.100 billion per year is expected to enter the country through remittance income only (Annapurna Post, Oct.28, 2006). To provide access for transferring remittances, Western Union, IME and Prabhu Money Transfers are found active in Nepal. Of these agencies, more than 200 sub-agents of single Hulas remittance including banks, finance companies, trading concerns, enterprises etc. under the province of Western Union, have been opened in five Development Regions of Nepal. These agents deliver remittances to the recipients of local areas within a short span of time.

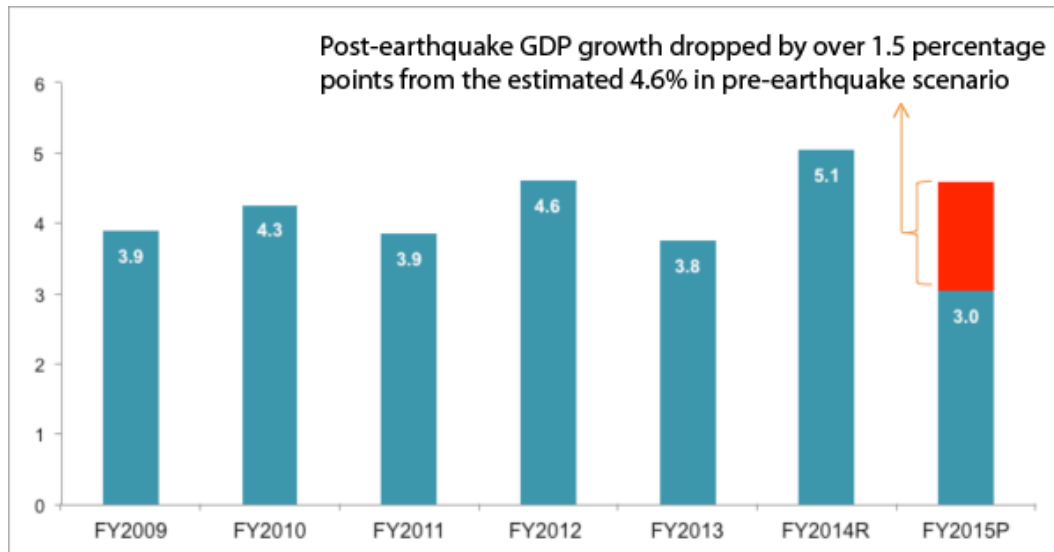
3.2. Shift from Agricultural economy to Remittance economy

The increasing trend of out-migration and youth reluctance towards farming have caused gradual shifting of the agriculture-based economy of the country to an economy that is based on other sources of income including remittances which ultimately threatening food security and agricultural sector (Gartaula et al 2012). Nepalese economy is, and has always been an agricultural economy. Being an agrarian economy, Nepal still receives 32% of GDP from the agricultural sector. Although agriculture is the major source of livelihood of around two-thirds of people, its nature is still subsistence type (MoF 2018). About 21.6 percent of the population is still surviving under the poverty line (NPC 2016). This has lead many Nepalese to choose employment in areas other than agriculture and emigration to other countries for remittance. The increasing trend of Nepalese population to emigrate for cash in other rich countries and decreasing number of people willing to farm has led Nepal's economy to gradually shift to remittance economy which ultimately can threaten the agriculture sector for food security (Gartaula et al 2012).

3.3. Political and natural disaster in Nepal (1995-2015)

Since the radical leftist group Nepal communist party (Maoist), began insurrection in rural areas aiming to abolish monarch and establish people's republic, sparking conflict in 1995 (that would drag on for over a decade) to the massacre of the entire Royal family (alleged shooting) in June 1st 2001 and a long civil war till 2006, Nepalese population have suffered long and troubling armed conflicts and insecurities. Even long after the end of the civil war, no constitution was ever able to be amended due to instable governance and violent ethnic protests. For a long period of time Nepal had obstacles to finish drafting its constitutions until recently in 2015 after devastating events of the earthquake. However, the present government has shown lack of interest in its people's livelihood rather than their own and their family. This has led to rampant open corruption even in high governmental jobs. The inefficiency and ineffective bureaucratic government structure have lost the peoples hope on the country to make any efforts. This has further led to unemployment and job insecurity since the officials only recruit their relatives. The earthquake (2015) further left the country in devastation dragging back Nepal's development progress 30 years back to 1975 (See figure 1).

Figure following on the next page

Figure 1: The impact of earthquake on economic growth

Source: Asian Development Bank (2016)

4. METHODOLOGY

This section will present the research design and method to be used in conducting this study. It will briefly explain how the data is collected and analysed to ensure the reliability and validity of the research under the study. According to Bryman and Bell (2007), the nature of the deductive approach is to a hypothesis testing. This study approaches a deductive approach to find out how remittance has affected Nepal and how has that impacted the Nepalese citizens. With a deductive stance, research starts with collecting theories, followed by building hypothesis and testing them through gathered theories. The research process starts with finding the research focus, followed by examining existing theories and collecting data. For enhancing the quality of this research, focus has been given on secondary data, collected through articles, journals and books that are related to Nepalese remittances through databases such as Science-direct, Research gate, Google scholar, social science research network (SSRN). Citation is also another important criterion to consider. All the annual reports used to gather the data from the Nepal department of foreign employment, International labour migration, Nepal department of health services, Nepal Ministry of health and population and World bank have been derived from each of their websites. To determine the nature and scope of social information, most of the researchers use the content analysis method. Along with the content analysis method, others also used correlation and regression analysis. In this study, content analysis is used in analysing the data collected. Sweeney and Coughlan (2008) define content analysis as a research technique used to indicate the presence or absence of certain words and concepts in the text. Our analysis will be based on the case of patterns of remittance. The gathered information is secondary data found in the literature. The reports are considered as a reliable source of information, primarily because the information has been analysed, reviewed and published by the scientific publishing agents such as Research gate, Science direct etc.

5. RESEARCH FINDINGS

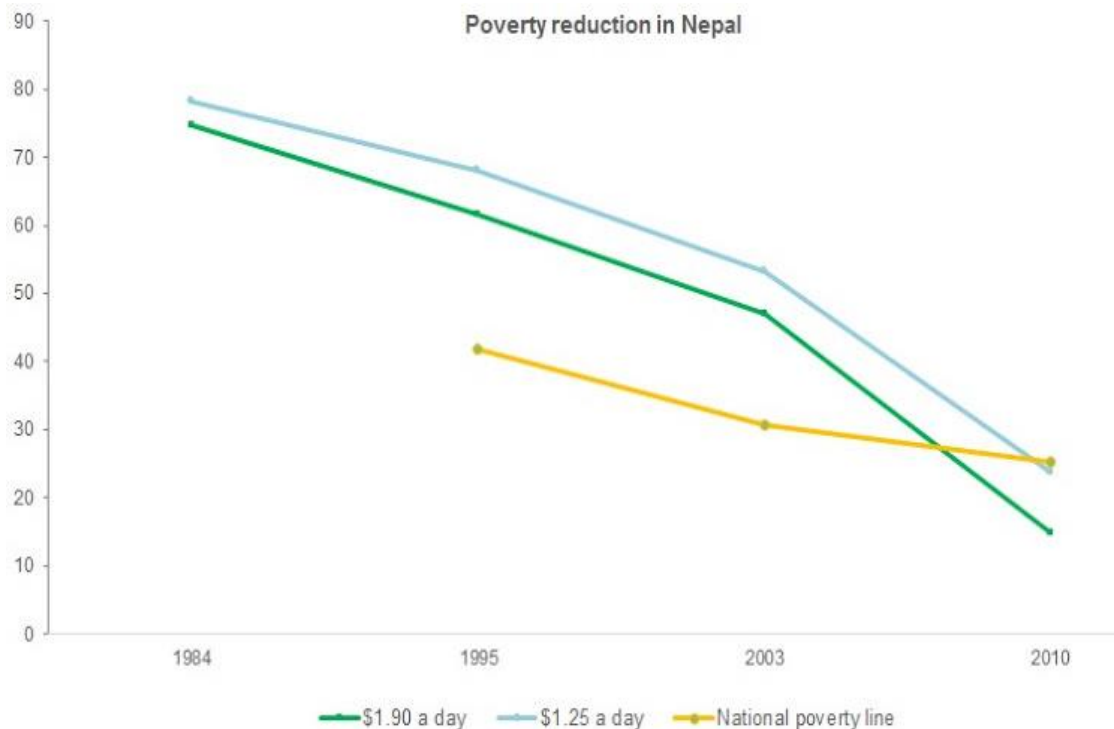
5.1. Positive impacts

5.1.1. Decrease in Poverty

The growing number of remittances have helped in the reduction of Poverty in Nepal. Remittances have helped keep current account and BoP in surplus in most of the years since 2000/01 (World Bank, 2006). Most of the emigrants are from a low income family belonging to lower class society, therefore the remittance sent home are used to finance the family's

basic needs for consumption, housing and education. The headcount poverty ratio has declined by 30 percentage points in the 15-year period 1995/96- 2010/11, or by an average of 2 percentage points per year — Increased worked-related migration (internal and international) and remittances sent home are estimated to have directly accounted for 20 percent of the reduction in poverty between 1995/96 and 2003/04, with international migration contributing about 14.5 percent (Lokshin et al., 2007). The World Bank recently updated its global poverty line, which is now re-estimated at \$1.90 a day, up from \$1.25 a day earlier. Accordingly, poverty estimates for all countries have been revised, mostly downward. Nepal's absolute poverty at \$1.90 a day stood at 14.9% in 2010, a sharp decrease from 47.1% in 2003 and 61.7% in 1995. Compare this with the estimate based on \$1.25 a day (2005 PPP): in 2010 absolute poverty stood at 23.7%, also sharply down from 53.1% in 2003 and 68.0% in 1995. The new poverty benchmark shows a marginal acceleration in absolute poverty reduction, but overall not much difference in rate of decrease over the last two decades.

Figure 2: Poverty reduction in Nepal



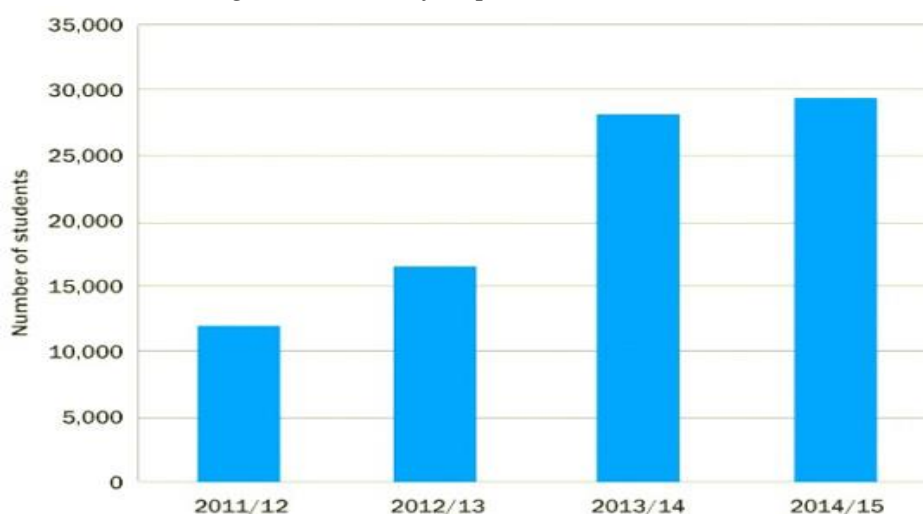
Source: World development Bank

5.1.2. Increased literacy rate

Education is a key determinant of earning potential; educated workers have skills that are more in demand and thus command a higher wage. The study found that only 16 per cent of migrant workers had a high school (i.e. school-leaving certificate) education, while more than half, at 55 per cent, had a lower to secondary level of education (grades 6–10). About 14 per cent of the migrant workers said they were illiterate (International Labour Migration, 2017). Gautam (1999) concludes that the literacy and educational status is improving. The social status of the village people has changed. Low caste and lower class people reported that they have now good treatment from the higher caste and class people. It is because they have cash money with an improved living standards. The households of emigrant workers were also found to be allocating a significant amount of their income in educational expenses. Consistent with that, study hours at home of their children were also positively affected.

This outcome was in contrary with the results some prior studies had revealed that educational efforts of the children of migrant-sending households had adversely affected (Siddhiqi, 2005). Although the emigrants are mostly illiterate, their remittance is being used for educating their children abroad. There are almost 1,500 students leaving Nepal for education. The number of Nepali students going abroad for higher education has increased unprecedentedly in recent years, especially in Japan and Australia. In Australia, the number of Nepali students grew by just over 50% last year compared to the previous year. Surprisingly, students from Nepal, which has a total population of just 30 million, are now the third largest group of foreign students after the students from India and China, which have huge populations of 1 billion plus. The number of students from Nepal has overtaken the number from Brazil, which was previously the third-largest source for Australia (Sapkota, 2018).

Figure 3: Ratio of Nepalese students abroad



Source: ICEF Monitor 2015

5.1.3. Increase in Living standards

The income of migrants from the foreign employment has not only increased their personal income but also their social prestige. The rural people lying below the poverty level have succeeded to uplift their economic standard receiving the opportunity of foreign employment. People working abroad sending remittances to their families have allowed their families to buy certain luxurious items. Even in poor families, they were able to increase a certain amount of their living standards in their day to day lives. (ICEF, 2015)

5.1.4. Economic Impact

Remittance as major component of current account plays a vital role in increasing current transfers in balance of payments. The basic factors of determining current transfers are grants, workers remittances, pensions and others including excise refund also. Initially, the share of remittance to GNP was found 1.74 percent in mid-July 1991. This share increased sharply (9.38 percent) after the period of mid-July 1999 and eventually reached to 12.03 percent in mid-July 2005. On average, the share of remittance to GNP was 11.03 percent during the review period from mid-July 2000 to 2005. Under the transfer category of BOP, remittance income increased by 11.65 percent totaling Rs.65.42 billion in 2005 due to the increasing trend of Nepali workers going to Malaysia and Gulf countries for employment (MOF 2006). During that period, the grants and pension also increased by 7.72 percent and 58.06 percent respectively. Thus, from this analysis it is clear that the remittance income has become an important contributor (64.72 percent) to the current transfers in balance of payments of Nepal.

Table: 1 Share of Remittance to GNP (Rs. in Million)

Year	Mid-July	Grants	Workers'		GNP at		Share of	
			Remittance	Pensions	Others	Total	Current Price	Remittance to GNP
2000		12874.8	36818.1	5941.0	1318.9	56952.8	392613	9.38
2001		12046.4	47216.1	6309.1	1456.1	67027.7	427447	11.05
2002		12650.5	47536.3	8269.6	1700.9	70157.3	441182	10.77
2003		13842.2	54203.3	7327.3	2392.3	77765.1	472869	11.46
2004		19557.8	58587.6	7906.2	3110.2	89161.8	509700	11.49
2005		21067.2	65416.0	12496.4	2104.8	101084.4	543903	12.03

Sources: *Economic Survey (various issues), Ministry of Finance, Government of Nepal.*

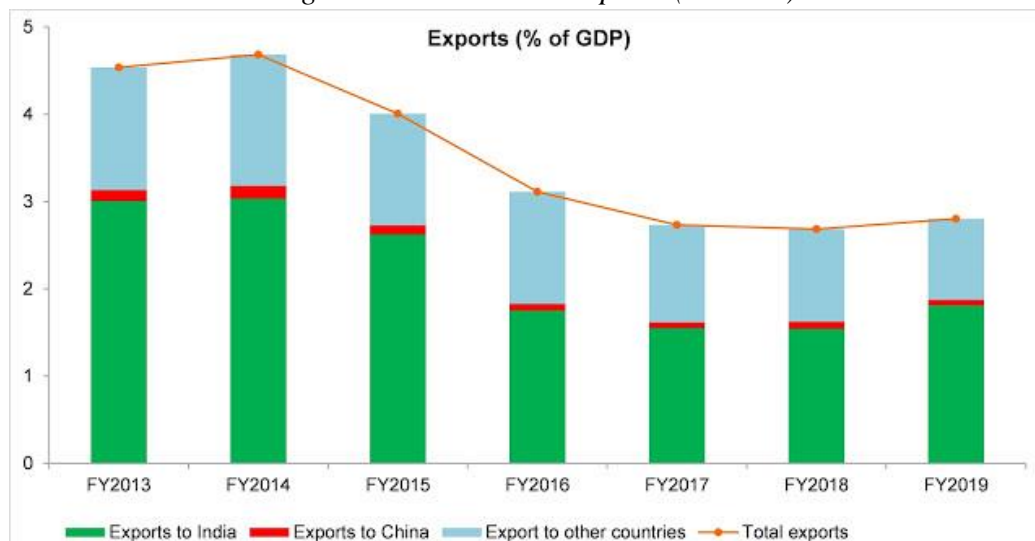
Main Economic Indicators (May-July), 2005, Monthly Report, NRB: Research Department

5.2. Negative Impact

5.2.1. Possibility of dutch disease

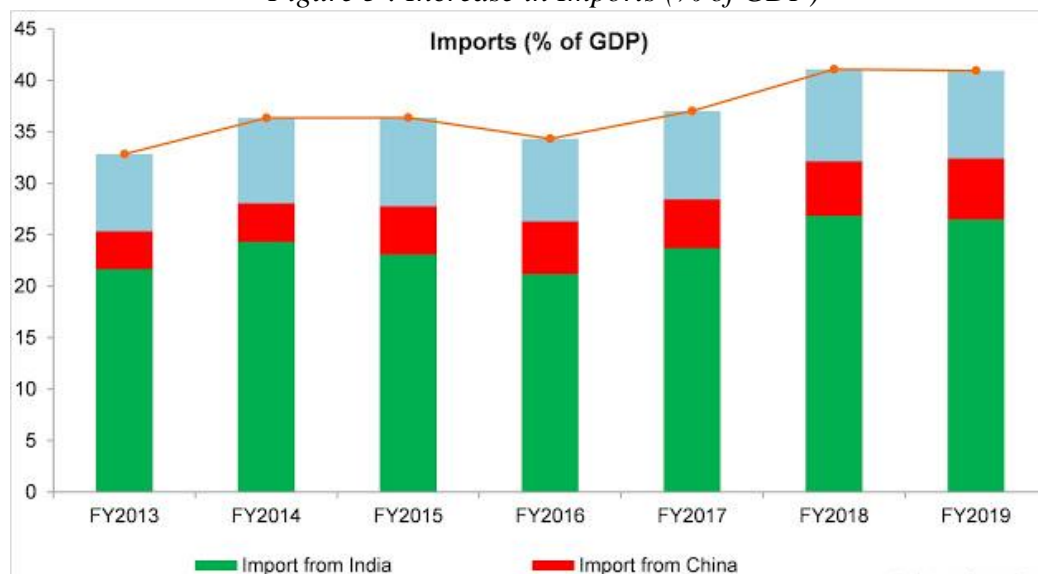
Taguchi and Lama (2015) research has concluded that Nepal's economy is suffering from Dutch disease; a condition where the economy is too dependent on remittances, lowering the labor force participation, decreasing the competitiveness in the world market, brain drain and slowing economic growth. To a certain extent, remittances have reduced poverty and increased the living standards of people in the rural areas, but there are adverse effects of remittances in Nepal. Nepalese citizens are already suffering from moral hazard problems like increase in conspicuous consumption patterns (drinking and partying), inability to develop a culture of saving, sharp increase in the domestic products, and increase in imports than exports. The money is being spent on unnecessary consumption, and on unproductive culture that does not help for Nepal's development in any way. A better understanding of their impacts is needed in order to formulate specific policy measures that will enable Nepal to get the greatest benefit from these monetary inflows. The figure 4 suggests that out of 141 Nepalese working citizens receiving remittances, 43.3% Nepalese cannot save any amount of money. This pattern suggests that the remittance income has not been spent productively. Another common phenomena in Nepal is the excessive drinking and gambling habit from an early age that is deemed as modern Nepali culture. This alarming trend has caused the need to spend money on unproductive things rather than to save.

5.2.2. Decrease in Exports and increase in Imports

Figure 4 : Decrease in exports (% GDP)

Source : *Nepal foreign trade (2018)*

Figure 5 : Increase in Imports (% of GDP)



Source : Nepal Foreign Trade (2018)

This might have an adverse effect on the economy as the remittance income is being spent on more imports than exports. According to the data from Department of Customs, in US dollar terms, exports increased by 10.3%, reaching US\$ 862.6 million. The growth rate of export is lower than last year. Exports to India, exports to China and other countries decreased. Meanwhile, imports grew 5.3%, reaching US\$12.6 billion. The growth rate of import is lower than last year, reaching US\$11.7 billion. As a share of GDP, exports, imports, trade deficit and total deficit and total trade were 2.8%, 40.9%, 38.1% and 43.8% of GDP, respectively. Export to import ratio was 6.8. It implies that half of the additional amount of remittance received by Nepali economy from foreign countries were spent on importing goods. Nepal should reduce import dependency to mobilize remittance in productive sectors that can help to boost economic growth. Its domestic production level needs to be increased through establishment of import substitution industry. At the same time it requires to attract much more remittance. Both policies are vital for achieving desired growth in country's GDP.

5.2.3. Brain Drain

Nepal's education ministry data shows that barely 16,504 students had a 'No Objection Certification' letter or NOC, which is required to study abroad, in fiscal year 2013-14. This increased fivefold up to the past fiscal year, 2017-18, with 62,800 students acquiring the certificate to study in 72 different countries. With a lack of specific government records on the number who actually leave the country to study abroad, the NOC is the main reference for statistics. Education consultancies that counsel the students say around 75% who get the NOC actually leave the country. The prospect of a better education and prosperous future is the major reason to leave, the consultancy operators say. But Nepalis also see study abroad as a gateway to working overseas and the consultancies are facilitating this. (Ghimire, 2019)

All the young students aged 20-30 leaving the country can cause serious brain drain in the country. Followed by less supply in labour, the country's economy can be seriously affected.

6. CONCLUSION AND POLICY RECOMMENDATIONS

Through this study, it is clear that Nepal will further increase its remittance income every year. So far, the advantages of remittances are progressive for the country's economy, however, the adverse effects are equally dangerous for the country in the long run. The study shows strong improvements in the living standards of the poor family along with the progress

in the eradication of poverty in the country. The remittance plays a huge role in the balance of payments and settling the international credits of the country. At the same time, it is dangerous for the country's labour supply leading to a slow economic growth. In addition, Nepalese citizens are wasting the remittance income on unnecessary consumption like drinking and partying. There should be a better pattern for the usage of the remittances such as productive investments that can have a positive implication on the country's economy. If unable to treat the situation, this can further lead citizens to emigrate more. These factors can directly affect the intentions of Nepalese to emigrate. Without addressing some of the major development challenges facing Nepal, efforts to "channel" remittances or mobilize diasporas will have limited to no impact if the general environment is not considered. While migration offers development potential, it is important that attention to migration and development does not come at the expense of broader development goals and complements replaces these efforts. Thus, government efforts to develop physical infrastructure (such as roads and electricity), combined with the development of education (for example, through an improved technical education and vocational training system) should underpin the more specific recommendations offered here: Develop banking infrastructure, especially in rural areas of Nepal; build confidence in banking systems by offering deposit insurance; pilot incentives to encourage savings.

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STATISTIC EVALUATION OF CURRENT DEMOGRAPHIC SITUATION IN AZERBAIJAN

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ABSTRACT

Fundamental changes in economic conditions of Azerbaijan have influenced a number of areas. Transformation of Azerbaijani society, its social structure and institutes are accompanied by changes in demographic processes. The determination of character and range of the relations between demographic event and process allows us to manage them in a more effective and reasonable way. The study of demographic processes, including the natural movement of population and its dynamics, is not only of theoretical importance. Being one of the main terms to make such or any other practical decisions, such studies are attached great importance in management of public life of a country. The purpose of the research work is to provide statistical evaluation of current demographic data in the country. The article, first and foremost, links the relations among demographic indicators with theoretical analysis. In the article, the authors assess the dynamics of demographic processes in Azerbaijan and the factors affecting them. The article also measures the influence level of results on factors through regression-correlation analysis, determines the rate of relation frequency and finds out the role of factors studied in total change of results, which is achieved by adequacy verification of the model. It can be concluded upon the studies that, birth has been main factor to determine the growth rate of population in the country. Continuous natural increase is the result of an increase in the birth rate. Birth, which is characterized by emergence of new members in the population, is a positive aspect of population reproduction.

Keywords: *demography, birth, death, natural increase, correlation-regression, statistical analysis*

1. INTRODUCTION

Modern age is characterized by both suitable and unsuitable tendencies in the demographic processes. Therefore, it is important to statistically assess the current situation and find effective ways for settlement of existing problems. Provision of sustainable social-economic development in the Republic of Azerbaijan requires the formation of optimal level of reproduction of population [1. Concept 2014-2017], which, as one of the factors that impact the demographic situation of country and change of its growth rate, makes inevitable the proper evaluation of place and role of natural movement of population. It is known that the solution of these complex issues is possible only if there are in-depth and comprehensive details about the development trends, dynamics of the demographic processes taking place in the country and its causes. Yet, it should be noted that, there is not enough information in the scientific references about the statistic evaluation of natural growth of population, its data base and methodological issues. Therefore, it is one of the important issues to develop the system of indicators that characterizes the natural growth of population and to find out priorities of statistic analysis. In consideration of the foregoing factors, regular compliance with the recommendations of

international organizations can help specify development tendencies of population [15. <https://www.unfpa.org/>]. On the other hand, the current condition of natural population movement sets significant tasks for the state statistics service. The implementation of effective and reasonable socio-demographic policy in the country requires us to provide international comparison of the indicators that characterize demographic processes. Demographic situation of country is formed as a result of mutual relations between various public events and processes. Therefore, in-depth and comprehensive statistical analysis of the development trends and dynamics of demographic processes, the factors affecting it, as well as the results of demographic policy is of great theoretical and practical importance for the country [7. Gladilin A.V, Gerasimov A.N.]. Settlement of the mentioned issues and significance of complex evaluation of demographic processes have given a ground for selection of research work.

2. HISTORICAL DEVELOPMENT OF DEMOGRAPHIC SITUATION IN AZERBAIJAN

In the population and socio-demographic structure of Azerbaijan in the twentieth century there are almost no factors that have not undergone serious deformation. Like the other post-Soviet Union countries, Azerbaijan has also gone through wars, social challenges and faced various obstacles to demographic development. Naturally, all these have had an adverse effect on strengthening of demographic potential of the country, normal formation of families and, consequently, demographic development in a stable way. Since the 1960s, the creation of normal conditions for development in all spheres of public life has significantly accelerated the demographic development of the republic. [3. Allahverdiyev R., Nasibov Kh. page 62-69]. In 1992, the population of the Republic of Azerbaijan has increased double on account of natural increase in comparison with early 1950s. Small number of generation born at that time during war and in the years after war entered into a reproductive age period. In the 1960s a new type of population reproduction formed, in which mostly dominated families with few children. Total decline in birth rate was affected by youth's inclination to values beyond family (education, professional promotion) and housing policy. 90% of apartments commissioned were for the families with 1 child. Sexual disproportion of population in the post-war period caused decline in number of marriages, increase of unofficial marriages and out-of-wedlock births, and change of the role of family as a social institute, which, consequently, led to decline of birth rates. At the same time, the number of deaths began to increase while birth rate declined from 1960s. By that time, its level was close to that of most European countries. The decrease in births and the increase in the number of deaths reduced the natural increase of the population. One of the important factors affecting the number of population and its regional displacement has been migration. In those years, highly qualified specialists and young able-bodied people were sent from our country to the regions of the USSR. Migration has led to a decline in Azerbaijan's population and indirectly led to losses in its natural growth. Thus, change of demographic behavioral norms led to a birth rate that ensures reproduction of population within a constant and narrow framework. In 1981, it led to adoption of new state measures aimed at stimulation of birth. State provided lump-sum allowances for children starting from the first one (not when the third one is born as before), partial-paid vacation for care of a child up to the age of one, an opportunity for the family to get interest-free loans after the first child is born (which would partially be eliminated after the second and third child are born), and other measures list of which would be extended periodically. Its positive effects emerged one year later gradually. For example, if the number of births was 154974 in 1980, it was 160425 in 1982 and 168644 in 1983. It should be noted that, the demographic policy adopted in 1982 had an impact on the number of first children born to families and gave an impetus to birth of the subsequent babies (mainly the second ones), which can be approved by the highest birth figures of the year 1991.

For three or four years, the timeline between these periods coincides with the intergenetic interval which is typical for the regions where minors dominate. Though the given measures bore positive results, they lasted shortly, and the birth rate went on going down from 1991. The measures adopted in 1991 had a short-term effect; this is because, first and foremost, they were social policy measures in nature despite their demographic direction, and secondly, there was not any complex approach to the solution of demographic problems at the time of their adoption. In the end of 1991, the number of population in Azerbaijan reached 190353 at the account of natural increase and migration process. As of 1992, the number of population went down. However, deaths were less than births. Besides, the migration process couldn't compensate for the natural decline of population. In the subsequent years, especially starting from 2004, the number of population can be characterized by a steady pace of increase. On one hand, the decline in the number of births in these years is the result of a change in reproductive age structure of women. The most intensive birth age group is included the small group of women born in 60-70s. On the other hand, the fundamental socio-economic changes in the end of 1980s and beginning of 1990s had an impact on the direction of demographic processes. The Karabakh war until 1994 and crises led parents to delay the birth of babies. Such process intensified from the second half of 1990 (including the first child), and families tended to have fewer children. Starting from 1992, the number of deaths increased. In that year alone death rate went up from 6.2% to 7.1%. The number of deaths reached its peak point 7.4% in 1994. The causes of such increase covered all types of death cases. In comparison with the economically developed countries, a very ineffectively structured and leveled model of death emerged in Azerbaijan. Life expectancy of men was 16-19 years while that of women was 8-13 years shorter than the most developed countries. Migration process swelled noticeably in 1990s, and its role in formation of the population of the Republic of Azerbaijan changed. The migration process has turned to a tool of partially compensating the natural declining number of population.

3. THE DIRECTIONS OF IMPROVING THE DEMOGRAPHIC POLICY IN THE REPUBLIC OF AZERBAIJAN

In the modern age, the strategy of social-economic development in the Republic of Azerbaijan is the transfer to market economy and comprehensive integration into world union system, which requires the formation of optimal level of population reproduction and migration as one of the most necessary conditions. It also, in its turn, requires the availability of comprehensive and in-depth details about the development tendency and dynamics and reasons of the demographic processes of the country. Based upon such details only, it is possible to develop effective measures which provide necessary conditions for comprehensive and harmonic development, aimed at formation of optimal socio-demographic structure of population and substantiated scientifically [9. . D.Lind,W.Marchal, S]. The main problem in studying of the population in Azerbaijan during the USSR period was the lack of information needed for adoption of decisions in different fields. Population was not centrally registered; there were lacking technical opportunities and all processes were manual, which necessitated their improvement. By the presidential decree on "Creation of State Register of the Azerbaijani population", this problem was eliminated. The database of demographic researches was built upon the statistic observational details of events. Such observation can be diversified by forms and types, one of which is a report. In a report, the authorities of statistics get necessary information about population via legal documents and statistical reports certified by signature of persons who are in charge of authenticity and presentation of such information. The initial report presented in a relevant address and time by registry bodies includes the reports on birth, death, marriage and divorce, health reports by health organizations, and the reports by internal affairs authorities and ASAN Service Centers. The other form is a special statistics observation conducted for getting the information which cannot be received by reports.

Here includes population census, observations once and for all and social-demographic selection researches. Main directions of demographic policy are:

- state assistance to low-income (children) families;
- creation of conditions for active work, provided that family obligations are fulfilled;
- reduction of diseases and deaths;
- increase in life expectancy;
- improving the quality of the population;
- regulation of migration processes;
- urbanization and location regulation;
- social support for the elderly and the disabled, etc.

These areas should be coordinated with employment, income regulation, education and health, staff training, housing construction, service sector development and social security, which are important areas of social policy. In order to address the envisaged tasks, it is necessary to ensure a sustainable and stable increase in expenditures on state support and protection of public health for families. The next step should be the formation of a national program in the field of population, and its main direction is to stabilize the population and create a basis for its further growth [13. Rich E. pp. 179-186]. The development of a scientifically-based and effective national program is not possible without the use of demographic statistics. At the time of program development, it is necessary to take the differences among regions into consideration alongside with the tendencies that are typical for the Republic of Azerbaijan. The economic boom of recent years created suitable condition for development of socio-economic development concept of the Republic of Azerbaijan, which means the country reaches the welfare standards of the developed countries. In many cases, the demographic future of Azerbaijan depends on the number of births. Some measures are being taken in order to increase births and its role as an integral part of future dynamics of Azerbaijani population. However, the settlement of this task in this stage shall be much more difficult than the previous ages. The current level of births and the low number of births are close to the ideal period of receiving a "demographic dividend" in terms of age structure. The absolute number of women of reproductive age and the situation in the marriage market is favorable in Azerbaijan. Such situation makes it possible to increase human capital to the highest level by stimulating richer and able-bodied group of population in years to come [10. Muradov Sh.M., Baxish Ch.A p. 135]. For more than 30 years, Azerbaijan has faced immigration and emigration problems. It is still not a large-scale problem, but it is a serious problem in terms of the quality of the migrating population. It enables us to tell about the danger of "brain drain". Increase in migration of Azerbaijani population was due to Karabakh conflict and the refugees and internally displaced persons from Armenia. At the same time, the balance between Azerbaijan and "far abroad" has been closed by a deficit for a long period of time. Such situation began in the second half of the 190s and extensively spread after a permission was given to religious groups to leave country and a law was adopted on coming to and leaving country. At first the emigration was of "ethnic" nature. The indicators of demographic statistics are applied in different fields of public activity. Here include discussions about the employment of citizens, and meeting of their needs for goods and services [5. Arkhangelsky, V.N.]. The effectiveness of demographic policy is determined by the flexibility to achieve the set goal, while minimizing the possible costs to society. Statistical information allows you to make management decisions in solving a number of tasks in this area:

- to optimize the type of reproduction of population and ensure the management of productive behavior (birth allowances and payments, project on provision of large families with apartment and so on);
- to control migration balance and to form migration flows adequate to economic needs of the country;

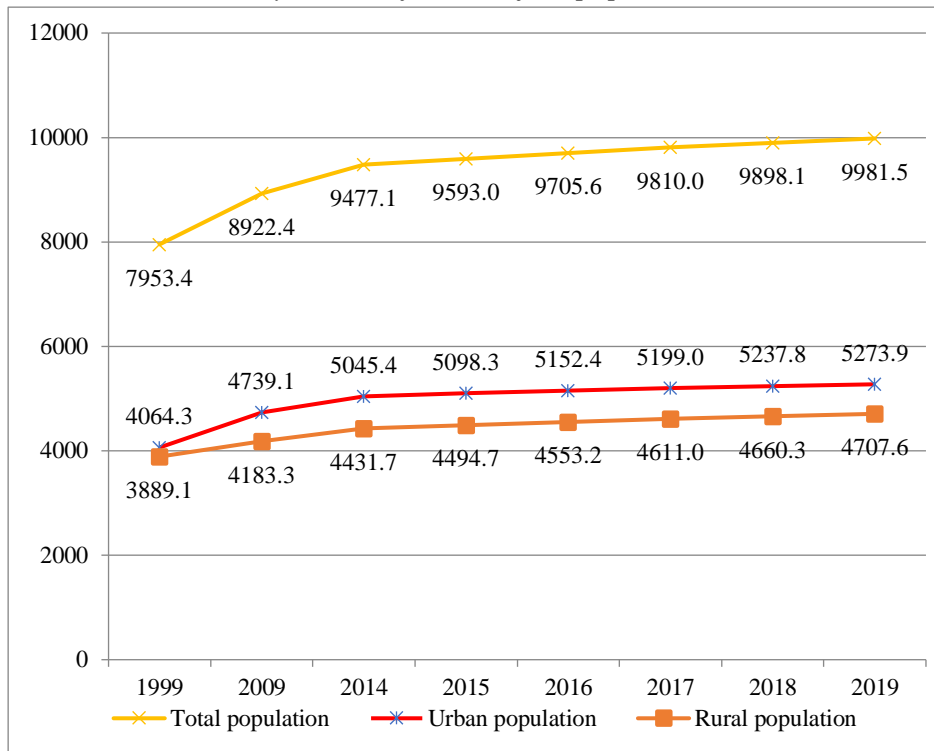
- to effectively distribute and use workforce;
- to intensify education reforms in accordance with the challenges of modern information society and innovative development needs of the country;
- to plan the structure of goods and services market;
- to provide social stability of administrative areas and so on.

Like in many fields, the direction of demographic policy depends on demographic situation of Azerbaijan and social-economic resources for its development. It should be noted that, there is not any direct connection between the economic welfare level and birth level of population. Against the background of poverty, the initial increase in welfare is usually accompanied by an increase in births. Yet, the next increase in financial provision and life quality does not provide a proportional increase in births. In addition, birth orientation in society is takes a secondary place, even in spite of the high standard of living, as it competes with other social and biological needs [8. State Planning Organization]. The main tasks in the field of demographic policy are to create comprehensive conditions that may provide birth level needed for normal reproduction of quantity and quality of population, to decrease deaths, to prolong life expectancy at the account of improving health and life of population, and to regulate marriage and divorce processes in accordance with interests of a society and individual families [4. Andreev E.M., Barkalov N.B]. Among these tasks are to regulate migration processes taking into account the prospects of social progress in near and distant future, to create conditions for improving the settlement of people in the territory of the country, including border regions and occupied regions in consideration of social economic, political and demographic interests of the republic, to promote and defend moral and ethical values of a family institute, to regulate healthy lifestyle formation in accordance with norms and the other necessary issues.

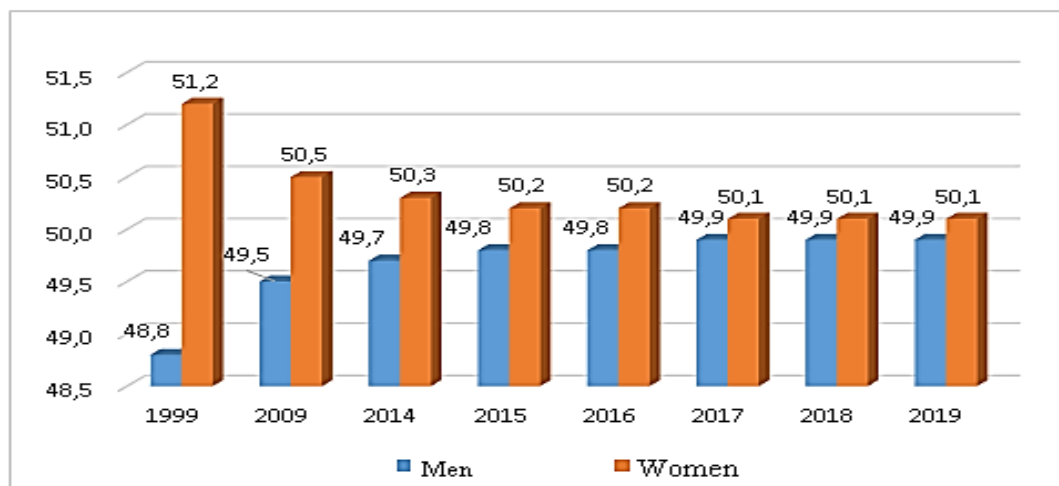
4. NUMBER, STRUCTURE AND ANALYSIS OF DEMOGRAPHIC INDICATORS

One of the necessary conditions of social-economic development of Azerbaijan is the statistic evaluation of demographic situation of population. Therefore, let's carry out the analysis using the database system provided by state statistics service. The number of population increased sharply in 1999-2017 in our republic. In accordance with the population census of 1999, total number of population was 7953,4, 8922,4 in 2009, while the figure was 9898.1 for January 1, 2018. Compared to 1999, the population increased by 23.3% and compared to 2009 by 9.9%. Growth in urban areas compared to these periods was 27.9%, 9.7%, and in rural areas 18.6%, 10.2%. While in 1999 the urban population was 51.1% and the rural population was 48.9%, at the beginning of 2019 the level of these indicators was 52.8% and 47.2%, respectively. As it seems, the tendency of population to move to cities is still observed. We reckon that necessary measures should be taken in order to prevent this process. It is no coincidence that the State Program on socio-economic development of the regions, signed by the President, was adopted, which will prevent the movement of people to the city. In order to see the changes in number of population in 1999-2019 let's have a look at the linear graphic below (Picture 1) [2. Statistical indicators].

Picture following on the next page

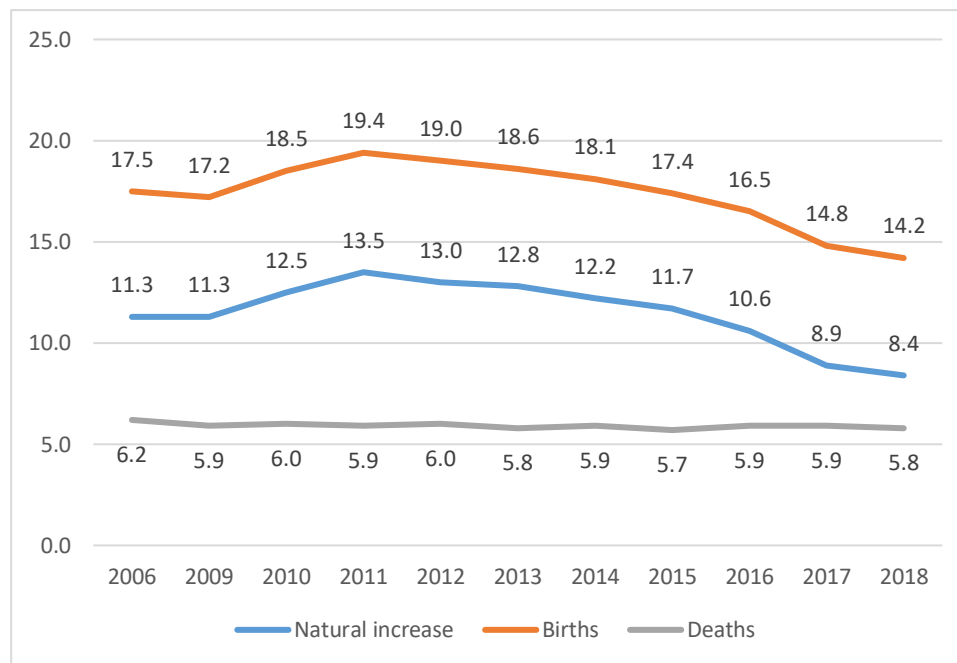
Picture 1: Dynamics of Azerbaijani population in 1999-2019

The average population density per 1 sq.m in Azerbaijan was 92 in 1999, whereas it was 113 in early 2017. 2245,8 (which amounts to 23% approximately) in total population have settled down in Baku, the capital city of Azerbaijan. According to analyses, though the annual average increase pace of rural population was higher than the annual average increase pace of urban population in recent years, urban population has dominated. Due to reduction of men's share and increase of women's in sex structure of population, women have dominated. It should also be noted that, if the disproportion in sex structure of population exceeds 3% on the basis of international methodology, then it is considered a serious discrepancy. The share of women in sex structure was 50.1% in 2017 while men's was 49.9%. The discrepancy in sex structure of population amounts to 0.2%. Thus the differences in sex structure of Azerbaijani population are quite normal.

Picture 2: Women's and men's shares in sex structure by percentages in the Republic of Azerbaijan in 1999-2019

In recent years, a decline has been observed in the level of natural increase in our republic. This is mainly because birth rate has dropped. Yet the coefficient between births and deaths may disappear due to change of age structure of population. Therefore, it is necessary to evaluate the natural increase opportunities of population on the basis of birth and death rates and age structure of population. Official statistical data indicates that birth rate has been 17.5% in 2006, 19.4% in 2011 and 16.5% in 2016. However, decrease of death rate has led the natural increase of population to reach 11.3%, 13.5% and 10.6%, which means the population reproduction has not entered a new stage where it doesn't provide its simple reproduction. The analyses show that downward tendencies are typical for natural increase of population. Such tendency can be seen much better in the linear graphic 2 (Picture 3) [14. www.stat.gov.az].

Picture 3: The dynamics of natural increase of population in the Republic of Azerbaijan in 2006-2018, %



According to researches, some changes have been found in demographic indicators of fertile women in recent period. Compared to 2000, the number of women at the age of 15-49 was 12.3% in 2005, it increased 18.9% in 2009 and 17.7% in 2015. As in the previous years, the age groups of 20-24 and 25-29 had the highest level of birth rate in 2015 among other age groups. The share of these two age groups in the total number of women of childbearing age did not change in the compared years and amounted to 34%. The gross coefficient of reproduction was 2406.4 in 2000 and 2470.4 in 2016. It means that, every 1000 woman gave birth to 2406 girl babies in 2000, and 2470 girl babies in 2016, which is a level that provides simple reproduction [12 Yusifov M.A.]. Thus the decline in birth rates in Azerbaijan has been intensified by mutual relations between two main factors. First of these factors is a relevant reaction of population to decline of life standards, and the second is formation and development of a new type of reproductive behavior in youth. The necessary changes in the process of family formation in recent years created a need for transfer from families with 3-4 children to family model with 1-2 children. In such a situation every family should be given a favorable opportunity to solve such or other problems, and state should provide its assistance to families. Constant provision of such assistance will have given results not only in social field, but also in economic one, which will lay the foundation of highly qualified staff potential for future and lead to formation of highly qualified human capital [11. Teymurova V.E.].

5. STATISTIC EVALUATION OF THE FACTORS THAT HAVE AN IMPACT ON BIRTH RATE IN THE REPUBLIC OF AZERBAIJAN

The model used statistics such as the number of marriages per 1,000 people, the poverty rate as a percentage, total per capita income in manats, and the number of births per 1,000 populations (Table 1).

Table 1: Number of marriages per 1,000 people for 2001-2018, poverty level and total per capita income and birth dynamics per 1,000 populations

<i>Years</i>	Birth dynamics per 1,000 population(Y)	Poverty level, in percentage(X1)	Total per capita income (in manat)(X2)	Number of marriages (per 1,000 people)(X3)
2001	13.7	49.0	29.1	5.2
2002	13.7	46.7	35.8	5.1
2003	13.9	44.7	37.6	6.8
2004	15.9	40.2	41.5	7.4
2005	16.9	29.3	50.4	8.5
2006	17.5	20.8	74.4	9.3
2007	17.7	15.8	88.1	9.4
2008	17.4	13.2	108.9	9.1
2009	17.2	10.9	125.0	8.8
2010	18.5	9.1	144.2	8.8
2011	19.4	7.6	166.0	9.7
2012	19.0	6.0	190.9	8.6
2013	18.6	5.3	214.7	9.3
2014	18.1	5.0	230.0	9.0
2015	17.4	4.9	240.5	7.2
2016	16.5	5.9	257.8	6.9
2017	14.8	5.4	268.4	6.4
2018	14.2	5.1	276.0	6.3

Regression equation has been carried out in Eviews 9 statistic program package.

Table 2: Regression equation

Dependent Variable: Y

Method: Least Squares

Date: 05/18/20 Time: 12:49

Sample: 2001 2018

Included observations: 18

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.958909	3.535069	0.554136	0.5917
X1	0.076740	0.044965	1.706682	0.1187
X2	0.012962	0.006674	1.942175	0.0808
X3	1.439324	0.234489	6.138136	0.0001
YEARS=2003	-1.739676	0.626931	-2.774906	0.0196
YEARS =2010	1.308739	0.578533	2.262169	0.0472
YEARS =2012	1.783709	0.552018	3.231250	0.0090
YEARS =2015	1.629165	0.574769	2.834468	0.0177
R-squared	0.955800	Mean dependent		16.68889
Adjusted R-squared	0.924861	S.D. dependent		1.889254
S.E. of regression	0.517874	Akaike info criterion		1.822932
Sum squared resid	2.681932	Schwarz criterion		2.218652
Log likelihood	-8.406385	Hannan-Quinn criter.		1.877496
F-statistic	30.89236	Durbin-Watson stat		1.551926
Prob (F-statistic)	0.000005			

In order to eliminate grave deviations which emerged in some years, dummy variables were used. As a result, regression equation shall be as below:

$$Y = 1.959 + 0.077 * X_1 + 0.013 * X_2 + 1.439 * X_3$$

According to the model, it should be noted that, 1 unit increase in the poverty level will have increased the explained variable by 0.077 units, 1 unit increase in per capita income by 0.013 units and 1 unit increase in the number of marriages by 1.439 units. As it seems from the information, the factors given in the model have a significant impact on the number of births. The calculated determination rate is 0.956, which means 95.6% of variety in the number of births has been substantiated on the account of the study factors. The other 4.4 percent falls into share of the other factors that are not taken into account. It is possible to know whether the regression model is important on the basis of the foregoing indicators. Correlation coefficient amounts to 0.978, and it gives us a ground to conclude that there exists a grave linear contact among the selected indicators.

Table 3: Grave linear contact among the selected indicators

<i>Indicators</i>	
Correlation coefficient	0,978
Determination coefficient	0,956
Observations	18

We can use the following details to check the availability of auto-correlation on Durbin-Watson criterion:

$$DW = 1.551926, \quad m = 3, \quad n = 18, \quad d_l = 0.708, \quad d_u = 1.422$$

The DW values change between 0-4. Application and value of the Durbin-Watson is estimated depending on the number of observation units, number of factors and its degree of significance. In our example, the hypothesis that there is no autocorrelation is accepted because the number of observations is 18, the number of factors is 3, and the Durbin-Watson criterion is 1,552 at the significance level of 1% and the condition is met.

6. CONCLUSION

By just having a look at some of the development concepts of the world countries, it is possible to see that, the human capital development is at the forefront as a key direction. The birth rate is among the first ones as a main direction and also a foundation. In consideration of these, it is important to study this area and to analyze the importance of current tendency of birth. For this reason, the establishment of a regressive relationship between this trend and key macroeconomic indicators in the country over the past 18 years will in itself given quite positive results. On the basis of our model, we will have measured the level of economic effect on demographic processes in order to enrich the human capital. It can be concluded on the basis of our results that, the official marital status had a direct impact on the high coefficient of births, and included indicators showed the development of the regression equation in a positive direction. Besides, without analyzing the structure of family planning, we have already specified by our model the proportions of newborns in relation to the family incomes. In order to get such results, we have used the recommendations of the international organizations and generally accepted methodology. This model proved that the effect of economic condition on the social processes can be measured; thus I believe that, when analyzing the results of economic and social state programs, it will be possible to use such models to determine the

success of the previous program. As a continuation of this research, we will set up the same model for the economic regions of our country, which will help us see a general view of those regions. It will pave a way for getting high results with the help of regional social-economic programs by clear description.

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THE ROLE OF HUMAN CAPITAL IN THE CONDITIONS OF POST-INDUSTRIAL GLOBALIZATION

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ABSTRACT

Human capital management in the current business environment is facing many changes and transformations due to ongoing globalization processes. The processes of globalization that have intensified in the world economy, have affected the activities of organizations around the world. The globalization of markets requires a thorough study of the success factors of multinational enterprises in an increasingly competitive international environment. For the effective management of these enterprises, their organizational culture and the choice of the right strategy, human resources or human capital management play an important role. Now it is more important to attract and take full advantage of the human capital potential than to focus on the company's financial resources, that can be augmented by new investors or new technologies. Globalization suggests that the boundaries between different cultures fade, they should adapt to each other. In practice, everything turns out to be far from simple: there are serious obstacles to this path related to the peculiarities of legislation, traditions, and customs. Globalization is a process of international integration in the fields of labor, finance, trade, production, computer science, telecommunications and education. It is widely believed that humanity has already entered the stage of development that can be called the information society now replacing post-industrial society (this is evidenced by the unprecedented development of computer technology, space communications, information technology, etc.). However, there are qualitatively different views that attribute the information society to the concepts of the distant future and consider it premature to discuss its features, since everything that we observe in the development of the information sphere is only a simple improvement of the post-industrial society. The process of unification and interpenetration of national economic complexes gained momentum at the end of the 20th century and acquired new forms of interdependence among countries: World Trade Organization, International Monetary Fund, World Bank, International Labor Organization, transnational corporations, Bologna Process, etc. The international labor migration has increased significantly. The unprecedented opportunities of post-industrialization and globalization should be grasped to help eradicate poverty, ensure full employment and distribute the benefits more equitably.

Keywords: *Human capital, GDP, Investments, Post-industrialization, The Human Development Index (HDI)*

1. INTRODUCTION

The creation of a new human-oriented economy and the general increase in the role of human capital should be considered as a special strategic resource for competitiveness, the greatest advantage of globalization in modern economies. Human capital, with its inherent capacity for creativity and innovation, is becoming increasingly demanded in modern society. The effectiveness of economic systems in the context of globalization depends to a large extent on public investment policies for human capital development. The formation and development of competitive human capital contributes significantly to the revitalization of economic growth, the promotion of employment, the welfare of the population and the development of innovative and modern energy-saving industries (the introduction of energy-saving technologies in the economic activities of enterprises is one of the important steps in solving many environmental

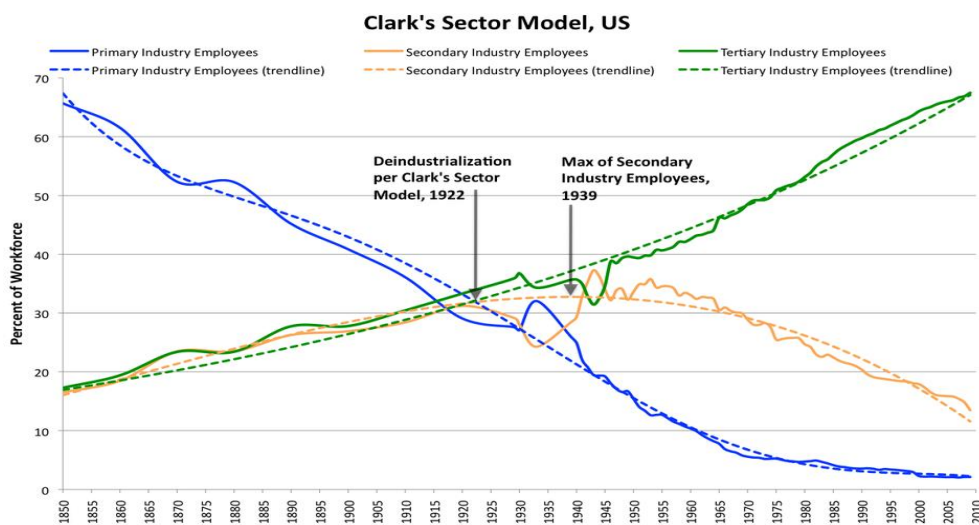
problems - air pollution, depletion of mineral resources, etc). Human resources development is becoming a determining factor in the sustainability of national economies and the world economy as a whole. The success of developed countries in capturing world markets and producing competitive high-tech products is directly related to the availability of high-quality human capital in these countries. In the modern economy, physical capital is being replaced by intellectual capital, the share of human capital at the end of the 20th century grew up to 80% in total national wealth of developed countries. Thus, in these countries at the end of the 1990s, about 70% of all investments were invested in human capital, and about 30% in physical capital. Moreover, in such kind of developed countries of the world, the government also makes the bulk of investments in human capital. At a low level and quality of human capital, investments in high-tech industries do not give returns. The relatively rapid successes of certain countries (Taiwan, Hong Kong, Singapore, etc.) confirm the conclusions that the foundation for the formation of human capital is the education level and culture of the bulk of the population. Hardworking, law-abiding nations achieve relatively quick paced successes in economic development. ^[1] According to world standards and approaches, national wealth is estimated in three ways: natural capital, productive capital and human capital. As identified by the World Bank, human resources play the role of the main resource in the structure of the national wealth of countries. The Changing Wealth of Nations 2018 (World Bank book that provided a fuller picture of economic well-being) tracks the wealth of 141 countries between 1995 and 2014 based on the aggregate of natural capital (such as forests and minerals), human capital (earnings over a person's lifetime); produced capital (buildings, infrastructure, etc.) and net foreign assets. Human capital was the largest component of wealth in general while natural capital made up nearly half of wealth in low-income countries, the report found. ^[2] Human capital is one of the "youngest" components of national wealth. The emergence of the theory of "human capital" is associated with an expanded interpretation of the national wealth concept. This theory was put forward in the early 1960s by T. Schulz and G. Becker. For creating the foundations of the theory of human capital, Theodor Schulz in 1979, and Gary Becker (presented the distinction between special and general investment in human capital and highlighted the peculiar importance of employees special training, their knowledge and skills) in 1992 were awarded the Nobel Prizes in economics. ^[3] The definition expanded over time and continues to expand, including more and more new components. In the economy human capital refers to the stock of human knowledges, skills, professional experience, health, personality attributes that are used by the individual to generate income. In determining the concept of "human capital", the following features should be taken into account:

- Human capital is unique and differs from any other capital, acts as a fundamental factor in economic growth;
- Human capital not only acquires knowledge throughout the life, but also deteriorates both physically and morally. The knowledge of the individual is becoming obsolete, that is, the value of human capital is changing economically in the process of being;
- Formation of human capital requires significant expenses both for the individual and for society as a whole, and investment can take place through education and training to improve quality and production. Investments in human capital give their owner, as a rule, a higher income in the future. For society, investments give a longer (in time) and integral (in nature) economic and social effect. This is necessary for government, society, companies to achieve goals, develop and remain innovative;
- Human capital can be accumulated, namely, an individual can acquire certain skills, abilities, improve the health.

2. HUMAN CAPITAL IN POST-INDUSTRIAL ECONOMY AS A MAJOR DEVELOPMENT FACTOR

As the main features of post-industrial society, researchers point to the significant growth of scientific and technological progress, the development of the service sector and the changing motivation and nature of human activity. The most important aspect of post-industrial transformation is a modern scientific and technological revolution. Human capital is the main intensive factor in the development of post-industrial society, after considering this, the living standard of the population of post-industrial countries undoubtedly should grow up. Since the development of production stimulates the continuous development of the skills of workers, education becomes a key factor in ensuring the social status of the individual. Post-industrial societies are characterized by increased appreciation of knowledge. This, in itself, is not surprising, exactly as Daniel Bell had predicted (american sociologist and publicist, founder of the theory of post-industrial (informational) society, professor at Harvard University) how economic employment models would evolve in such societies. Daniel Bell recorded that employment will grow faster in the tertiary sector (and quaternary - information technology, education, research, global marketing, banking and financial services and other services not related to production as such, but related to its planning and organization - knowledge economy) compared to employment in the primary and secondary sector (mining of raw materials and production of commodities) and that the tertiary (and quaternary) sector will take priority in the economy. This will keep up in such a way that the “impact of the expert” will expand and power will be monopolized by knowledge. [4]

Figure 1: Clark's (a British and Australian economist and statistician) Sector model for US economy 1850–2010



The three-sector model in economics classifies economies into three sectors of activity: extraction of raw materials (primary), manufacturing (secondary), and services (tertiary).^[5] In conformity with the model, the main focus of an economy's activity shifts from the primary, through the secondary and finally to the tertiary sector. Countries with a low per capita income are still at an early state of development; the main part of their national income is achieved by production in the primary sector. Countries in a more advanced state of development, with a medium national income, generate their income mainly in the secondary sector. In highly developed countries with a high income, the tertiary sector dominates the overall output of the economy. The model was developed by Allan Fisher,^[6] Colin Clark,^[7] and Jean Fourastié^[8]. So, the most valuable qualities are the level of education, professionalism, learning ability and creative approach of the employee, in this way a postindustrial society is characterized by the

primacy of knowledge (rather than property); the presence of intelligent technology; the transition from the production of goods to the provision of services; increase in the number of knowledge holders. If in the industrial society the main figures were an entrepreneur, businessman, head of an industrial enterprise, today the “new people” are scientists, mathematicians, economists and other representatives of intelligent technologies. Distinctive features of postindustrial society from industrial one are very high labor productivity, high quality of life, the predominant sector of innovative economy with high technology and venture capital, business.^[9] In some CIS countries saturation of markets with industrial products and goods reduces the growth rate of total industrial production and decreases the share of industry in GDP, however this does not occur due to high labor productivity, but due to the predominance of product import over export. In this regard, some scholars believe that the decisive criterion for the emergence of a post-industrial society is a change in the structure of employment, namely attaining 50 % of employment rates in the non-productive sector or engaging more of the total active, working population.^[10] At the first stages of an industrial society, having capital, it was almost always possible to organize the mass production of a product and occupy a corresponding niche in the market. With the development of competition, especially international, the amount of capital does not guarantee protection against failure and bankruptcy. Success requires innovation. Capital cannot automatically provide the know-how necessary for economic success. Conversely, in the post-industrial sectors of the economy, the availability of know-how makes it easy to attract the necessary capital. Deindustrialization primarily affects economically developed countries and old industries, such as metallurgy, textile industry. The closure of plants leads to increased unemployment and the emergence of regional socio-economic problems. But in parallel with deindustrialization, a process of reindustrialization takes place - the development of new, high-tech industries replacing old industries. Newly industrialized countries with such competitive advantages as cheap labor and lower tax burdens have attracted new industries to their territory. This has led to the global transfer of industrial production to Southeast Asia. In many countries of the region and in other developing countries, transnational corporations have established enterprises that produce semi-finished products or assemble finished products from imported parts. The value of corporations in a post-industrial society is mainly determined by intangible assets - know-how, employee qualifications, business structure efficiency, etc. Human resources development is becoming ever more costly, in part because of rapid changes in technology and methods and the need for highly qualified and trained personnel. A number of researchers characterize the post-industrial society as a “society of professionals”, where the main class is the “class of intellectuals” and the power belongs to the meritocracy - the intellectual elite. As D. Bell wrote, “a post-industrial society ... presupposes the emergence of an intellectual class where representatives at the political level act as consultants, experts or technocrats” (technocracy - an ideological system where authority belongs to scientific and technical specialists. The idea of transferring the management of society to a certain category of people — knowledge holders, philosophers — was first appeared in the writings of Plato, in his work “The Republic”).^[11] Ford automobile company’s founder Henry Ford once said: “You can take my factories, burn up my buildings, but give me my people and I’ll build the business right back again.”^[12] Today relations between the company and employees with intellectual capacity become more collaborative, and dependence on the employer is declining sharply. At the same time, corporations are moving from a centralized hierarchical to a hierarchical-network structure with increasing employee independence. Not only work functions, but also all managerial functions, up to the most senior management, are gradually taken over by hired employees, and usually these employees are not company owners. On the other hand, the post-industrial economy is experiencing less and less demand for unskilled labor, this fact in turn can cause difficulties for the population with a low educational level. Arises the situation, when population growth (in

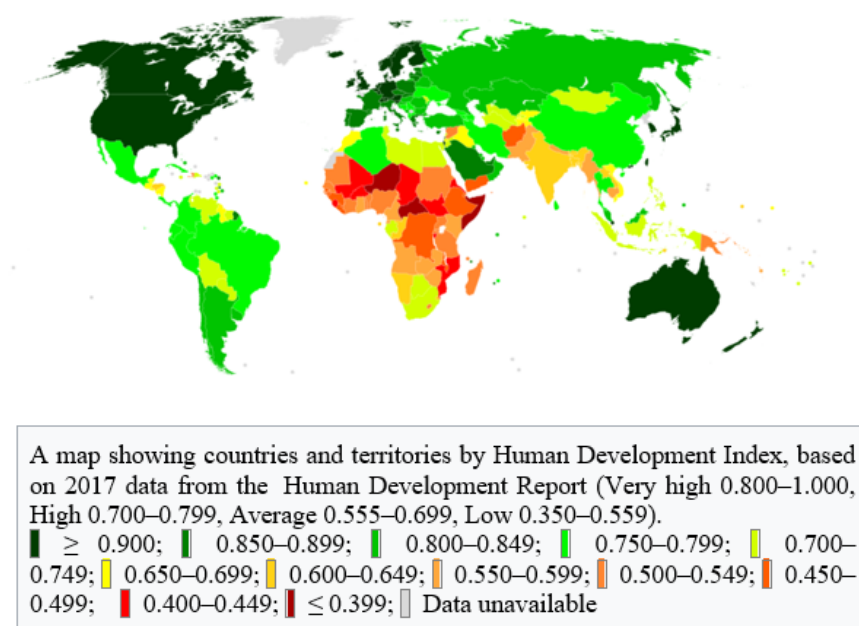
its unskilled part) does not increase the economic power of the country, but rather decreases it. The development of post-industrial societies in the most developed countries of the world has led to the fact that the share of manufacturing industries in GDP in these countries is now much lower than in some developing countries. Displacing commodity production to other countries, post-industrial ones have to put up with the inevitable growth of the necessary qualifications. If in the industrial era (predominance of industrial production in the economy, the process of creating large-scale machine production and thus the transition from an agrarian to an industrial society), from the beginning of the 19th century up to the 80s of the 20th century, the gap in GDP per capita between developing and developed countries increased more and more,^[13] then the post-industrial phase of economic development slowed down this trend, it can be deemed as a consequence of the globalization and growing education in developing countries. As a result of the relative decline in the share of material production, the economy of post-industrial countries has become less dependent on the supply of raw materials. For example, the unprecedented rise in oil prices in 2004-2007 did not cause a crisis similar to the oil crises in the 1970s. A similar increase in raw material prices in the 70s of the XX century encouraged developed countries to reduce the level of production and consumption. In the opinion of V. Inozemtsev (a Russian academician, the director of the Moscow-based Centre for Research on Post-Industrial Societies, a professor and the chair at the Department of World Economy, Moscow State Lomonosov University), “the postindustrial world enters the 21st century as a completely autonomous social entity that controls the global production of technologies and complex high-tech goods, the postindustrial world is fully self-sufficient in industrial and agricultural products, relatively independent of energy supplies and raw materials, as well as self-contained in terms of trade and investment”.^[14] Technological progress in industrial society was achieved mainly due to the work of inventor-practitioners who often did not have scientific training (e.g. T. Edison). In a post-industrial society, the applied role of scientific research, including fundamental research, is increasing dramatically. The main driver of technological change was the introduction of scientific achievements into production. As previously noted, the new economy is based on human capital - the main driving force of the social and economic development of modern society. The change in the role of human capital, its transformation from a cost factor into the main productive, social factor of development, and other similar processes have led to the need to form a new development paradigm. Within the new development paradigm of countries and the world community, human capital has taken the leading place in national wealth. Each country allocates a certain share of budgetary funds to maintain and develop the main spheres of human life, such as medicine, education, the social sphere, ecology, sports, culture, patriotism, etc., i.e. invests in a person. The main productive resource - the qualifications of people - cannot be increased through the growth of investment in production. This can only be achieved through increased investment in people and increased consumption - including consumption of educational services, investment in human health, etc. Moreover, increased consumption meets basic human needs, as a result of which people have time for personal growth, development of creativity, etc. that is, those qualities that are most important for the post-industrial economy. A citizen enjoys the benefits offered, lives, works in the country, enriches his/her human capital and brings profit, thereby stimulates the innovative activity of the government and provides GDP growth. Thus, it becomes clear that stimulating and enhancing human capital significantly affect the size of the country's GDP. Initially, human capital was understood only as a combination of investments in a person, increasing his ability to work - education and professional skills. Further, the concept of human capital expanded significantly. Recent calculations made by World Bank experts, include consumer spendings in human capital - household spending on food, clothing, housing, education, healthcare, culture, as well as government spendings on these goals.^[15]

The growth of human capital should be carried out by expanding the systematic establishment and implementation of targeted and comprehensive programs to increase human capital. The introduction of a human capital development program should be a priority for the government. According to most scientists, of the many investments in human capital, investments in health and education (education component is considered as one of the most profitable types of investments) are the most important. The results of science development include not only the knowledge products that produce new technologies and services, but also the transformation of the participants of labor process themselves, who become the holders of new knowledge and qualities. The costs of general education, training and health are no longer considered as unproductive costs. The structure of the workforce is also changing: the proportion of physical labor is decreasing, and the proportion of highly skilled and creative intellectual labor is increasing. The costs of training the workforce, expenses for education, advanced training and retraining of workers are also increasing.

2.1. The human development index (hdi)

The Human Development Index (HDI) is a comprehensive measure of life expectancy, literacy, education and living standards for countries around the world. This index is used to identify differences between developed, developing and underdeveloped countries, as well as to assess the impact of economic policies on quality of life.

Figure 2: A map showing countries and territories by Human Development Index, based on 2017 data from the Human Development Report ^[16]



3. FACTORS AFFECTING HUMAN CAPITAL GROWTH

One of the factors that can improve the efficiency of human capital development is the factor of innovation, which involves the interconnected development of science, technology, production, finance and social activities in the new environment. Today, there is a fairly clear definition of innovation, this definition refers to the end result of innovative activity, realized in the form of a new or improved product, as well as an improved technological or organizational process used in practice. And in this context innovation is measured as an outcome of investments in new equipment or technology, in new forms of production organization, labor force, services and management, including new forms of control, accounting, planning methods, methods of analysis, etc.

Human capital in the broad sense is an intensive productive factor in the development of the economy, society and the family, including the educated part of the workforce, knowledge, tools of intellectual and managerial work, the living standards and labor activity, that provides effective and rational functioning of human capital. The necessary scientific base of these processes was provided by theories of “human resources”, the development of the theories continues to this day. Also, leading specialists in human resources motivation theory like A. Maslow, F. Herzberg and others worked in this direction. According to the theory of «human resources» for most people, labor brings satisfaction, it is important for people to realize their abilities for creativity, self-control, responsibility, and also seek a higher level of hierarchy than they currently occupy.^{[17][18]} From a substantive point of view, human capital comprises a stock of health, knowledge, and capabilities that are capitalized under the following conditions:

- a) Flows and accumulation of human abilities, potential in the phases of life;
- b) Feasibility in the use of talent, resulting in increased productivity;
- c) An increase in productivity leads to an increase in the worker’s earnings;
- d) Increased income motivates the worker to make additional investments in human capital and accumulate it.

The analysis of the content and conditions of human capital formation and development makes it possible to propose a generalized definition of human capital as an economic category of the modern innovative society.^[19] The formation of human capital should be investigated as a process of searching, updating and improving the quality of human productivity, this contributes to the process of social production. Factors affecting human capital formation can be grouped into the following groups:

- Socio-demographic - Number of inhabitants, gender and age structure, population growth rate, average life expectancy of the population etc;
- Institutional - Institutional factors of the formation and use of human potential can be classified conditionally into some groups: factors that directly and primarily affect the formation of human capital (family environment, education, etc.); resources (time, money, effort) deliberately invested in order to expand the professional capabilities of the person, the resources determine the amount of human capital as a financial category in terms of “investment - return” in the structure of human capital; factors that allow human capital to transform into its realized form by obtaining higher incomes (since sometimes the accumulated potential may remain unrealized).
- Integration factor - In the modern economy, several interrelated processes can be distinguished: trends in the development of digital technologies, changes of human living conditions under the influence of a post-industrial society, digitalization of public administration and the field of science, transformation of the labor market and demand for personnel competencies;
- Socio-psychological and moral attitudes – Work attitudes, ability to learn, self-development, self-organization, responsibility, performance, etc.,
- Ecological - According to experts from the World Health Organization (WHO), the impact of environmental factors on the health of the population is very important among other relevant ones. The effects of air pollutants on the human organism are mainly manifested in general health damage or loss of capacity for work, inability to continue work;
- Economic – Because of weak income growth arises a dangerous situation in which countries face difficulties in eliminating infrastructure problems, improving public health, improving the quality of human capital, and empowering people.^[20]
- Productive – As it mentioned earlier, human capital can be broadly defined as the stock of knowledge, skills and other personal characteristics embodied in people that help them to be productive.

Formal education (pre-school education, the formal school system, adult education programmes), as well as non-formal and on-the-job training and work experience, represent an investment in human capital. According to the International Labor Organization (ILO), investment in education and training is a shared responsibility of the public and private sectors. Moreover, the main responsibility in terms of financing basic and primary vocational education, as well as education for vulnerable categories of the population, should lie with the State. As for investment in lifelong learning in the workplace and training that enhances the employability and competitiveness of enterprises, financing is more the responsibility of enterprises and citizens. At the same time, governments need to finance education in those areas that do not have investment attractiveness for employers and citizens (for example, for small and medium enterprises), as well as to implement active labor market policies. For instance, in Denmark, under the National Action Plan on Employment, it was possible to reduce unemployment rate between 1992 and 2000 nearly twice, as reducing youth and chronic unemployment was a priority.^[21]

All of this assumes that human capital is a complex systemic subject of socio-economic research. Almost all researchers recognize the reality and crucial role of intellectual capital. Indeed, intellectual products may be registered as intellectual property and included in business transactions, purchases and sales in the form of investments in capital, sales of licences, accounting as an intangible asset. Peter Drucker (American management consultant, educator, and author), introducing the term “knowledge worker”, stated that in the “knowledge society” the basic economic resource is already knowledge, not capital, natural resources or labor. He further noted that “knowledge has become a key economic and dominant resource - and perhaps even the only source of competitive advantage.”^[22] This explanation stems from his assertion that enhancing knowledge-based productivity is a great challenge for 20th-century management. A. Marshall also gives priority to knowledge, arguing that capital is largely knowledge and organization and knowledge is the most powerful engine of production.^[23]

3.1. The structure of human capital

Table 1: The structure of human capital^[25]

<i>Non-alienable types of human capital (illiquid capital)</i>	<i>Alienable types of human capital (liquid capital)</i>
Non-alienable types of human capital are illiquid, since they are inseparable from the individual and cannot be fully converted into money. A person entering into labor relations as an employee or entrepreneur sells only part of abilities - the ability to work or to perform other labor and official duties. Incomes on non-alienable human capital are wages (labor remuneration) or entrepreneurial profit, as well as pension savings.	Alienable types of human capital are liquid to a greater or lesser extent, since they do not belong either to a specific person or to a subject of the economy (company, industry, region, state, etc.), but only appear when socio-economic relations are implemented by these agents. ^[24]
Health capital (biophysical)	Social capital (The quality of social connections in society. For example, the willingness to help strangers. Social capital is considered as a characteristic of society that determines the quality of life in a particular country)
Culture and ethics capital	Customer capital (brand-capital, relationship between company employees and customers or suppliers. In other words, it is a part of the firm's intellectual capital)
Labor capital	Structural capital (one of the primary components of intellectual capital, consists of the supportive infrastructure, processes, and databases of the organisation that enable human capital to function)
Intellectual capital	Organizational capital (includes the accumulated experience of the organization that is somehow preserved and used for normal operation and development of the organization)

This classification makes it possible to consider and evaluate human capital at the individual level (micro-level - individual human capital), an enterprise or range of enterprises (meso-level - firm's human capital) and the State as a whole (macro level - national human capital). National human capital includes social, political capital, national intellectual priorities, national competitive advantages and the natural potential of a nation. To fully understand human capital, it is necessary first to look at the core components of this concept, the components lie at the intersection of the humanities and economic sciences: human and capital.

4. CONCLUSION

A person spends certain physical, mental and financial resources on the development of qualities and abilities. Labor resources can be transformed into capital, but this requires the creation of an environment in which human potential can be realized. In other words, if a person is engaged in social production, and labor resources bring real income and create wealth, then they can be called capital. The development efficiency of the enterprise and the State's economy depends to a large extent on the amount of funds that are allocated to the development of human capital, as well as on the timeliness of these funds. This type of investment has a significant, long-lasting and integral economic and social impact, and therefore is the most beneficial both for the individual and for the enterprise and society as a whole. Consequently, according to analysts, the main trend in the labor market in the near future will be efficiency orientation. This means that talent now is a key factor of the quality of human capital, and therefore the ability of a company to attract, develop and retain talent will be a major competitive advantage to capture economic effect and social benefits for many years to come.

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PROSPECTS FOR THE DEVELOPMENT OF THE FINANCIAL MARKET OF AZERBAIJAN IN THE CONTEMPORARY TIME

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ABSTRACT

The existence and efficient functioning of the financial market plays an important role in regulating the systemic activity of the national economy. An improved market mechanism reduces the ability of the state to influence and directly interfere in the distribution of funds. At the same time, it should be considered that the development of the economy on a sound basis requires the effective organization of the distribution and redistribution of financial resources. All this brings to the fore the analysis of the current state of the financial market and the study of its prospects. One of the interesting issues is that the financial and economic crises in the world economy, in turn, have led to an evolution in the theory and practice of regulating the development of financial markets. For example, the financial and economic crisis of 2008 raised the issue of the need for financial market regulation at the national and international levels by many governments. Currently, the process of formation and development of the financial market in Azerbaijan is progressing rapidly. However, certain problems in the field of interaction between the internal segments of the market and the formation of effective financial support for the process of large-scale recycling, etc., need to be addressed. In this regard, first, the problems of attracting local and foreign investment, increasing investment activity, business development and access to credit for the real sector must be addressed. Therefore, a comprehensive analysis of the various links of the financial market, the identification of opportunities for integration into international and regional financial markets, in short, the study of the effective development trajectory of the market are among the urgent problems of today. It can be concluded that the strategic goals for the development of financial markets should be, above all, the creation of a favorable environment for issuers and financial intermediaries, increasing access to financial markets for investors and increasing activity in the interbank money market. The existing problems in its integration into international financial markets should be identified, and on this basis, concrete practical proposals and recommendations should be prepared for the future development of the financial market should be considered.

Keywords: *credit, capital, development, finance, money, market, investment, issuer*

1. INTRODUCTION

An advanced national financial market plays an important role in the sustainable development of the economy in every country. An affection of links between the compound structure of the financial market and its segments requires a complex approach in the regulating it. Today, the financial market of any country does not operate outside influence of the global economy and even it's not possible, because international commodity (service) exchange in turn paves the way for the development of the financial markets. It is no coincidence that the financial market itself is accepted as the total relationship marketing on the purchasement of the financial resources which an action from the investors to debtors was provided and helps the investment development with this. The importance of the financial resources emerges on the action of cash used by the economic agents in the process on the share and re-share of national incomes. We can approach in terms of realities of specific epoch for the effective use. So, as a result of activity of the financial market during XX-XXI century, its economic role was deformed.

The main reason for this was the complex volatility of the financial market, which allowed to make a profit not through the use of financial resources in the production process, but through profiteering. The existence of the financial market being established on the development, distribution and use effectiveness of the financial resources is one of important provisions of the development of national economy. Establishment of strong economy based on non-advanced financial market may only seem like an illusion. However, it is necessary to benefit from time, large theoretical and practical skills, tested experience to achieve it. The financial market is such a sensitive section of the economy that it always must adequately respond to the situations of any accidental cases and happening crises. Breaking optimal comparisons and interactions among its internal structural sections may led to stagnancy in the micro and macroeconomic level. In this regard, the main purpose is to define problems and development directions of formation of the financial market in Azerbaijan and to develop demand and recommendations which were argued scientifically based on generalizing relevant theoretical-methodological and practical approaches by taking into account core tendencies of modern globalization period.

2. DEVELOPMENT OF AZERBAIJAN FINANCIAL MARKET AND MODERN DEVELOPMENT TRENDS

The financial market of Azerbaijan Republic is developing. The development of it covers approximately 30 years period. However, it was affected by the “traumatic crisis” happened in the last period. It also evoked the government to take appropriate measures to improve the financial market regulation system. The changes in the global financial market and Azerbaijan’s financial market come to the front issues on interactions among economic role of the financial market, its modern structure and functions, segments of the financial market and external incentives. An economic-theoretical and practical analysis of internal and external interactions on the segments of financial market enables to appear directions on the reduction of economic role globally. Rapid growth of the financial market scale has been launching since the late 1970s, revolutionary development of financial theories took place, new tools are being prepared. The financial market is divided into following development phases during this period:

- Expanding the functions of the financial organizations. Some tendencies started to develop new structures of the financial moderators trying to meet all possible needs of their customers in the financial services instead of a whole range of financial organizations (commercial banks, investment banks, brokerage companies) executing different functions.
- Development of derivative securities (derivatives) market. The derivatives paved the way for re-connecting various risk types, as well as involving the customers by developing new tools for the financial market bodies.
- New level of the financial business concentration. The largest banks, insurance companies and other financial moderators become transnational companies having customers across the world.
- Combining the achievements of financial theory and engineering-calculation science with the experience of financial markets. The scientific achievements in the financial field paved the way for finding some new financial tools and effective methods for the solution of financial problems. 8 economists were awarded with Nobel prize for the achievements in the financial theory field from 1981.

Evaluational approach to the investigating financial market gives a chance to determine variety periods in the development of the financial market. Those periods cover starting from fighting against usury to the growth of the financial market scale. These periods are characterized by the features of the financial market, as well as directions of theoretical research of the financial market.

So, it is impossible to achieve aimed economic purposes without exactly defining regulation of economic relations, function and activity spheres of economic institutions and issuer. Of course, normative-legal base should be prepared for the formation, development and normal functioning of the financial market. Foreign economists relate the activity of the financial market to providing to transfer money funds or capital from the debtors to borrowers. For example, G.Mankiw defines financial markets as institution, people wanting to save money may offer their investment to the ones wanting to tick through it. It covers bond and stock markets as main financial markets[9, p. 556]. We can see the similar statement like this in the research of J. Stiglitz and C.Walsh. They refer the financial market and capital market as synonymous and characterized them as a market that enables the movement of savings from businesses and firms whose incomes exceed their expenses to businesses and households that want to spend more than their current incomes let [2, p. 612]. Other two foreign authors V. Boys and M. Melvin consider that the financial markets help separation of resources and claim it happens at the expense of following processes[4, s. 371]:

- The financial institutions play a moderator role between investors and borrowers and select borrowers in such a way that money funds is organized on the implementation of the best projects.
- The financial institutions control over the borrower behaviours for the use of borrowers' funds on their intended purpose.
- The financial institutions reduce investment risks, because credits are given to the various farm and firms and they decline large loss probability through such diversification.
- They also note that the more developed the financial sector of the economy, the more alternatives there are for financing investments.

The following definition is given in the financial encyclopaedia: the financial markets are related to money flow to determine the needs of borrowers when savings of creditors were shared[8, s. 85]. It is highlighted in other edition dedicated to the fundamentals of the finance that the financial markets make easier the transfer of funds from depositors to companies, the state and families that use them. The financial markets also provide the movement of current securities from sellers to buyers [10, s. 14]. The term “Financial market” and detailed interpretation of related conceptions are given in the editions on the activity of the financial markets and institutions of the foreign investors. For example, F.S. Mishkin and S.G. Eakins think that the financial markets perform the most important economic function of directing money to those who are in need of money because they spend less than they earn and spend more of what they earn from households and firms than the state that collects the surplus. The main creditors (investors) are housekeeping, but firms, state, as well as foreign investors can loan from surplus funds of finance by collecting much more money. The main borrowers are firms and state though they can borrow to finance receiving longlasting expensive goods of housekeeping[10, s. 16]. Robert E. Bailey note in his book that he financial markets and capital markets are the totality of official and unofficial organizations used in exchange of assets. Assets refer to financial instruments. R. E. Bailey defines types of following capital markets depending on sold assets: stock market, bond market, money market (short-term securities), trade exchange (goods may be securities or agricultural products), material assets (real property) market, currency market and affiliate financial instruments market[3, s. 1-4]. Let's try to interpret development tendencies of the financial market in Azerbaijan recently with the oil price dynamics in the global markets and inflation processes hereon.

Figure following on the next page

Figure 1: The inflation rate in Azerbaijan 2007-2018

Source: www.stat.gov.az

Now let's look through change of oil prices during those years:

Figure 2: Historical price level of "Brent" oil

Source: tradingeconomics.com

The figures show that state expenses mass increased during the inflow of large oil revenues into the country in 2005-2008 while the price of Brent oil was \$ 140 for the last 12 years. Coming down of import affected on economic activity as a result of increasing foreign currency exported into Azerbaijan and the national currency increasing value against the strongest currency in the world; high rate of inflation was 25% during those years. The downward trend in Brent oil prices has affected macroeconomic indicators in Azerbaijan since the second half of 2014. The country has seen an increase in inflation as a result of the pressure of oil prices on the national currency, the reduction in the Central Bank's reserves, increase in imports because of its devaluation due to pressure on the manat, losing consumer confidence, rising import prices. Constant devaluation processes in 2015-2016 also had a negative impact on the financial market, especially the banking sector. It is no coincidence that several banks have since gone bankrupt. It significantly eroded public confidence in the banking sector. The current situation of Azerbaijan's financial market should be interpreted unequivocally in terms of a global pandemic. This case caused serious dissensions in the financial markets of all countries.

Azerbaijan almost spends 120-150 million manat (70-85 million US dollars) every day by taking into account social protection of the low-income families due to the shutting down of most activities, support and treatment costs of the banking sector. The sudden decline in oil prices on the world market requires systematic measures to maintain the stability of the financial market with the decline in the country's revenues. To this end, the first steps are to create conditions for the activities of small and medium-sized businesses by complying with the quarantine regime rules. We should note another issue that the timing of the gradual exit from the quarantine regime in the regions will coincide with the beginning of the farming season in the regions, which will soon help the rural population to avoid the negative impacts of the pandemic, increasing budget, insurance payments, as well as demand for bank loans. We assume that it will reduce the country's financial burden and provide relative stability in the financial market in about three months.

3. THE PERSPECTIVE DEVELOPMENT DIRECTIONS OF AZERBAIJAN'S FINANCIAL MARKET IN THE CONDITIONS OF INTERNATIONAL INTEGRATION

The results of a comprehensive analysis of the current situation of the financial market in the Republic of Azerbaijan show that there are certain problems in this area. These problems hedge to the development of the currency and securities markets, their integration into international financial markets, as well as the economic development of the country to the certain extent. As we noted, currently one of the shortcomings of the country's securities market is related to its regulatory mechanism. So, one of the weaknesses of this market is the lack of self-regulatory organizations in the securities market of the Republic of Azerbaijan and has a negative impact on its dynamic development. There are self-regulatory organizations such as the National Association of Stock Market Participants and the Association of Promissory Note Market Participants in some countries unlike the Republic of Azerbaijan. The main purpose of the first of these organizations is to unite the efforts of financial market participants in the formation of market infrastructure through the development of a system of registration and depository services, the development of standards for the operation of depositories. Today that organization bases its work on financial, operational, trading analysis, legislative initiatives, information and consulting activities and interested in issues such as optimization of taxation, development of advanced trade technologies. These organizations also take measures against a breach of applicable laws in the securities market, giving misleading information to customers and others, "artificial prices" play and etc. Generally, the aforementioned experience of securities market self-regulatory organizations can be continued in the example of other civilized countries. However, the main result is the existence of such institutions in the securities market of the Republic of Azerbaijan and its separate segments is very important and effective. We can observe the positive results of the formation and activity of the country in the securities market by increasing the knowledge and skills of all securities market participants in the country and widely promoting international experience. It should be also focused on what segment of the market they will operate in and what activities they will engage in and on this basis which of them should be decided to create more objective conditions and provide assistance. The following are the main directions of development in the financial market of Azerbaijan, especially in its relatively backward securities segment by considering modern world experience and local economic conditions:

1. Defining the minimum amount of information they should disclose in front of every participant of the emerging securities market. The scope of information materials (including macro and microeconomic reports) published in the securities market should also be increased. It is necessary to pay special attention to whether the information is a trade secret when publishing these materials;

2. Specially paying attention to the development of specialized edition network characterizing different segments of the securities market in the publishing information and report materials and development of this network in the future;
3. Regular mandatory publication of any facts of activity of issuers that may affect securities rates;
4. Network development of independent rating agencies and wide application of rating assessment of securities issuers;
5. Establishment of a unified system of indicators that objectively assess the situation in the securities market. Special attention should be paid to the formation of an information system reflecting the situation of financial and economic activities and ensuring its functioning to predict the level of risk, liquidity and profitability for investors.

We focus on improving the credit market while showing the directions of solving the problem of inter-enterprise debt. It is advisable to implement large-scale and complex measures in order to develop the credit market in Azerbaijan, its integration into international financial markets, to stimulate the flow of funds abroad and from abroad to the country. One of these measures is related to the interest rate of the loan. So, meeting the needs of the economy for borrowed funds in the absence of working capital in enterprises and organizations directly depends on the positive nature of the interest. Thus, the complex measures should be taken on decreasing of credit interests. Interest rates on centralized credit resources should be reduced to increase credit assets of banks by taking into account inflation in the economy and the rate of return in the real sector. However, it should be noted that in the current situation, the impact of these measures on lowering interest rates on credit transactions will be weak. The main reason is a disproportion between supply and demand for money in the country. Interest rates on loans by commercial banks also include credit risks and interest income that are beyond the control of the Central Bank. Taking into account aforementioned, it should be clearly substantiated in which area and how much credit is required to stimulate the development of the real sector for the effectiveness of credit policy in this direction. It is important to keep in mind the rate of diversification of the economy, or rather the rate of profitability in each sector of the real sector and the level of development of that sector in order to ensure the efficient functioning of the credit market in the country and to support the optimal development strategy of the economy when credit offer is being implemented. The main goal of credit policy for this purpose is the proportional distribution of debt among the real sector and ensuring the balance and optimality of this distribution. It is generally inevitable that the problems of the financial market will be considered in the context of the loss of five banks operating in Azerbaijan in the first quarter of 2020 and a 40.3% decrease in stock exchange turnover. The analysis of currency market in Azerbaijan has recently shown that there are significant differences between the exchange rate set by the government and the nominal and real effective exchange rates. It was not beneficial for the country's economy as a whole, as well as negatively affecting the promotion of export products and imports in the country. It is necessary to resolve the problems in the national currency system as well for the effectiveness functioning of the financial market. It should be noted that the the main direction of regulation in the field of currency relations is to create normal conditions in the field of foreign economic cooperation and stimulation of exports from the exchange rate, maintenance of the domestic market from foreign competition should be set as the main goal through it. The conducted analyses show that effective currency policy on export and import has not been implemented. It is evidenced by the calculations of real and nominal effective exchange rates and the interpretation of their results. Failure to implement such a policy sometimes has a negative effect on the national economy naturally. An experience of developed countries indicates that effective use of currency policy is an essential condition in the presence of private ownership of the means of production.

Nonetheless, a system on the ensuring currency conversion and improving the redistribution of foreign exchange within the country should be developed. The following important results emerged and relevant proposals and recommendations were made as a result of a comprehensive analysis of the financial market of the Republic of Azerbaijan and the problems of its development in the context of globalization of the world economic systems. The world experience shows that the institutions, organizations, companies and firms of the countries having advanced market economy for a long-term developed their own opportunity principles to get free financial funds for their needs. In such countries, opportunities to get free financial resources on favorable terms are also increasing. In this regard, in meeting their needs for free financial resources, the integration of farming enterprises into the international financial market may create wide range of opportunities. Rising globalization trends in the world economy have exacerbated competition between international financial centers and companies according to the research. As a result, now some countries minimize existing restrictive measures to improve national financial market. Such relations led to competition between national and international financial markets and development of the financial system as a whole. We consider that the globalization in the world financial market will force the world to fully integrate financial markets or impose severe restrictions on foreign financial transactions. The development of the financial market gives a chance to carry out large investment projects based on mobilization of large funds; favour for adoption of more effective investment decisions. One of the other necessary measures to be taken for the development of financial market in Azerbaijan is related to the total development of assurance system on the government securities. So, solution of this problem may enable the use of government securities in the country as collateral in the process of lending to private companies.

4. CONCLUSION

The strategy of economic development in Azerbaijan is the intermingling of key countries. In this way, the financial sector of the national economy brings income, in general, the development of the payment system, credit and insurance system, the harmonization of the financial system with international standards and substantial development. Finally, in 2016, the "Development Strategy for the National Economy and Development Sectors of the Economy" is provided with financial services. It is determined that it will take 15-20 years to develop the state of financial markets and improve health. Develop and enhance financial development for sustainable economic development and core development in each country. It promotes the development of the trading system with financial markets and brings economic benefits to the financial markets. If it brings economic benefits to the financial markets, then a mechanism is applied to make market participants less economical and restore health. It is said that it is expedient for foreign countries to switch to foreign experience through the mechanism of regulating the activities of the financial market. In addition, the development and improvement of external financial opportunities. This is what the current global economy requires and brings income. To develop these ideas is to develop health and monetary relations with the capital market. If finance is not provided with the efficiency of financial funds, then there is a problem in the dynamics of development of the national economy and the financial system. The rate of productivity and productivity associated with success and financial productivity in the economy is regulated. At present, the development of the economic market and the prospects for development are not determined by the impact of the pandemic abroad. It is necessary to wait for how many times the reduction will be in the financing market. Received the first commercial services and commercial banks in the financial and financial sector. Let them take into account the fact that the fourth bank will soon achieve its happiness. Enemy development and revenue reduction decreased. This does not have a negative impact on banks. We think that the connection of "weak" banks is optimal in terms of strengthening the financial market.

Therefore, 677 million manat (\$ 398.3 million) has been created to restore the normal operation of the fourth bank. It is necessary to think about it, to make it ready, to support the sustainable development of the national financial market, to provide state support to all credit and investment companies. Therefore, "be able to stand" helps market participants in this area. It contributes to the development of the financial market. From this point of view, it is not a priority to regulate and harmonize the activities of banks, insurance companies and stock exchanges in accordance with the anti-crisis regulation and situation. At the same time, it is planned to improve and enhance the development of the securities market, which is the weakest right of the financial market in Azerbaijan.

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HOW TO INCREASE EFFICIENCY AT MANUFACTURING FIRMS: EXPANDING INNOVATION ACTIVITIES

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ABSTRACT

Manufacturing sector for it is essential role in ensuring economic development, improving employment and increasing living standard has a positive effect on country economy. There are many reasons for inefficiency in manufacturing firms. So low level of innovation activities, less technologies, lack of financial resources, and poor quality of workforce and managers are an examples of those. Innovation activities are most effective factor, because it covering all production, technology, marketing and management spheres of firm and for this regard it has direct and broaden influence on efficiency of the firm. Innovation activities, including research and development and gaining new and modern technologies has influences on firms efficiency for some ways. Research and development could increase operational efficiency of firms. At the same time with improving innovation activities firms could reach new goods and services. Besides, gaining modern technology could increase efficiency in firms. Research and development expenditures (% of GDP) in Azerbaijan comparing with some other countries is the low level. Besides, state sector has the main share in this spending (85.3%) and business sector has little share (2.5%). Firms expressed that their main problems on research and development are low level of financial resources and lack of sufficient state financial aids. And ties between firms and research institutions are on limited level. We consider that supply-side and systemic policies would be more effective on increasing innovation activities in firms. Therefore by imposing some tax incentives for innovation activities and funding grants for this regard firms could be stimulated. At the same time, by improving cooperations and relations between firms and research institutions innovation activities of the firms could be broadened. For this regard stimulating policies could affect both organizations in increasing relations.

Keywords: *efficiency, innovation activity, research and development, supply-side policies, systemic policies*

1. INTRODUCTION

In the current environment of fierce competition, efficiency is one of the main factors increasing the profitability of enterprises, expanding the market share, increasing the competitiveness and meeting the changing consumer needs. Enterprises achieving increase of efficiency can make more profit by making proper use of existing production capacity. When a firm uses its resources more efficiently, its costs are kept to minimum and it produces better product that meets demand and, in its turn, increases its competitiveness. As we know, the manufacturing industry plays an important role in the economic development of the country. This sector is considered to be a source of economic growth, job creation and positive multiplier effect. Lack of efficiency in the manufacturing industry that makes an obstacle to the industrial development of developing countries is an important problem. In such group countries the reasons for low efficiency at the firm level are weak innovation, lack of modern technologies, low level of manpower and management skills. Among these factors the innovation is the most important. Thus, since innovation activity covers such areas of the enterprise as product, technology, marketing and management, it is able to have direct, comprehensive and more effective positive impact on the efficiency.

2. THEORETICAL REVIEW

In order to increase the efficiency of each enterprise, issues such as technical efficiency, productive (or economic) efficiency, X - efficiency, as well as allocative efficiency are applied. However, among these four types of efficiency, technological efficiency has a special role and exerts a decisive influence on ensuring the remaining three efficiencies. Technical efficiency means the production of more products basing on available inputs. In other words, an enterprise is technologically efficient when it achieves maximum output with minimum inputs (labor, capital and technology). The main goal in terms of technical efficiency is reaching the current or more level of production with minimal use of resources. That is to say that, technical efficiency means maintaining and increasing the existing production capacity of the enterprise by spending less resources. The main factors increasing the technical efficiency of enterprises include the use of modern technologies, the achievement of a high skilled human resources potential, as well as product design, organization of the production process, the application of innovations in marketing and management. Each of these results can be achieved through the organization and expansion of innovation activities in enterprises. Many researchers have conducted a number of studies on the impact of innovations on the activities of the enterprise and put forward different views. According to current existing researches in this area, innovation is essential for a firm's success and survival in competition (Bell, 2005; Jimenez and Sanz-Valle, 2011; Damanpour, 1996; Damanpour and Gopalaksihnan, 1997; Pucik and Cho, 2005), as well as, it is a key factor in having sustainable competitive advantage (Garud and Bartel, 2009; Mumford and Licuanan, 2004; Johannessen, 2008; Kiniti and Standing, 2011). Terrien (Therrien et al., 2011) has concluded that the innovation is a complex process as it creates changes in the function of production. At the firm level, the innovative activities depend on the acquisition of new ideas that play an important role in development and the creation of new products (Kirca and Rubera, 2012). The explanation of the positive relationship between innovation and firm activity has traditionally been given in Schumpeter's researches (1934). He noted that the new innovative product that introduced to the market for the first time faces limited competition and, as a result, the firm makes a large profit. Over time, the high profits available in the market lead to the creation of a similar product by competing firms and consequently, a decrease in the firm's profit on the product. However, a firm constantly introducing new types of innovative products to the market will make high profits (Lacey and Sharma, 2004). Like many researchers, Varis and Littunen reported in 2010 that the firm's innovative activities contribute to its success. In 2002, Calantone et al., 2002 concluded in the study of the relationship between the inclination to learning, innovation and firm performance in the manufacturing sectors in the U.S. that a firm's innovation was positively related to the firm's performance. Pucik and Cho said that there is a strong positive relation between the firm's innovativeness, quality, growth, profitability and market value in the US financial sector. The innovativeness is the instrument between quality and growth and in it turn, quality is the instrument between innovation and profitability. Another author states that firms' continued engagement in innovation is the key source of their long-term success (Rosenbush et al., 2011). Some researchers say that at the global level, the competitive environment has been intensified due to the shortening of the product life cycle. For this reason, it is more important for firms to have the ability to innovate in order to increase their competitiveness (Artz et al., 2010). Under the current circumstances, the products produced by firms may suffer more damage due to the changing needs and requirements of consumers, the rapid development of technologies, the shortening of the product life cycle and the intensification of international competition. For this reason, regardless of size and type of activity, every firm must step up its innovation activities in order to remain competitive in the market.

Thus, based on the assumptions made by many world-class scientists, it can be concluded that innovation is the key to the success of any firm, as it is extremely important in increasing profitability and efficiency and the future of the enterprise is questionable if the enterprise fails to pay the required attention on this issue.

3. CURRENT SITUATION OF INNOVATIVE ACTIVITIES IN AZERBAIJAN

Looking at the statistics, it is clear that as a result of numerous state programs realized in our country over the past years and strategic roadmaps, great progress has been made in our economy, as well as in many areas. However, along with many achievements, there are weaknesses in a number of areas. One of them is the research and development expenditure as a percentage of GDP, which varies by about 0.2%. However, if we look at this figure in many developed and developing countries of the world, we can see that it is about 1 - 3% and even 4%. In order to determine the main reasons of this low figure, while studying the distribution of research and development expenditures by sectors and comparing with other countries, it is clear that the majority of research and development expenditures in Azerbaijan fall to the government's share (Table 1).

Table 1: Distribution of research and development costs by sectors (in %)

Years	2005	2017	2005	2017
Countries	Business sector		Public sector	
Finland	71.3	58.0	9.5	29.0
Germany	69.6	66.2	14.0	27.7
France	62.9	56.1	17.8	32.4
Japan	77.7	78.3	8.6	15.0
USA	72.8	63.6	12.6	22.8
Great Britain	63.0	53.7	10.8	26.0
Norway	53.2	42.8	15.8	46.7
Turkey	33.9	49.4	11.9	33.6
Slovenia	59.0	63.1	24.3	22.9
Hungary	45.0	52.7	28.6	31.9
Azerbaijan	19.7	7.9	74.0	85.4

Source: EuroStat and ARSSC

It is clear from Table 1 that the share of the country's business sector in domestic research and development expenditures decreased from 19.7% to 7.9% between 2005 and 2017 and even was lower in 2018, instead, the share of the government increased from 74% in 2005 to 85.4% in 2017. However, in all other countries listed in the table, the share of the business sector is over 40%. For this reason, it can be concluded that in the recent years, the business sector in our country has not allocated the necessary funds for research and development. Due to the fact that sufficient funds have not been allocated for research and development in research and development in Azerbaijan, most of the funds allocated to this field in our country belonged to the group of fundamental research (Table 2).

Table following on the next page

Table 2: Distribution of research and development expenditures by areas of scientific and technical activity (as a percentage) in Azerbaijan and a number of other countries in 2017

Countries	Total (in %)	Fundamental researches	Applied researches	Developments
Azerbaijan	100	51,4	22,4	26,2
Belarus	100	13,4	27,3	59,3
Kazakhstan	100	15,7	59,4	24,9
Russia	100	14,9	18,2	66,9
Czech Republic	100	27,2	39,1	33,8
Japan	100	13,1	18,7	63,9
Korea Republic	100	14,5	22,0	63,6
Hungary	100	18,3	28,2	52,2

Source: UNESCO.org

It is clear from Table 2 that in 2017, 51.3% of expenditures on research and development were spent on fundamental research, 22.4% on applied research and 26.2% on development in our country. However, a comparison with some CIS countries as well as other countries around the world shows that most of the funds allocated to this area were spent on applied research and development. As a result, this is evidence of lack of due attention on research at the enterprise level and the insufficiency of the practical importance of fundamental research. It is necessary to look at the existing obstacles in this area, as it is necessary to identify problems in order to strengthen innovation at the enterprise level in our country (Table 3).

Table 3: Main factors hindering innovation in industrial enterprises in Azerbaijan

	Number of enterprises assessing the factors hindering innovation as following					
	Essential or critical		important		less important	
	2017	2018	2017	2018	2017	2018
Economic factors						
Insufficient own funds	20	22	40	28	13	14
insufficient financial support from the state	14	11	18	16	16	19
high cost of innovations	8	13	22	23	17	11
high economic risk	12	11	18	16	13	13
Production factors						
low innovation potential of the enterprise	8	7	28	29	16	14
lack of qualified staff	6	3	16	16	29	18
lack of information about new technologies	10	4	16	19	21	14

Source: ARSSC

Table 3 lists the main factors hindering the innovative activities of enterprises in our country and these factors are presented in two sections: economic factors and production factors. It is clear from the table that the main economic factors that hinder the innovative activities of enterprises are the insufficiency of internal funds, insufficiency of financial support from the

state, the high cost of innovations and high economic risks. The low innovation potential of the enterprise, the lack of skilled workers in this field and the lack of information about new technologies are production factors.

4. WAYS TO STRENGTHEN THE INNOVATIVE ACTIVITIES OF ENTERPRISES

It was determined as a result of implemented studies that innovation policies implemented to stimulate the innovative activities of enterprises, especially small and medium enterprises in the world are divided into three groups: supply-side innovation policies, demand-side innovation policies and systemic innovation policies. Supply-side innovation policies mean appropriate incentives to increase investment in innovation at the enterprise level. Through this policy, tax incentives, grants and subsidies, loans and direct public investment are applied to support the research and development activities of enterprises. At the same time, through supply-side policies, trainings could be organized for employees, scientists and engineers working in the field of research and development. Demand-side innovation policy is not limited to creating the necessary markets for the products produced by enterprises. When necessary, the government becomes the supplier of innovative products produced by enterprises. In some cases, the fact that the state as a supplier is more effective than providing any financial assistance to firms. Moreover, the state can use various mechanisms to stimulate the private sector to acquire innovative products produced in the country. These mechanisms include the dissemination of necessary product information, promotional policies, tax breaks and subsidies for innovative product buyers and more. There is another policy to expand coordination between those operating within the innovation system, i.e., between businesses and universities and research institutes and this policy is perhaps more effective than the previous ones, it is called systemic innovation policies. As we know, the interaction of business structures with intra - enterprise, inter-enterprise and other knowledge - creating organizations plays an important role in innovation. There are many channels for the flow of knowledge from universities and research centers to industry. These channels include individual contacts between university teachers and researchers of industrial enterprises, the creation of new firms in universities, the organization of joint conferences and scientific seminars, attracting graduates into production and others. According to the researches conducted in a number of European countries, there are various types of cooperation between firms and universities, such as curriculum development, lifelong learning, student and educator mobility, commercialization of research and development results, entrepreneurship and management. The mentioned partnerships are directly related to the needs of enterprises, as well as the missions of universities. In most countries of the world, there are a number of barriers in the development of cooperation between firms and universities and research institutes and if you look at these barriers, it is clear that they also exist in Azerbaijan. One of these difficulties is the disagreement over the choice of topic. Thus, universities and research institutes mainly prefer fundamental research, but enterprises pay more attention to the rapid commercialization of the results obtained. Cooperation requires certain costs and the results are achieved in the medium and long term. However, firms are mainly interested in results covering the current business environment in the short term. Another difficulty is setting priorities between two organizations. Researchers often prefer to transfer knowledge, but firms focus on output in the production format, i.e., the final product. The mentioned obstacles can be overcome by establishing close relations between these organizations. Thus, firms benefit more from establishing relations with these organizations. It shall be noted that firms have certain motivations to cooperate with universities and research institutes. By establishing contacts with universities and research institutes, firms can easily use the equipped laboratories of universities, attract highly qualified staff of universities and research institutes, receive tax benefits for this cooperation, accelerate research to improve existing products, gain a

competitive advantage. acquire new technologies that increase productivity, increase the skills of staff, gain employment opportunities for talented students, increase the company's overall awareness and skills in research and development, as well as create a culture of innovation in the company. Thus, we can note that through the establishment and expansion of relations between businesses and universities and research institutes, it is possible to strengthen the innovative activities of enterprises and, consequently, increase their efficiency.

5. CONCLUSION

Researches show that increasing the efficiency of enterprises plays an important role in increasing their profitability and competitiveness. One of the main factors influencing the increase of efficiency is the expansion of innovation activities. According to the researches, firms in our country don't pay enough attention to research and development. The main reasons are the lack of financial resources of firms, weak innovation potential, lack of necessary staff, high risk, lack of allocation of the necessary financial support by the state in this area and other factors. In order to strengthen innovation at the enterprise level in Azerbaijan, first of all, the use of supply-side and systematic innovation policies may be more effective. In order to benefit from these policies, the government should play a leading role and assist in financial and organizational matters. For this reason, the implementation of the following measures is considered expedient:

- 1) In order to expand the financial opportunities of enterprises and stimulate them, it may be effective to apply certain types of tax exemptions and grants in this area in accordance with the innovation activities.
- 2) It would be useful to establish a joint network of universities and research institutes in order to stimulate the development of relations between the firms and universities and research institutes in the field of innovation. The network envisages the creation of an online platform that offers cooperation in existing areas of interest to firms of universities and research institutes in the country.
- 3) Opening of preferential credit lines in connection with long - term and purposeful innovation activity. In order to strengthen cooperation between firms and universities and research institutes, a similar policy has been successfully implemented in a number of European countries under the name of innovation vouchers (in the form of small credit lines). Through this policy, the government opens small credit lines for manufacturing facilities to obtain services from universities and research institutes.
- 4) Application of tax exemptions to industrial enterprises for cooperation with universities and research institutes. When taxing the facilities, the application of incentives in accordance with their relationship with universities and research institutes can encourage them to collaboration.

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MANAGEMENT ACCOUNTING OF BUSINESS PROCESSES OF HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

The article discusses the business processes of the university as objects of management accounting of income and expenses. Business processes of the university are classified into the main ones, maintenance processes, and management processes. Administrative expenses relate to the objects of management business processes. The objects of the integrated accounting and control model for the accounting of expenses and revenues in the frame of the main business processes include expenses and revenues from scientific activities and the provision of educational services by the university. As to supporting business processes, the costs and revenues from the provision of related services and the costs of maintaining the property of the university are considered objects of an integrated accounting and control model. Scientific novelty lies in the development of a model and classification of business processes of the university. Applied significance: The study allows us to conclude that the justification of the objects of the integrated accounting and control model for the accounting of expenses and income in universities should be carried out based on their business processes. Economic efficiency of work: Modeling the business processes of the university will improve the quality of management of income and expenditure of educational services, thereby increasing the efficiency and competitiveness of higher education institutions at the global level.

Keywords: *business processes of the university, management accounting of the university, main and maintaining processes of management, integrated accounting and control model*

1. INTRODUCTION

The transition to market relations in Azerbaijan Republic has led to the fact that the effectiveness of organizations has become dependent on management activities. The management activity in the organization ensures the company's position on the market, its competitiveness and efficiency. Bookkeeping at the same time implements the function of control over the safety of public property, as a result of which the requests of the management of institutions are ignored, which causes the unreasonableness of management decisions and reduces the quality of management of the institution. The competitiveness and effectiveness of higher education institutions – complicated property complexes are fully dependent on the quality of their economic management, as well as on the rationality of conducting economic and financial activities in higher education institutions. Consequently, a sharp change in the system of budget support for higher education institutions, giving them sufficient independence in the field of management, requires the development of a modern management mechanism that allows universities to operate as full-fledged market entities. When modernizing the higher education system, the key role is to improve the quality of education, to increase the economic stability and independence of higher education institutions, and to improve the financial mechanisms in the activities of educational institutions. The main feature in this plan is considered to be the broad involvement of extra-budgetary funds in the education system [1].

Modernization of the system of higher professional education is aimed at changing the system of financing budget educational institutions and increasing their economic independence. This circumstance determines the need to develop new mechanisms for managing universities. Therefore, it becomes inevitable to create and master the types of accounting in a budget educational institution that are aimed at ensuring the tasks of effective management of the university. First of all, it applies to the system of management accounting of income and expenses in budgetary educational institutions. A well-organized management accounting of income and expenses will allow you to create a system of information and analytical support for the organization of university management, aimed at improving the efficiency of its activities. In modern market conditions, when providing organizations with full financial and economic independence, it is considered ineluctable to form an accounting and control apparatus as an independent branch of accounting activity [2]. The cost-based principle of financing budgetary institutions, as well as the non-commercial nature of their activities, led to the formation of a positive financial result. As a result, resources are spent in budgetary institutions based on the volume of allocated resources, rather than on actual needs [3]. Based on this provision, it can be concluded that the current system for controlling expenditures of budgetary institutions is inefficient from the point of view of manageability, that is, it assumes their spending, and not rational use. Educational institutions of higher professional education receive limits of budget obligations, on the basis of which they spend financial resources [1]. This is why higher education institutions need to develop and implement an integrated accounting and control model. Such a model should be based on a unified information and analytical base, developed as a set of subsystems of management and accounting. The system of information and analytical management of an educational institution in modern conditions is required to form a reliable database of information data for the development of management decisions aimed at improving the efficiency of activities and the quality of educational services. It should become the link that connects management, control and accounting.

2. FEATURES OF MANAGEMENT ACCOUNTING IN UNIVERSITIES

In budgetary educational institutions, management accounting has several fundamental features of a methodological and organizational nature. Distinctive features of the financial policy of higher education institutions affect the process of implementing management accounting:

- financial mechanisms for full or partial compensation of educational expenses for certain categories of citizens have not yet been developed, each individual educational institution uses different methods for pricing educational services, distributing expenses and income;
- actual expenses of the educational institution are taken into account only by codes of economic budget classification, without taking into account expenses for responsibility centers, types of activities and other management analysts;
- the administrator of financial resources is the university rector, who has the authority to distribute and approve extra-budgetary funds of the higher educational institution;
- higher education institutions spend funds and budget allocations that are received from extra-budgetary sources, based on the approved business plan, for the intended purpose;
- financing of the education system in the public sector is considered multi-channel – in addition to budget funds, sources of funding are considered to be funds that come from income-generating activities;
- financing of the education system in the public sector is carried out on the basis of the legislation of Azerbaijan Republic;
- higher education institutions are considered state-owned, autonomous or budgetary institutions that are formed by state bodies for the implementation of socio-cultural and educational functions of a non-commercial nature.

Foreign and national practice of management accounting in higher education institutions has its own specifics, due to the peculiarities of the activities of higher education institutions. Highlighting their main features, the following should be noted:

- 1) Dependence of higher education institutions on financial resources of budgets of different levels. Educational institutions receive more than 50 % of their revenue from end users of educational services and from customers of research and consulting work performed by the teaching staff of the institution. In Canada and the United States, major universities receive a large income from organizations within the medical and sports institutions, campuses, serving the students and university employees, and urban residents, in the area of the university. Higher education institutions in many countries earn income from renting their own training laboratories, space, and other facilities for cultural, business, and scientific events. Higher educational institutions, unlike other state institutions, attract extra-budgetary sources of funding, which makes it necessary to forecast the revenue and expenditure part of the budget, taking into account external risks that are associated with likely sources of funding. The amount of revenue that universities receive from non-budgetary sources may vary depending on several external factors that cannot be controlled by educational institutions. These include: the demographic situation in the region where the educational institution is located, the situation in companies and organizations, and the macroeconomic situation in the region where the educational institution is located and in the country. This uncertainty implies the implementation of elements of strategic analysis in educational institutions for the annual revision of forecasts, calculations and estimates. Revenue planning for large universities must be based on a scenario approach, in which the total amount of budget revenues will differ depending on the specific scenario: thus, the projected expenses of the university will also differ. The dependence of educational institutions on extra-budgetary sources of funding from the position of management accounting means that:
 - heads of higher education institutions must have a reliable picture of the structure and volume of expenditures of functional units of the university in the event of an adverse scenario;
 - the management accounting system should include strategic management.
- 2) in some universities, the teaching staff has considerable freedom in determining the format, duration and subject of training courses, as well as the number of students in these courses.
- 3) The multidisciplinary nature of the activities of most universities. Any large university, in fact, is considered a research and training center, and also performs large amounts of consulting services. To develop an effective management accounting system, it is required to take into account the structure of expenditures by business lines and functional divisions, in order to evaluate the effectiveness of these areas and make effective management decisions.
- 4) Universities often lack a single management center for different activities. That is why management accounting cannot rise to the level of a highly effective system that can generate information for making effective decisions in the field of university management.
- 5) The increasing role of distance learning using advanced information technologies. Analysis of the future and current demand for these services, marketing of distance learning, planning of educational programs, forecasts of financial revenues from distance learning - this is not a complete list of issues that should be solved by the university management, based on data generated within the framework of the management accounting system.

3. BUSINESS PROCESSES OF THE UNIVERSITY AS OBJECTS OF MANAGEMENT ACCOUNTING

A workable and efficient management accounting system contains the following key elements:

- accounting procedures for the submission, processing and collection of information by users;
- management reporting forms;
- accounting registers for grouping data;
- primary documents of management accounting;
- availability of controlled indicators;
- responsibility centers [4].

The integrated accounting and control system must allocate such accounting objects as "responsibility centers". Management of expenditures of budgetary institutions is carried out through the activities of people who are responsible for the need to implement certain expenses of the institution. According to V. E. Kerimov, responsibility centers are a segment of an institution for which it is advisable to accumulate accounting information about the activities of this center [5]. Monitoring and accounting of expenses for responsibility centers is required to increase the activity of the process of managing the formation of actual expenses. As well as to form prerequisites for increasing responsibility for qualitative and quantitative indicators of the educational institution [6]. When implementing management accounting in higher education institutions, it is required to determine the system of objects of this accounting, as well as methods that would allow obtaining information about their status. At the present stage, there are no unified positions of scientists on the composition of the system of objects and their identified methods. According to Doctor of Economic Sciences V. E. Kerimov, the objects of the accounting and control model are considered to be types of products (services), cost centers and responsibility centers [7]. M. A. Vakhrushina considers that the following elements can be distinguished in the objects of the accounting and control model of budgetary institutions: internal reporting and budgeting, internal pricing and results of economic activity, costs [8]. At the same time, in the opinion of T. P. Karpova, the objects of the accounting and control model should include economic processes and their results, as well as production resources [9]. In our own research, we adhere more to the views of Professor Y. V. Sokolov, who stated that the objects of the accounting and control model of budgetary institutions are a set of business processes of an institution in the course of the production life cycle, as well as their segments included in them [10]. The disparity of definitions of objects of the accounting and analytical model of budgetary institutions is based on the features of management accounting, which are related to the fact that management accounting can be organized to solve specific tasks according to the principle of efficiency [11]. Therefore, the definition of "management accounting objects" should begin with the study of business processes that are carried out within budget institutions. Many researchers have tried to classify the objects of the accounting and control model of budgetary institutions. For example, E. M. Yegorova and A. V. Glushchenko identified management processes that provide the main business processes within the framework of process management of the organization of management accounting in higher education institutions. An integrated accounting and analytical model for accounting expenses and income of higher education Institutions within the framework of management business processes, aimed at summarizing information about management expenses in higher education institutions. In the management business processes of the university, the university management activities are carried out, that is, the analysis of decisions made, coordination and operational management, strategic planning. Providing business processes of budgetary educational institutions consist in the maintenance of the property of the higher educational institution and the provision of related services.

The accounting and control model for accounting expenses and income of business processes of higher education institutions is aimed at summarizing information:

- expenses for the maintenance of the university's property;
- the expenditure on the provision of related services;
- income from the provision of related services.

The main business processes of an educational institution are the provision of educational services and scientific activities. The key feature is that such business processes are carried out with the help of various sources of financing:

- a) the university's own income (the activity of an educational institution that generates income);
- b) budget investments;
- c) C) activities that are carried out with the help of subsidies for the performance of municipal (state) tasks;
- d) grants that are allocated for other purposes.

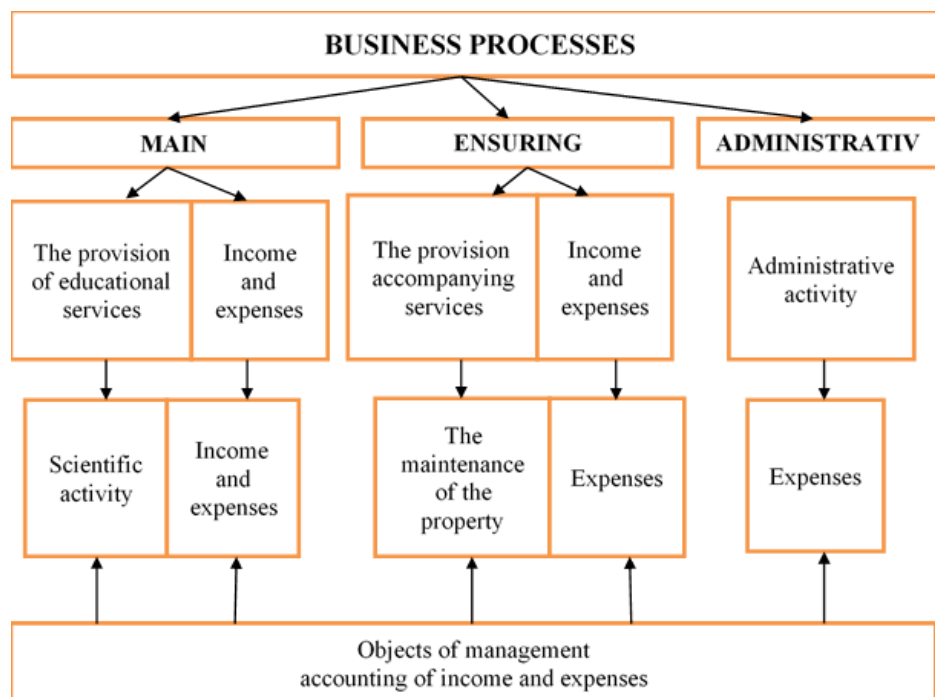


Figure 1: Classification of business processes of the university for accounting of expenses and income

Therefore, in figure 1, it is possible to give a classification of business processes of the university for accounting expenses and income. Thus, the integrated accounting and control model for accounting expense sand incom of higher educational institutions can be considered as a system of management accounting and control of expense sand income of the main business processes of the university:

- 1) generalization of information about income from educational activities, which are obtained through various source soffunding; about the achievement of specific results and expenditure incurred in the of educational activities. High-quality training of specialists is considered as the key results for higher education institutions;
- 2) generalization of information on the income from scientific activities that are obtained through various sources of funding, on the achievement of specific results and on the expenditures made in the framework of scientific activities.

4. CONCLUSIONS

Hence, the conducted research allows us to conclude that in budgetary educational institutions, management accounting has several fundamental features of a methodological and organizational nature. The quality of educational and other services provided by universities is highly dependent on properly developed and implemented management accounting. After all, it allows the university management to make effective management decisions aimed at improving the competitiveness of the university's divisions, determine the consequences of deviations from the plan and develop effective management decisions aimed at improving the efficiency of the university. Justification of the objects of the integrated accounting and control model for accounting expenses and income in higher education institutions should be carried out based on their business processes. During the research, the objects of the integrated accounting and control model for each business process of an educational institution were identified. Management expenses are related to the objects of management business processes. The objects of the integrated accounting and control model for accounting expenses and income within the main business processes include expenses and income from the implementation of scientific activities and the provision of education services by the university. Within the framework of supporting business processes, the objects of the integrated accounting and control model are expenses and income from the provision of related services and expenses for the maintenance of university property.

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MAIN FACTORS AND PROSPECTS OF DEVELOPMENT OF CONSTRUCTION ENTERPRISES IN AZERBAIJAN

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ABSTRACT

The aim of the research is to determine the prospects for the development of enterprises in the construction industry of Azerbaijan. To achieve this goal, this article was supposed to determine the relationship between the construction industry and GDP, to identify the main factors that affect the development of the construction sector. The methodological basis of the study was a descriptive, comparative method and econometric analysis of Poisson regression based on annual data from 2000 to 2020. Calculations and graphs are made based on free software, i.e. the statistical environment R, which is one of the most dynamically developing programs in its class. The methodology for the research was the fundamental works of foreign scientists and researches of international organizations UNCAND. The relevance of the study is also due to the lack of development of these issues in the domestic and foreign economic literature. In this regard, the article conducted a critical analysis of the theoretical base. The research put forward the relevant hypotheses and tested them. The novelty of this study is expressed in deepening, fleshing out the conclusions and ideas obtained empirically and demonstrating their application in modern conditions. A critical analysis of the method reviewed has been carried out, relevant conclusions and proposals have been made. The results obtained in the article are relevant, important and can have practical applications, they can be used in monitor the development of Azerbaijan's economy and as a tool for retrospective analysis. The conclusions obtained in the study can be successfully applied to predict the construction sector of Azerbaijan in the short-term period.

Keywords: *construction sector, enterprises, econometric modeling, GDP, economy*

1. INTRODUCTION

Over the past two decades, the mining industry has been the leading link in the industrial production of Azerbaijan, accounting for more than 75% in some years. Due to the one-sided nature of such development in our country, one of the priorities for development is the modernization and diversification of the economy, as the economy needs new sources of growth and development. The need to diversify the economy of Azerbaijan is primarily related to the reduction of oil dependence, which turned into a genuine concern after the global financial crisis of 2008 and drastic changes in oil prices. This problem has become more urgent for our country in recent years. However, it is only possible to give an impetus to the development of other industries, those where a large amount of added value is formed, if the necessary infrastructure is available within the country. Thus, the use of the potential of the construction industry, being fundamental in creating infrastructure, becomes relevant. The purpose of this work is to define the prospects for the development of the construction industry in Azerbaijan. In the furtherance of this goal, this article was intended to determine the relationship between the construction industry and GDP, to identify the main factors affecting the development of the construction sector.

In this regard, the following hypotheses have been put forward:

- Hypothesis 1: the construction industry continues to make significant contribution to GDP of Azerbaijan.
- Hypothesis 2: investment is a significant factor in the development of the construction sector.

The proposed hypotheses are tested using comparative analysis and Poisson regression analysis of empirical data that characterize the economic development of Azerbaijan. The construction industry in Azerbaijan has been developing rapidly over the past 20 years. So, the construction sector in absolute terms increased by 4.2 times from 2000 to 2005, by 2.6 times from 2005 to 2010, and by 1.89 times from 2010 to 2019, thus made 188.9%. The construction sector has thus become one of the largest sectors of the economy providing for the creation and renewal of fixed assets in Azerbaijan. As you know, the construction industry final product is a variety of buildings, structures and objects of different commercial and social purposes. On January 1, 2019, 2084,7 thousand sqm of living space were commissioned from total construction volume, having increased by 103,3%, 580 thousand sqm were commissioned to medical institutions. This number increased by 2.8 times compared to the previous year. The construction of schools increased by 109.9%. 87.6% of the total investment allocated for construction was used for construction and installation works. 11,656.4 mln AZN were allocated for the construction of production facilities, and 4,268 mln AZN – for the construction of non-production facilities. 1,313.8 mln AZN were allocated for housing construction. As for the dynamics, the construction sector is developing unevenly. Analyzing this number with regard to the structural part of GDP, it should be noted that it ranges from 3.8 to 13% in the mean, depending on business activity in the economy and its needs.

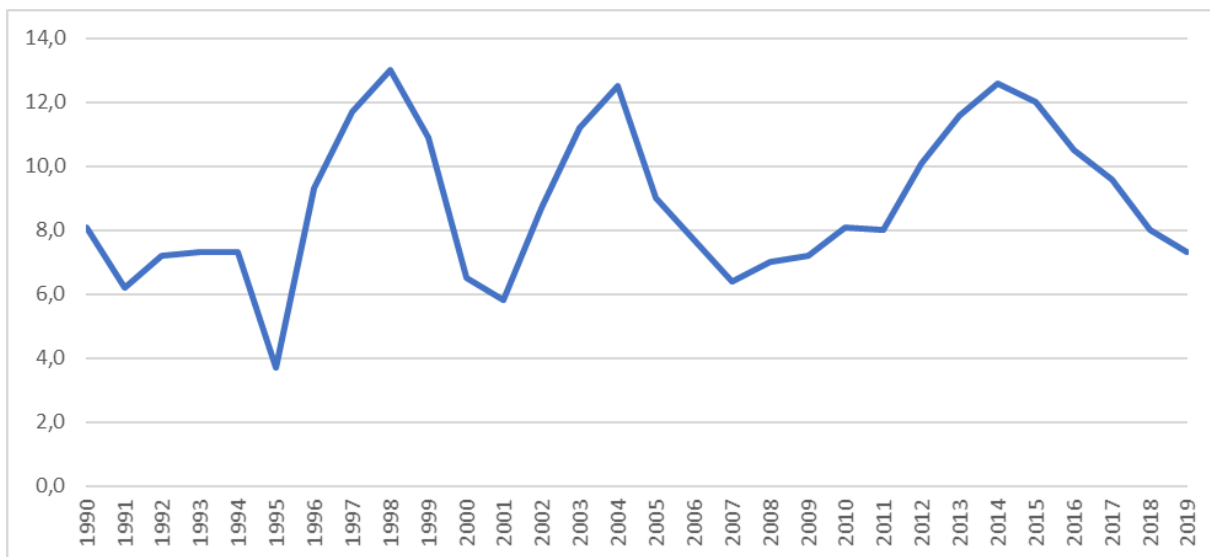


Figure 1: Dynamics of the construction sector of Azerbaijan, in % of GDP

2. BACKGROUND PAPER

Scientific interest in the impact of the construction industry on the economic growth and development of countries became actual in the middle of the last century. As in the analysis of the construction sector researchers were fraught with problems of getting empirical information and its interpretation. For example, scientists studying this issue have repeatedly encountered the problem of one-sided data. In particular, most international organizations providing free access to statistical information (for example, UNCTAD, the World Bank, and the IMF) calculate the volume of the construction industry only in the form of value added, which usually

includes labor costs, overheads, and profits. While studying the role of the construction industry, it is also important to estimate total construction costs taking into account the intermediate products involved in the construction industry and reflecting its volume to the best advantage. Based on the analysis of 39 national economies, Burns and Grebler (1977) found that the share of housing construction in GNP first increases, and then decreases as the economy of the country develops, shown in GNP per capita. Bon (1990) decided to expand the analysis conducted by Burns and Grebler (1977), and check the implementation of the pattern derived for housing construction, for the entire construction industry. In his analysis, he used an indicator of the volume of the construction industry, calculated in the form of value added for almost 150 national economies over 15 years (1970-1985). GNP per capita was taken as the economic development level characteristic. Confirmation of the dependence derived by Burns and Grebler (1977) for the construction industry as a whole was the result of the analysis. This relationship was later repeatedly empirically verified by other economists using slightly different data. For example, Crosthwaite (2000) used data describing the total expenditure in the construction industry in 150 countries in determining the share of the construction industry in the national economy (data were obtained in a special study conducted by Engineering News Record (ENR) in 1998). After studying data from 78 countries, Turin (1978) found that the relationship between the share of the construction industry in GDP and GDP per capita is characterized by a so-called S-shaped function: as a country's economic development, the share of the construction industry in GDP always increases, first accelerating and then slowing down. Bon (1992) attributed these results to the predominance of the least developed and developing countries in the sample of Turin, which led to the omission in the model of some features of the construction industry development in developed countries and, as a result, mutilation of the real situation in the world. However, concerning the construction industry, do not forget about the functions it performs in society. First, it is labor-intensive industry, so it is necessary to take into account labor costs. Secondly, the result of this industry is capital facilities, including infrastructure necessary for the functioning of other economic sectors. Thus, before talking about the declining role of this industry in the economy, it makes sense to analyze the dynamic data that characterize the development of the construction industry in recent decades.

3. DATA AND METHOD

Based on the analysis of literature and features of the construction sector, annual empirical data were selected from 2000 to 2020. The value added of the construction sector is taken as a dependent variable to be analyzed in accordance with international statistical terminology. The authors used the total profit of construction sector enterprises, the average annual number of employees in the construction sector, the average monthly nominal wage, the workscope, performed using domestic resources, GDP per capita, and investments allocated to renew the construction sector funds as independent variables. The methodology of the work was based on the fundamental works of foreign and local scientists in the field under consideration. The research methodology is based on descriptive and comparative analysis. For econometric modeling, we will work with Poisson regression, used to predict the values of a binary dependent variable from a set of continuous or categorical dependent variables (Fox 2008, Faraway 2006). Calculations and graphs are made based on free software, i.e. the statistical environment R, which is one of the most dynamically developing programs in its class.

4. RESEARCH RESULTS

4.1. Hypothesis 3

- H0: no significant impact on economic growth/development
- H1: there is a significant impact on economic growth/development

As a result of econometric modeling using a generalized linear modeling function (Duntelman & Ho (2006)), the following model 1 was obtained:

$$Y = 483,2966 + 0,9992 * M + 1,0222 * H + 1,00002 * X + 1,0081 * I + 1,0414 * K + \varepsilon \quad (1)$$

Where,

"Y" is the value added of construction companies at current prices, in mln AZN

"M" – total profit of construction companies, in mln AZN

"H" – average monthly nominal salary of employees in construction enterprises

"X" – amount of work performed using internal resources

"I" – investments in the construction sector, in mln AZN

"K" – GDP per capita

" ε " – unaccounted random factor

Each regression coefficient is statistically significant at the level of $p < 0.001$. We cannot accept the H_0 hypothesis, as each factor has a high impact on GDP of Azerbaijan. It means that hypothesis H_0 is rejected, there is a significant impact on economic development.

4.2. Hypothesis 4

- H_0 : there is overdispersion
- H_1 : there is no overdispersion

Overdispersion test poisson data	Obs.Var/Theor.Var 1955.119	Statistic 35192.15	p-value 0
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*Table 1: The result of the overdispersion test
(Source: author's calculations)*

The p-value was less than 0.05, which indicates that there is overdispersion. There is no reason to reject hypothesis H_0 , then hypothesis H_1 is rejected. To reduce the overdispersion, we will re-evaluate the model using a quasi-Poisson function. Estimates for the parameters remained the same after repeated modeling. But large constant errors led to the fact that the p-value for currency exchange rate variables and internal investment exceeded the 0.05 level. This suggests that given the presence of overdispersion, we do not have sufficient grounds to claim that they have a significant impact on GDP. Oil production, its price, and employment have remained highly significant, suggesting that these variables have the greatest impact on GDP. After several iterations and exclusion of insignificant variables, we get the following model 2:

$$Y = 584,004 + 0,9994 * M + 1,0001 * I + 1,0021 * K \quad (2)$$

In model 2, all parameters are significant at the p-level less than 0.001 (see Table. The econometric characteristics of the model 2). They have a significant impact on the Y and economic development of the country. Let's compare models 1 and 2.

Table following on the next page

Model 1: $A\$y \sim A\$m + A\$I + A\k					
Model 2: $A\$y \sim A\$m + A\$h + A\$x + A\$I + A\k					
Resid.	Df	Resid. Dev	Df	Deviance	Pr(>Chi)
1	15	1223.61			
2	13	850.29	2	373.33	< 2.2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					

Table 2: Analysis of Deviance Table
(Source: author's calculations)

In this case (see the table above), the model 1 is in the model 2. As we can see, as the number of variables increases, the dispersion will increase, which means that we did the right thing excluding 1 to 5 variables from the model. Although they have their own interpretation, they nevertheless have a minor, insignificant impact on GDP of Azerbaijan. The insignificant value of the $Pr(>Chi) < 2.2 \text{ e-}16$ criterion means that the reduced model with 4 independent variables corresponds to the data as well as the model with 9 independent variables. This strengthens the confidence that the parameters of model 1 we excluded do not affect significantly the quality of prediction of the dependent variable (see Figure). So we can interpret the GDP on the basis of a simpler model.

(Intercept)	6.370*** (0.124)
A\$m	-0.001** (0.000)
A\$I	0.000*** (0.000)
A\$k	0.000*** (0.000)

Aldrich-Nelson R-sq.	1.0
McFadden R-sq.	1.0
Cox-Snell R-sq.	1.0
Nagelkerke R-sq.	1.0
phi	74.8
Likelihood-ratio	37783.9
p	0.0
Deviance	1223.6
N	19

Table 3: The econometric characteristics of the model 2
(Source: author's calculations)

5. CONCLUSION

Azerbaijan is an EIT country. According to the initial results of the model constructed in this research, it was found that investment has a significant impact on the development of construction industry enterprises; however, the factor of average monthly wages of construction employees has an even greater impact. Human capital is an important resource for development. However, the GDP per capita factor comes to the fore with a more detailed study. An increase in GDP per capita by 1% leads to an increase in the value added of enterprises in the construction sector by 1.0021 times or by 13.3 mln AZN, provided that all other factors remain

at the same level. The second most important factor is investment in the construction sector. This confirms hypothesis 2 that investment is a significant factor in the development of the construction sector. Thus, an increase in investment by 1% leads to an increase in the value added of construction enterprises by 1,0001 times. The growth of the dependent factor from investment, provided that the other factors remain unchanged, is estimated according to model 2 at 41,2 thousand AZN. This largely assumes that there is potential for growth in the construction industry. All the above mentioned means the existence of a huge unrealized potential for growth and development of the construction industry. Among the instruments that can have an indirect impact on the development of the construction sector, the following can be mentioned:

- reduction of tariffs on imported construction materials • local construction standards with higher European standards (Eurocodes);
- development of the financial sector (improving access of economic agents to financial resources);
- increasing transparency of procedures helps attract foreign investors (increasing investment in fixed assets). The effect of the measures taken cannot be immediate. Expect changes only in the midterm and / or long term.

Thus, taking into account the current level of development of the economy of Azerbaijan, we can conclude that there is a significant potential for the development of the construction sector in the country, which can be impelled by an increase in GDP per capita, depending directly on the socio-economic development of the country. The results attained in the article are relevant. They can have practical application. It is advisable to use them both for monitoring the development of the economy of Azerbaijan as a whole, and as a tool for post evaluation. The findings of the research can be applied successfully to predict the situation in the construction sector of Azerbaijan in the short term.

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IDENTIFICATION OF A CYCLICAL COMPONENT IN THE SOCIO – ECONOMIC DEVELOPMENT OF AZERBAIJAN

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ABSTRACT

This article deals with a brief critical analysis of the theory of Singular Spectrum Analysis and a problem of allocation of cyclic components from a general dynamics of economic situation is also considered. As a solution of this problem the asynchronous harmonic analysis algorithm based on spectrum analysis and decomposition filtering algorithm is proposed. This research is based on fundamental works by foreign scholars and studies. The aim of the research is to identify and evaluate the cyclic component and prospects of social and economic development of Azerbaijan on the analysis the most important indicator GDP. The results of the research. As a result of the research, a number of models were constructed. Important cyclic dependencies have been identified. An econometric analysis of models and relevant conclusions are made. Calculations and graphs are made based on free software, i.e. the statistical environment R, which is one of the most dynamically developing programs in its class. In the course of the study, we identified the main parameters, general trends, seasonal and cyclical components of Azerbaijan's GDP for 22 years from 1997 to 2019. The comprehensive econometric tests carried out during the research showed that the constructed econometric models meet all the basic ideas of econometric analysis, that is, the conditions of specification, parameterization and verification, and are quite adequate to the real economic situation in the country. Practical significance: The findings of the research can be successfully applied to analysis and predict the socio-economic development potential during the diversification of the economy of Azerbaijan. The results, suggestions and recommendations obtained in this research can be used in short- and medium-term planning of the main indicators of social and economic development of Azerbaijan.

Keywords: *Cyclic Components, Economic Development, Fourier Transforms, Gdp, Spectral Analysis*

1. INTRODUCTION

In the study of time series, two approaches are widely used: stochastic and functional. The stochastic approach has been profoundly studied in the works of Doob (1953), Cramer, Leadbetter (1967). The stochastic approach involves the consideration of the time series as the result of random selection from a set of possible series [2, p. 49]. Following relative indicators, calculated on the basis of absolute annual statistical data of the State Statistical Committee of Azerbaijan from 1997 to 2018 (inclusively) were used as the initial data: gross domestic product (GDP) at comparable prices; fixed assets at comparable prices. Let's assume our time series of Azerbaijan's GDP is a set of vector functions $Y(t)$ with r components. Using the second approach, the r - time series (with components) is interpreted as a nonrandom function from the main set of functions of $\{X(t, \mu) = X(t + \mu) / \mu = 0, 1, 2, \dots\}$ type, where $X(t)$ is a given vector function with r components. This approach is well studied in the works of Wiener (1930), Wintner (1932, Wold (1948), Rozanov (1963), Granger (1979) and is called generalized harmonic analysis [3]. The assumptions made using each of these approaches lead to the determination of parameters that are close in meaning, and practical conclusions usually turn out to be the same. In fact, D. Brillinger [4, p. 22] shows that both of these approaches are equivalent. From the point of view of theorists, the difference between the above approaches lies in what mathematical tools are used and what limit processes are involved in the

consideration. From the theorists' standpoint, the difference between the above-mentioned approaches lies in what mathematical tools are used and what limit processes are involved in the consideration. The components or levels of any dynamic time series are formed under the combined influence of a group of factors that are different both in nature and in the strength of the impact. The first group of factors includes deterministic factors that have a constant effect and determine the general direction of development of the observed phenomenon, its long-term and constant evolution. Such changes in the dynamic time series are called a trend or the main trend in the development of an economic phenomenon. A trend is perceived as a smooth and steady change in the levels of a phenomenon in time, free from random fluctuations. The trend is a kind of deviation from stationarity, which indicates a violation of the properties of time series [2, 49-52]. Therefore, the $X(t)$ series cannot be subjected to direct harmonic analysis. Caterpillar-SSA or SSA (Singular Spectrum Analysis) is a model-free time series analysis technique. It combines the advantages of other methods, such as Fourier analysis and regression analysis, having the simplicity of visual controls. The method of SSA is used to determine the main components of the time series and suppress noise. SSA method allows:

- distinguish between components of a time series obtained from a sequence of values of a quantity, taken at regular intervals;
- find previously unknown periodicities of the series;
- correct the initial data based on the selected components;
- select a component with a predetermined period in the best possible way;
- predict the future behavior of the observed dependence.

2. LITERATURE REVIEW

The ideas of "Caterpillar" - SSA were independently developed in Russia, the UK and the USA (called SSA, i.e. Singular Spectrum Analysis). The first publication, which can be considered as one of the sources of SSA and signal processing methods based on the estimation of the signal subspace, dates back to the eighteenth century (the Prony method). The following, related to the analysis of the dynamics of the number of animals, Efimov, Galaktionov (1983). The world's first monograph on this subject is Efimov et al. (1988) [5]. Broomhead and King (1986a, b) and Fraedrich (1986) formulated the SSA algorithm for use in the context of nonlinear dynamics for reconstruction of attractors. Ghil, Vautard and their colleagues (Vautard and Ghil, 1989; Ghil and Vautard, 1991; Vautard et al., 1992) noticed an analogy between the trajectory matrix from works of Broomhead and King, on the one hand, and the Karunen-Loev (The method of principal components in the time domain) decomposition, on the other. Thus, SSA began to be used as a method for analyzing time series, regardless of the reconstruction of attractors, including those cases where the latter does not make sense. We can separately note the methodology of the so-called 'Caterpillar' method, which was widely considered in its work by Danilov and Zhigljavsky (1997) and Golyandina et al (2001). The main difference of the Caterpillar-SSA methodology is that the method is developed for the analysis of series of a general type, the main emphasis is on the study of the theoretical properties of the method. The main theoretical concept is the concept of separability of series. In particular, the requirement of separability of series imposes its limitations on the choice of parameters. Currently, there are dozens of articles with methodological aspects of SSA and even more with SSA applications. An introduction to SSA can be found in Elsner and Tsonis (1996). More in-depth works are represented in the monograph by Golyandina et al. (2001) study guide (Golyandina, 2004), review by Ghil et al. (2002), a special issue of the journal 'Statistics and Its Interface' (Zhigljavsky, 2010, Ed.) And the book Golyandina and Zhigljavsky (2013). In the book of Golyandina et al. (2018) there are described and structured various generalizations and modifications of the SSA method for analyzing time series and images, as well as their algorithms and their implementation in software.

The range of areas of knowledge where SSA can be applied is very wide: climatology, oceanology, geophysics, engineering, image processing, medicine, economics, econometrics and many others, where short and long, one-dimensional and multidimensional, stationary and non-stationary, almost deterministic and noisy time series should be analyzed. Therefore, in practical applications, various modifications of SSA are used. There are two main directions: a) SSA as a universal method (Golyandina et al., 2001) for solving general-purpose tasks such as highlighting a trend, detecting periodicities, adjusting for seasonality, smoothing, and suppressing noise; b) SSA for spectral analysis of stationary time series (Vautard and Ghil, 1989). In the study called “Analysis of the singular spectrum using R” (2018), SSA modifications are structured and described as well as their generality and difference are shown.

3. THE CATERPILLAR-SSA ALGORITHM

The Caterpillar-SSA algorithm for analyzing one-dimensional time series consists of the steps shown in Figure 1.

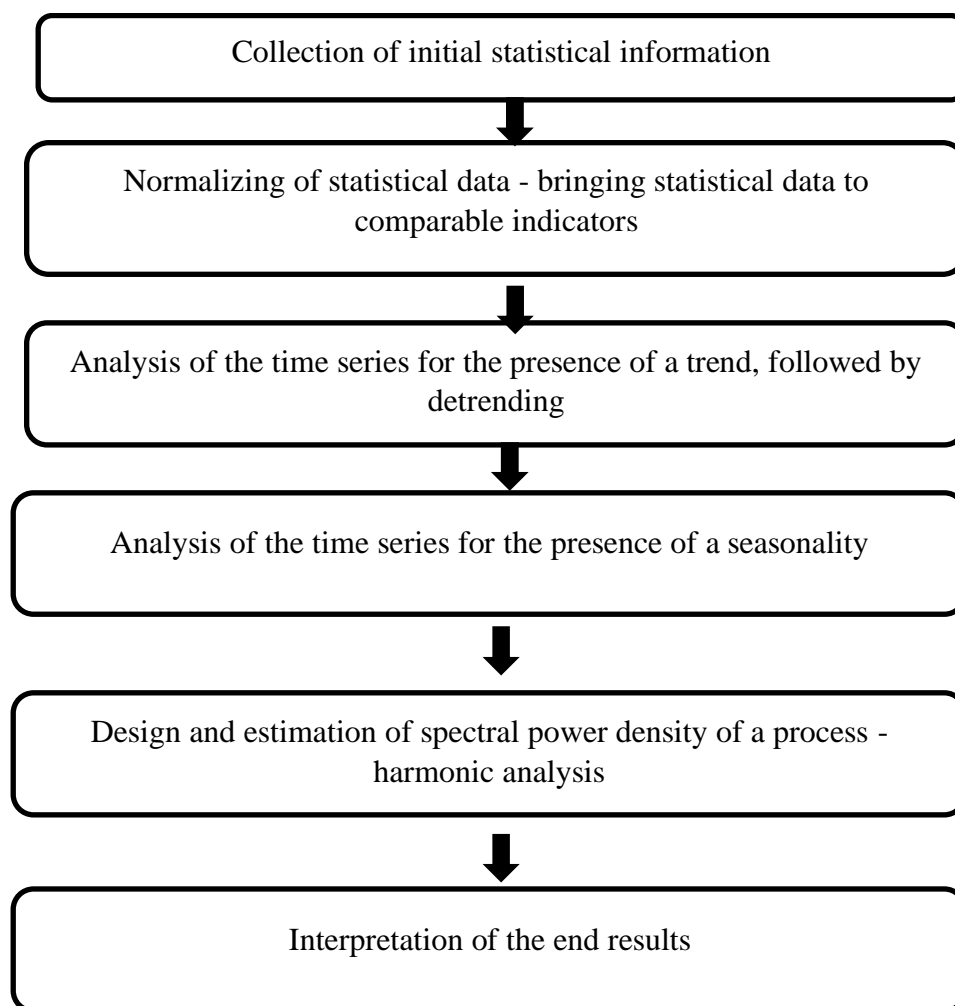


Figure 1: The algorithm for conducting singular spectral analysis

Thus, the result of Caterpillar-SSA processing is the decomposition of time series into several components that can be identified as trends, seasonality, and the cyclical component. Caterpillar-SSA is a method for simultaneously extracting periodic components with different periods from a time series. The natural decomposition of the time series is automatically built on a unique parameter (window length). Singular spectrum analysis (SSA) combines elements of classical time series analysis, multidimensional statistics, multidimensional geometry,

dynamical systems, and signal processing. The sources of origin of SSA include the Principal Component Analysis method and the classical Karhunen -Loeve theorem for spectral expansion of time series. For further analysis, the residuals obtained as a result of the model 1 were normalized for each of the three periods by dividing each residue by the standard deviation, calculated for all residues for a given period. This was done because the ranges of data changes in each of the considered time periods were very different. After the normalizing procedure, the data were combined into a common array of residues, for which Fourier analysis was performed. Fourier analysis showed that there was a relationship between current values of 3 monthly and 43-44 monthly values in the past, so it seems appropriate to introduce this component into the model.

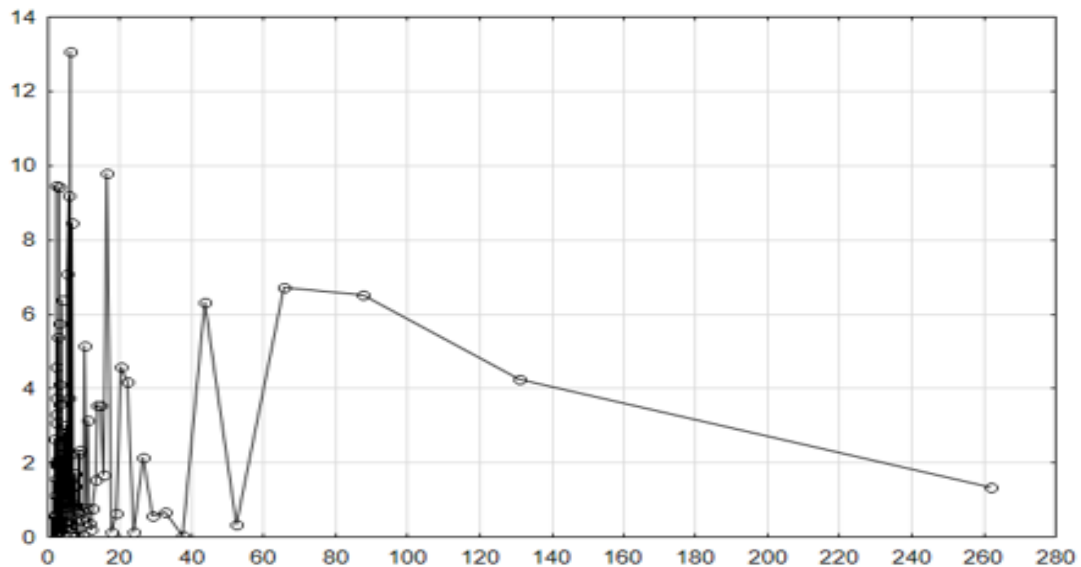


Figure 2: Spectrogram for normalized residuals for all three time periods of GDP dynamics (model 2)

The regression model (table 1), constructed using the stepwise regression, shows that a cycle of 43-44 months is an important predictor of the studied series of residues, so adding a cyclic component can improve the overall model. The autoregressive model for normalized residuals has the form:

$$CYCLE_{NORM} = 0,254 \cdot \text{Lag}_3 + 0,249 \cdot \text{Lag}_{43-44} + 0,003,$$

and after returning to irregular values:

$$CYCLE = (0,254 \cdot \text{Lag}_3 + 0,249 \cdot \text{Lag}_{43-44} + 0,003) * \begin{cases} 71,7 & \text{for the period of 1997 – 2004} \\ 630,1 & \text{for the period 2005 – 2014} \\ 490,6 & \text{for the period 2015 – 2018} \end{cases}$$

Indicator	BETA	B	The level of statistical significance p
Free variable		0,003	0,960
Lag ₃	0,255	0,254	0,000
Lag ₄₃₋₄₄	0,187	0,249	0,004

Table 1: Autoregressive model (stepwise method) for normalized residues

Additionally, we include a lag of 43-44 months into the model. To do this, when calculating lags, we will calculate the arithmetic mean between two consecutive values of the series. The indicators of the new model (model 2) are presented in table 1.5.2. Obviously, this model is better than model 1, since the coefficient of determination increased by 1-3%, and the Fourier spectral analysis indicates a continuous spectrum (Figure 1). Thus, the formula of the model will now have the form for 1997-2004:

$$GDP = 0,1846 \cdot t - 6385,1 + \begin{cases} -67,3, \text{if I quarter} \\ -31,7, \text{if II quarter} \\ 34,6, \text{if III quarter} \\ 64,4, \text{if IV quarter} \end{cases} + 71,7 \cdot (0,254 \cdot \text{Lag}_3 + 0,249 \cdot \text{Lag}_{43-44} + 0,003);$$

for 2005-2014:

$$GDP = 1,2555 \cdot t - 47150 + \begin{cases} -67,3, \text{if I quarter} \\ -31,7, \text{if II quarter} \\ 34,6, \text{if III quarter} \\ 64,4, \text{if IV quarter} \end{cases} + 630,1 \cdot (0,254 \cdot \text{Lag}_3 + 0,249 \cdot \text{Lag}_{43-44} + 0,003);$$

for 2014-2018:

$$GDP = 2,0945 \cdot t - 83975 + \begin{cases} -67,3, \text{if I quarter} \\ -31,7, \text{if II quarter} \\ 34,6, \text{if III quarter} \\ 64,4, \text{if IV quarter} \end{cases} + 490,6 \cdot (0,254 \cdot \text{Lag}_3 + 0,249 \cdot \text{Lag}_{43-44} + 0,003);$$

Period	Model 1: Trend +season		Model 2: Trend +season +lag in 43-44 months		Improvement
	SD	R ²	SD	R ²	
1997-2004	71,7	84,2%	171,8	85,0%	0,80%
2005-2014	630,1	82,0%	1477,1	85,1%	3,10%
2015-2018	490,6	77,9%	995,5	79,3%	1,40%

Table 2: Indicators of models that take into account trends and a seasonal component of 3 months for each of the three periods (model 1).

For the subsequent analysis, a conversion was performed, opposite to the normalizing procedure in order to return to the original values. The results of applying Model 2 can be compared with the initial indicators in Figures 1.5.2-1.5.4.

Figure following on the next page

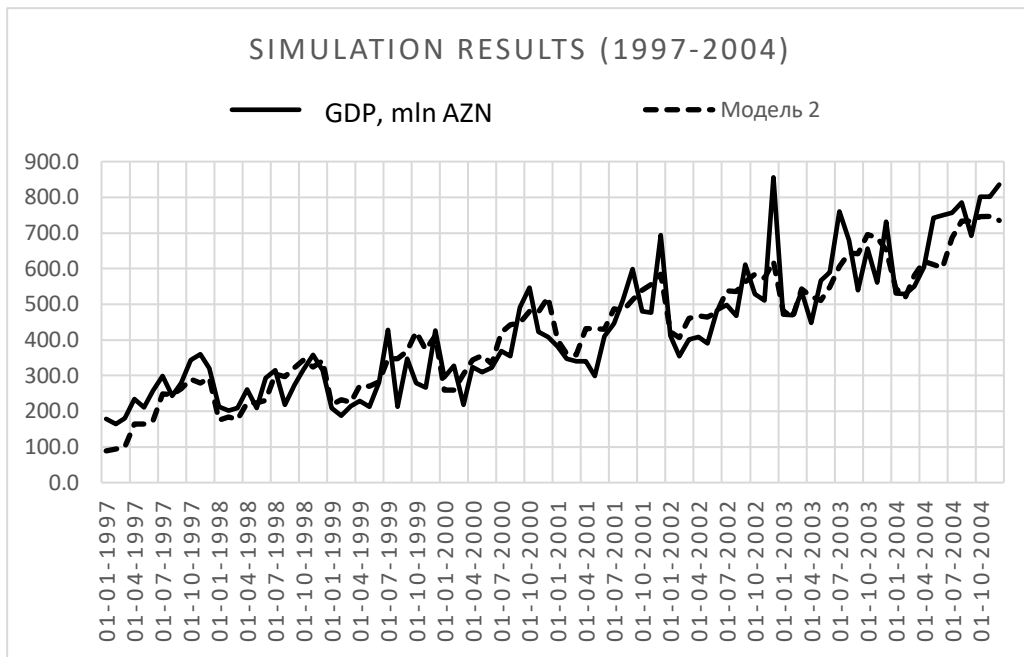


Figure 3: Monthly GDP dynamics (million AZN) in 1997-2004: initial data and results of model 2

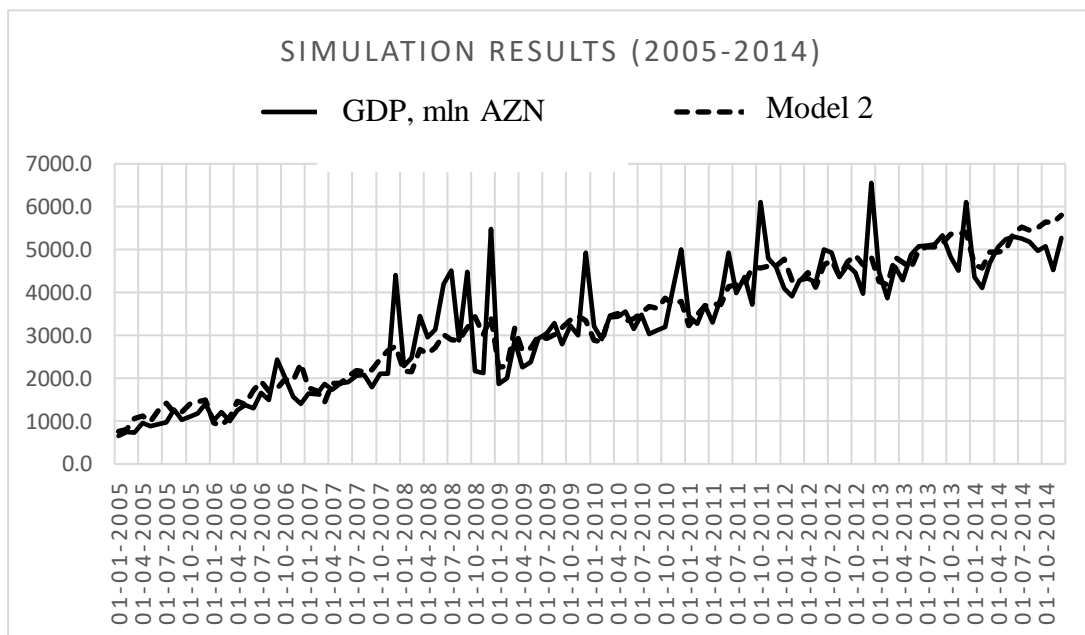


Figure 4: Monthly GDP dynamics (million AZN) in 2005-2014: initial data and results of model 2

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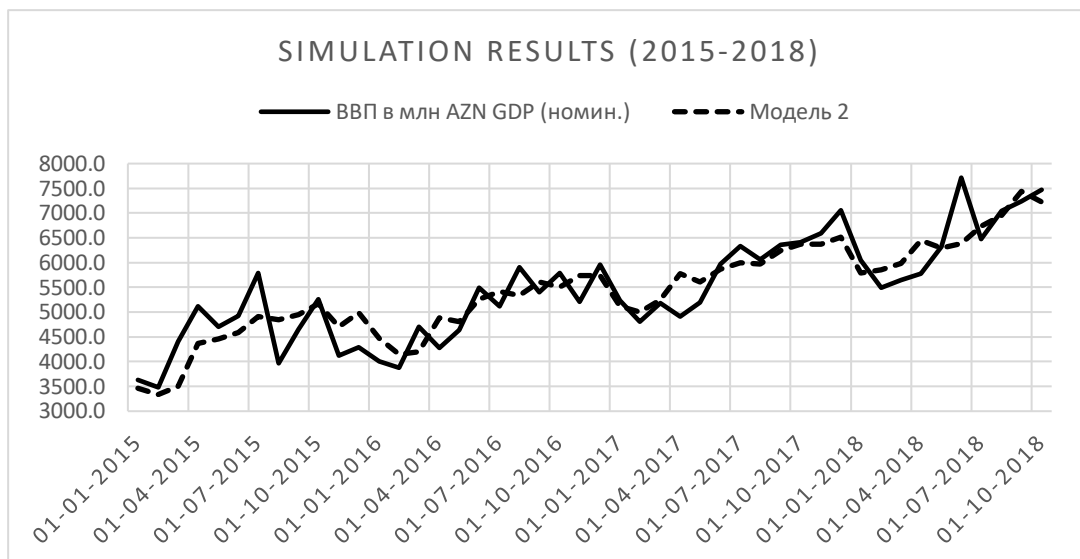


Figure 5: Monthly GDP dynamics (million AZN) in 2015-2018: initial data and results of model 2

4. ANALYSIS OF THE RESIDUES OF THE FINAL MODEL (MODEL 2)

Analysis of normalized residues shows that their distribution does not differ from the normal one (Kolmogorov - Smirnov criterion $d = 0.07$; $p > 0.20$; Figure 1.6.1). The criterion statistics for the empirical distribution function is defined as follows:

$$D_n = \sup_x |F_n(x) - F(x)|,$$

Where as,

$\sup S$ - the exact upper bound of the set $S = |F_n(x) - F(x)|$,
 F - the intended model.

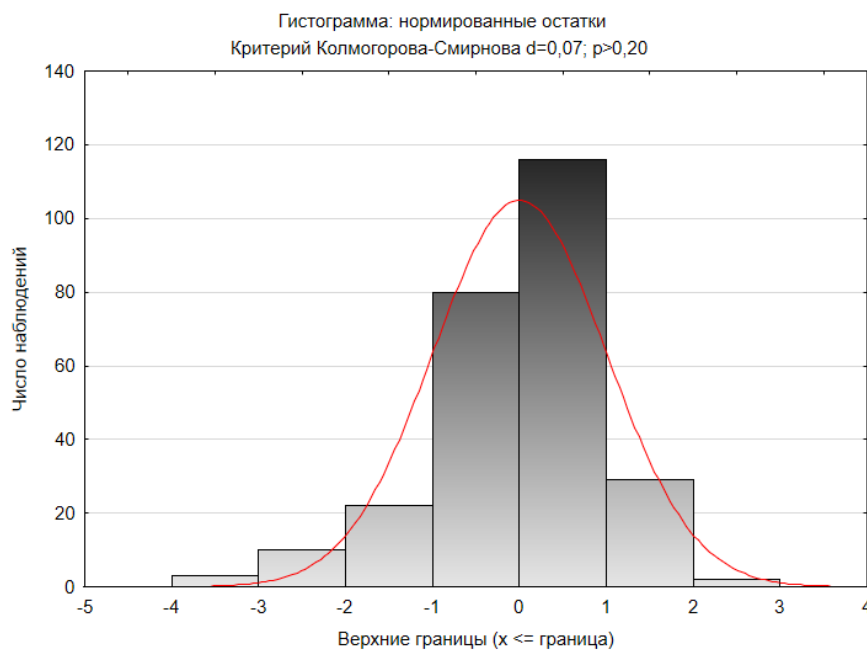


Figure 6: Distribution of normalized residuals for GDP dynamics (model 2)

An analysis of the residues for heteroskedasticity showed that the correlation between the initial values of the variable of interest (GDP) and the residues is weak and statistically insignificant ($r_s = -0.11$; $p = 0.07$). The scattering diagram (Figure 1.6.2) also shows the absence of any dependence. Thus, the hypothesis of heteroskedasticity of residues can be rejected.

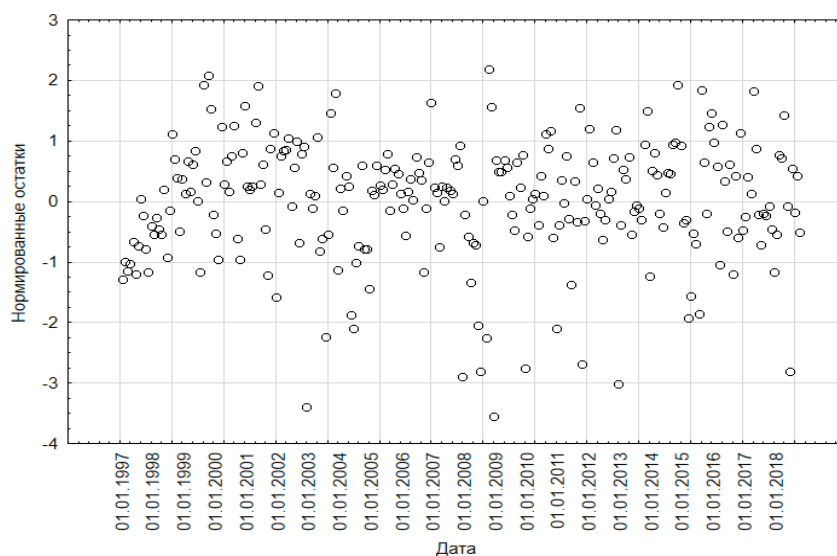


Figure 7: Scatter plot for normalized residues and dates (model 2)

Thus, the results of the analysis of model 2 showed that this model, which includes various trends for each of the three time periods (1997-2004, 2005-2014 and 2015-2018), the quarterly seasonal component and the cyclical component of 43- 44 months is the best of all considered models and adequate.

5. CONCLUSION

Based on the analysis of the data, three time periods (1997-2004, 2005-2014 and 2015-2018) were distinguished, which are characterized by different trends and different ranges of change of indicator. For each period, there were built models with trends taken into account. The constructed models turned out to be adequate ($r^2=68-80\%$). Additional introduction of the seasonal component to the model improved it: $r^2 = 78-84\%$, which is 2-10% more than for a model that takes into account only trends. Nevertheless, the Fourier analysis suggests that there is an additional cyclic component at 43-44 months and its introduction into the model will allow to obtain even better results. Additional introduction of a cyclic component into the model at 43-44 months made it possible to increase the coefficient of determination by 1-3%. Analysis of normalized residues showed that their distribution does not differ from normal, they are homoscedastic, and Fourier spectral analysis indicates a continuous spectrum. Thus, we can conclude that the model, which includes various trends for each of the three time periods (1997-2004, 2005-2014 and 2015-2018), the quarterly seasonal component and the cyclical component of 43-44 months is the best of all considered models and adequate.

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THE IMPACT OF INFORMATION TECHNOLOGY ON THE COMPETITIVENESS OF THE COUNTRY'S ECONOMY

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ABSTRACT

The development of the information technology sector is now an important factor in shaping and improving the competitiveness of the economy. Sustainable economic and social development of countries is associated with a high level of information technology development. This industry has become an important determinant of the efficiency of the national economy. According to economist Intelligence Unit experts, the most significant factors in the development of this industry are: timely measures of the government, protection of the rights holder, a stable and competitive economy, a sufficient number of qualified personnel, technological infrastructure and a strong system of innovative support. These factors are primarily consistent with the United States, Japan, South Korea, Great Britain. They have a highly developed information technology industry and are better placed to support and improve the competitiveness of the sector. Today, various international organizations, consultancy and research companies are compiling ratings related to the level of information technology development in countries. The most significant and objective are the ratings of IMD World Digital Competitiveness Ranking, The Global Innovation Index, Knowledge Economy Index, Bloomberg Innovation Index, etc. These types of statistical ratings provide an opportunity to determine the competitive advantages of each country. We looked at the WEF competitiveness indices. For calculations, we applied the Spearman rank correlation ratio. The results confirm the correlation between the level of information technology development and the country's competitiveness.

Keywords: *Competitiveness Index, Coefficient, Factor, Economy, Information Technology*

1. INTRODUCTION

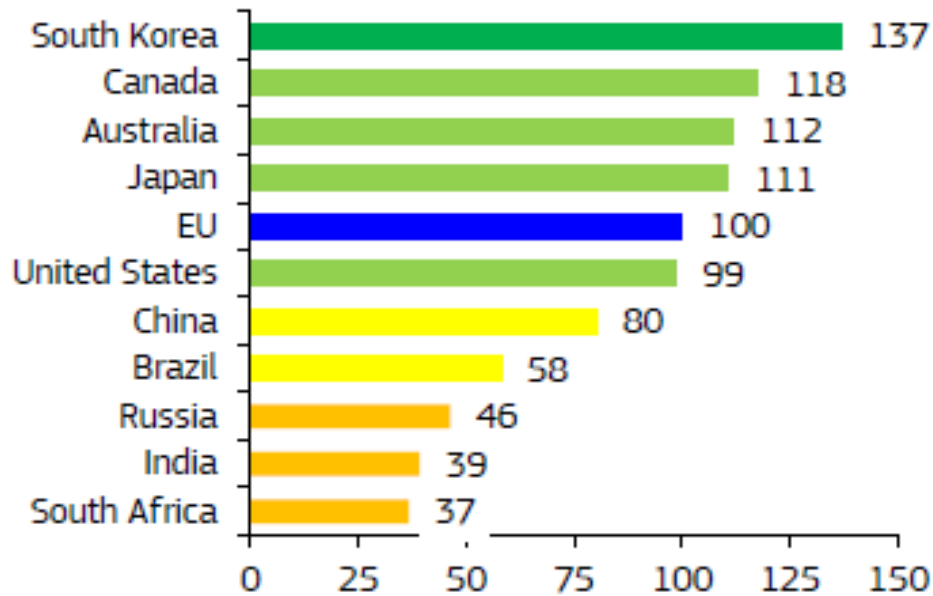
The development of the global economy is significantly influenced by competition between market entities. The joint actions of market participants and the governments of each country shape its competitiveness in the modern world economy. Competitive advantages are made up of a number of factors. Certain factors are not constant, and competitiveness indicators for countries vary accordingly. Note that the problem of competitiveness has been thoroughly studied in studies of [1, 2, 3, 4]. Numerous publications have studied this concept in relation to goods and enterprises. M. Porter considered the competitiveness of the national economy from the standpoint of the main factor of productivity using available resources [5]. Subsequently, the model was supplemented taking into account the development of globalization of the world economy [6]. The American scientist D. Bell (since 1973) developed the theory of post-industrial society. The fundamental characteristics of this society were identified as follows: the central role of theoretical knowledge, the creation of new intellectual technology and the growth of the class of knowledge carriers [7, 127]. Currently, issues regarding competitiveness continue to be addressed in the scientific literature.

At the same time, competition is understood as rivalry aimed at acquiring sustainable competitive advantages - assets, skills and knowledge, consumer preferences. At the same time, competition acts as an element of the market mechanism [8]. When considering the concept of competitiveness, the advantage in relation to other countries or enterprises of a certain industry within the country is usually evaluated [9]. Competitiveness can be revealed by comparing countries or companies between themselves and in the global market. Each enterprise needs to quickly make business decisions, adapt to new conditions and factors, implement innovative technologies [10]. General and special factors are essential for the formation of the competitiveness of the country's economy. In 2001, in London, at an international seminar, factors for competitiveness were identified [11, p.17]. The role of using knowledge to gain the benefits of the economy was also emphasized there. Among these factors, let's note 4 according to the level of development: the education system, the formation of economic incentives using public policy methods, the innovation system and high technologies in the country. The development of the modern digital economy involves economic growth with stable macroeconomic indicators, growth in labor productivity, research and development, and job creation with new requirements. With the development of information technologies, the speed and volume of data storage and transmission between the subjects of the world economic system, the transparency of financial transactions, the availability of information within the country and in the global economy are growing.

2. COMPETITIVENESS RATINGS OF THE INFORMATION TECHNOLOGY INDUSTRY

The publication of statistical ratings by various organizations makes it possible to determine how significant the contribution of information technology to the competitiveness of each country is. In our opinion, among the new factors determining the potential of competitiveness, it is necessary to consider the state of development and application of information technologies in the country. To do this, you can use the indicators of development of the information technologies and data published on the competitiveness of countries in the global economy. In 2005, a study of this kind was conducted by the European Commission and the results were shown in the report of the European Innovation Scoreboard 2005 [12]. The total index was calculated using 26 indicators. Experts took into account the amount of investment spent on research and development of innovations, the number of patented inventions, the volume of exports of high-tech products, the scientific degree of university graduates in the field of exact or natural sciences, the desire of citizens to acquire new knowledge and skills. Further studies showed that a number of European countries belong to the top ten: Sweden along with Switzerland, the Netherlands, Norway, Finland and the UK. And Germany is characterized by high rates of development of science, innovative systems of small and medium-sized businesses. EIS data is reflected in a report dated June 17, 2019 [13]. The European Innovation Scoreboard provides a comparative analysis of innovation performance in EU countries, other European countries, and regional neighbours. The latest edition of this 2-yearly report was published on 17 June 2019. Compared to last year, innovation performance improved for 24 EU countries. The EU's performance has surpassed the United States for the first time and has a considerable lead over Brazil, India, Russia, and South Africa (figure 1).

Figure following on the next page



*Figure 1: Countries' performance relative to that of the EU in 2018
(Source: European Innovation Scoreboard 2019)*

However, China is catching up at 3 times the EU's innovation performance growth rate. Canada, Australia, Japan, maintain a performance lead over the EU. Sweden is the 2019 EU innovation leader, followed by Finland, Denmark and the Netherlands. Lithuania, Greece, Latvia, Malta, the United Kingdom, Estonia, and the Netherlands are the fastest growing innovators. According to the classification of Digital Competitiveness Ranking 2019 [15] conducted by the IMD - Swiss business school, the United States takes 1st place out of 63 countries among which the rating is conducted. The next place after the USA is Singapore, then Sweden, Denmark, Switzerland, the Netherlands. The IMD World Digital Competitiveness ranking analyzes and ranks the extent to which countries adopt and explore digital technologies leading to transformation in government practices, business models and society in general. IMD World Digital Competitiveness Ranking is compiled in three areas: "Knowledge" (quality of training, education and science), "Technology" (regulatory environment, financial capital in the IT industry, the development level of Internet and communication technologies) and "Future readiness" (level of preparedness for the use of digital transformation). A total of 51 criteria are used to form the rating, of which 31 are based on statistical data from regional and other sources. The remaining 20 criteria are based on the results of surveys of an international group of experts. Our study is based on data from various organizations, including the World Economic Forum (WEF). The Global Competitiveness Report (GCI) by WEF compares the status competitiveness in 141 countries. These countries produce 99% of the world's gross domestic product. In October 2019, the World Economic Forum published a new edition of the countries competitiveness rating (table 1).

Table following on the next page

Country	CE rank (score), 2019	CICT rank (score), 2019	CE rank (score), 2018	CICT rank (score), 2018
Singapore	1 (84,8)	5 (87)	283,5	4 (85,2)
UnitedStates	2 (83,7)	27 (74)	1 85,6	27 (71,2)
HongKong	3 (83,1)	3 (89,4)	7 (82,3)	2 (87,9)
Netherlands	4 (82,4)	24 (76,3)	6 (82,4)	19 (75,1)
Switzerland	5 (82,3)	17 (79)	4 (82,6)	15 (77,0)
Japan	6 (82,3)	6 (86)	5 (82,5)	3 (87,4)
Germany	7 (81,8)	36(70)	3 (82,8)	31 (69.3)
Sweden	8 (81,2)	4 (88)	9 (81,7)	5 (85.2)
United Kingdom	9 (81,2)	31 (73)	8 (82,0)	28 (71.1)
Denmark	10 (81,2)	9 (83)	10 (80,6)	8 (82.3)

Table 1: Ranking of the competitiveness of countries in the global economy and the competitiveness of the development (adoption) of information and communication technologies in the global economy in 2018 and 2019. [16, 17]

(Source: World Economic Forum, The Global Competitiveness Report 2018, 2019)

Note: CICT - competitiveness with regards to ICT adoption in the global economy.

CE - the competitiveness of the country's economy in the world economy.

Region	Institutions	ICT adoption	Macro-economic-stability	Human Capital (skills)	Financial system
East Asia and the Pacific	61,6	70,3	89,6	67,3	74,3
Eurasia	53,8	59,5	74,9	66,1	52,0
Europe and North America	64,7	70,4	92,6	74,6	70,9
Latin America and the Caribbean	47,1	50,9	73,7	58,7	60,3
Middle East and North Africa	55,5	57,6	75,3	62,9	63,7
South Asia	50,0	35,1	74,7	50,1	60,0
Sub- Saharan Africa	46,9	34,3	69,4	44,3	50,8

Table 2: Regional competitiveness performance by indicators, 2019 [17].

Average score (0–100)

(Source: World Economic Forum analysis)

In a special thematic chapter, the report explores the relationship between competitiveness, shared prosperity and environmental sustainability. The GCI is the product of an aggregation of 103 individual indicators, derived from a combination of data from international organizations as well as from the Executive Survey of WEF. Indicators are organized into 12 pillars: Institutions; Infrastructure; ICT adoption; Macroeconomic stability; Health; Skills; Product market; Labour market; Financial system; Market size; Business dynamism; and Innovation capability. A country's performance on the overall GCI results as well as each of its components is reported on a 0-100 scale as a "progress score". The GCI allows economies to monitor progress over time. Economic and social parameters are the basis of the WEF study. Among them, there are the number of mobile subscribers, the number of inventions and patents, and others.

"ICT adoption" pillar includes:

- Mobile-cellular telephone subscriptions - number of mobile-cellular telephone subscriptions per 100 population.
- Mobile-broadband subscriptions. This indicator includes standard and dedicated mobile-broadband data subscriptions to the public Internet.
- Fixed-broadband internet subscriptions. This indicator refers to the number of subscriptions for high-speed access to the public Internet (a TCP/IP connection), including cable modem, DSL, fibre and other fixed broadband technologies.
- Fibre-to-the-home/building internet subscriptions per 100 population. This indicator refers to the number of Internet subscriptions using fibre-to-the-home or fibre-to-the-building.
- Internet users- percentage of individuals who used the internet from any location and for any purpose, irrespective of the device and network used, in the last 3 months.

2.1. The importance of information technology in ensuring the competitiveness of the economy

In recent years, with the increasing importance of information technologies for the economic growth, an indicator characterizing the role of these technologies in each country has been increasingly used. This is due to the extremely wide range of problems solved in the economy using information technologies. Nowadays, corporations have to regularly make fundamental changes to their strategies and use new tools in the markets. In this situation, modern information technologies with their potential and decreasing costs open up great opportunities for both firms and the economy as a whole. From the analytical standpoint, it is preferable to pay attention to the results of special studies. In 2009, the US National Security Research Center - RAND Corporation published a study. It is called The Global Technology Revolution 2020, In-Depth Analyses. In this report, the IT field is named one of four strategic areas designed to ensure US global technological leadership in 2020 [18]. There are relatively few countries in the world, where all the necessary conditions are in place to support the rapidly growing segment of information technology. According to experts, the most favorable conditions for increasing the competitiveness of the industry have been formed in the United States, Japan, the Republic of Korea and the United Kingdom. This was concluded by the specialists of the research company named "Economist Intelligence Unit", who conducted the ranking of countries in the world for their competitiveness of information technologies. The most important factors determining the effectiveness of the national economy in a post-industrial society are science and knowledge, information and methods for its processing. Also education that ensures the formation of intellectual capital and systems. Research costs are an integral part of production. This is an opportunity to maintain market positions by companies and an advantage in the competition with others. Comparison of various indicators of countries shows that modern information technologies and the intellectual capital of workers greatly increase the market capitalization of companies. For example, in the USA, companies of the "new" economy outperform traditional ones in terms of capitalization by 3 times. Moreover, the number of working employees comprises the ration of 1 to 40. In recent years, the requirements for skills have changed, and a lack of professional specialists in the field of information technology is felt in all countries. It is expected that over time, the problem with specialists will escalate. This is due to the strict requirement of employers for the level of professionalism, including IT competencies. Companies associated with the development and provision of information services are being active in the business sector. Their services help to reduce material, production and transaction costs. Thanks to the real-time mode, almost all types of services got the opportunity for rapid development. Business services from producer to consumer began to be provided directly. It is relevant for all countries that the level of development of the information technologies industry is closely related to the level of

development of certain conditions and factors. However, some countries manage to compensate relatively weak level of economic development by the development of information technologies. This is primarily India and China and their achievements in the ICT industry. China's high performance is associated with large labor reserves and low wages. On the other hand, India uses its linguistic advantages. However, for both India and China for successful competition, it is necessary to seek new opportunities as these factors are leveled. The future rivals of India and China will be countries such as Russia, Brazil, Malaysia and Vietnam, as well as very small states such as Estonia, Lithuania and Chile. Most of these countries have all the prerequisites for development, and the level of professional skills employees possess in each of them is constantly improving. The priority is given to the development and support of software, that comprises the dominating field for their promotion in rankings. In the area of legal regulation, it is important to combine open competition in the IT sector with effective protection of intellectual property. The United States and Western European countries are superior to other countries in terms of copyright protection measures. By developing and implementing a competent economic policy, the state can contribute to increasing the competitiveness of the national industry.

3. RESULTS OF STATISTICAL ANALYSIS OF FACTORS OF COMPETITIVENESS OF THE NATIONAL ECONOMY

The importance of information technology and its impact on economic growth has been repeatedly studied by well-known scientists. However, most probably, a statistical analysis of the indicators was never carried out. And here we consider it appropriate to rely on the ratings and methodologies of international organizations and specialized companies. Our statistical analysis showed a sufficiently high correlation between the levels of development of information technology in the country and the level of its competitiveness. The analysis was carried out according to EIS-2019 and WEF-2019. For calculations, we used the Spearman rank correlation coefficient. C. Spearman's correlation coefficient is used to measure the relationship between two variables measured in a quantitative scale, mainly in an ordinal scale. Spearman's correlation coefficient, in contrast to the Pearson coefficient, is resistant to the presence of atypical values. To check the significance of the correlation coefficient - check the null hypothesis that the true correlation coefficient is 0.

- H_0 : no correlation
- H_a : correlation takes place

Table following on the next page

1. Correlation matrix								
	ExpP	ExpB	SME	SME _m	Inn	PCT	Tr	Medht
ExpP	1.00	0.77	0.75	0.63	0.69	0.76	0.37	-0.07
ExpB	0.77	1.00	0.48	0.54	0.52	0.90	0.31	0.27
SME	0.75	0.48	1.00	0.78	0.70	0.54	0.31	-0.23
SME _m	0.63	0.54	0.78	1.00	0.55	0.59	0.14	-0.09
Inn	0.69	0.52	0.70	0.55	1.00	0.50	0.17	-0.17
PCT	0.76	0.90	0.54	0.59	0.50	1.00	0.40	0.20
Tr	0.37	0.31	0.31	0.14	0.17	0.40	1.00	0.07
Medht	-0.07	0.27	-0.23	-0.09	-0.17	0.20	0.07	1.00
2. Probability values (Entries above the diagonal are adjusted for multiple tests.)								
	ExpP	ExpB	SME	SME _m	Inn	PCT	Tr	Medht
ExpP	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.00
ExpB	0.00	0.00	0.04	0.01	0.01	0.00	0.64	0.93
SME	0.00	0.00	0.00	0.00	0.00	0.01	0.64	1.00
SME _m	0.00	0.00	0.00	0.00	0.01	0.00	1.00	1.00
Inn	0.00	0.00	0.00	0.00	0.00	0.03	1.00	1.00
PCT	0.00	0.00	0.00	0.00	0.00	0.00	0.19	1.00
Tr	0.02	0.06	0.06	0.43	0.32	0.01	0.00	1.00
Medht	0.67	0.10	0.16	0.60	0.31	0.24	0.66	0.00

Table 3: The correlation matrix and the matrix of significance levels
(source: author's calculations)

Whereas:

- ExpP - R&D expenditure in the public sector
- ExpB- R&D expenditure in the business sector
- SME_m- SMEs with marketing or organisational innovations
- SME- SMEs with product or process innovations
- Inn - Innovative SMEs collaborating with others
- PCT - PCT patent applications
- Tr- Trademark applications
- Medht-Medium & high tech product exports

According to correlation analysis, a high correlation was found between "expenditure in the public sector" and "expenditure in the business sector", SMEs with product or process innovations PCT patent applications. An average correlation was found between the expenditure in the public sector and SMEs with product or process innovations and Innovative SMEs collaborating with others indicators. The correlation coefficients for the above-mentioned indicators are statistically significant according to the probability matrix in Table 3. Thus, based on p-value <0.05, we reject the hypothesis H0 for a 5% significance level.

Correlation matrix				
	CE2019	CICT2019	CE2018	CICT2018
CE2019	1.00	0.29	0.95	0.37
CICT2019	0.29	1.00	0.13	0.98
CE2018	0.95	0.13	1.00	0.21
CICT2018	0.37	0.98	0.21	1.00
Probability values (Entries above the diagonal are adjusted for multiple tests.)				
	CE2019	CICT2019	CE2018	CICT2018
CE2019	0.00	0.66	0.00	0.45
CICT2019	0.22	0.00	0.74	0.00
CE2018	0.00	0.59	0.00	0.74
CICT2018	0.11	0.00	0.37	0.00

Table 4: The correlation matrix and the matrix of significance levels
(source: author's calculations)

Table 4 presents the results of the correlation analysis of the dependence of competitiveness on ICT adoption in the world economy (CICT) and the competitiveness of the country's economy in (CE) for 2018 and 2019. In the R output, we see two important things: the value of the correlation coefficient (sample estimates) and p-value. In our case, $p\text{-value} < 0.05$, therefore, at a 5% significance level, there is reason to reject the null hypothesis that the correlation coefficient is equal to zero. Once we reject this hypothesis, we believe that the correlation coefficient is not 0, and therefore, there is indeed a connection between CICT and CE. A strong correlation was found between these variables from the previous year, which is 0.98 and 0.95. These coefficients are statistically significant at a significance level of 0.05 and 0.01, because $p\text{-value} < 0.00$. The competitiveness of the country's economy is directly and strongly correlated with competitiveness based on ICT adoption. It is noteworthy that the current correlation between these indicators is weak and accounts for 0.22 and 0.21, respectively. However, $p\text{-value} > 0.05$. Therefore, here we accept the null hypothesis that the correlation coefficient is equal to zero. The data from the tables of the research confirms the analyzed set of factors. Of course, there are other factors of competitiveness of the country's economy in the world market. Taking into account changes in the composition of these factors makes it possible to identify new aspects of the formation of the competitiveness of the national economy.

4. CONCLUSION

Our statistical analysis showed a sufficiently high correlation between the levels of development of information technology in the country and the level of its competitiveness according to the World Economic Forum. The results showed a strong connection between the level of IT development in the country and the competitiveness of its economy. The study shows that the competitiveness of the country's economy directly depends on the level of ICT development. In addition, it was found that there is also a strong correlation between "expenditure in the public sector" and "expenditure in the business sector", as well as between "expenditure in the public sector" and "SMEs with marketing or organizational innovations". The impact of "PCT patent applications" on "expenditure in the public sector" and "expenditure in the business sector" has been identified. All found coefficients were evaluated as statistically significant at the significance level of 0.01% and 0.05%. The results obtained in the article indicate the importance of ICT development in the socio-economic development of countries. In addition, close attention should be paid to expenditure in the public sector, expenditure in the business sector, marketing or organizational innovations and patent applications. Countries with high-tech industries provide favorable conditions for the competitiveness of the industry. Most of these countries are countries with leading economies of the world, with high labor productivity (including in the field of information technology). The above-mentioned research results confirm that besides favorable economic conditions for doing business and strict legal regulation, they have a developed system of innovations, the availability of advanced technological infrastructure and qualified specialists of various profiles. The results can be used to monitor the development of the country's economy. Dependencies and factors identified in the research are important components of short-term and medium-term planning and forecasting. They can be used as indicators of the impact on the competitiveness of the country based economies.

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MANAGING THE SUSTAINABILITY OF CORPORATE FINANCE IN THE DIGITAL ECONOMY

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ABSTRACT

This article discusses the main trends in the financial sustainability of an enterprise in the digital economy. The information and communication technologies sector is one of the main areas of the non-oil sector, and the development of this sector is one of the important directions of the state's economic policy. Ensuring the development of the ICT sector in the country in the near future is associated with the implementation of the "National Strategy for the Development of the Information Society in the Republic of Azerbaijan for 2014-2020." The ICT sector is one of the main goals in the Development Concept "Azerbaijan 2020 Vision". One of the main pillars of the innovative development policy pursued in Azerbaijan is the creation of a favorable business environment for the sustainable operation of enterprises. Today, one of the drivers of revolutionary transformations in the global economic system and changes in the hierarchy of world centers of power is the development of a digital economy based on the fourth industrial revolution. The purpose of the article is to study the paradigm shift in the management and functioning of modern enterprises in the context of the development of the digital economy. Research methods: system analysis, induction and deduction, comparison, forecasting. The types and characteristic features of the financial stability of the enterprise, internal and external factors, as well as tools to improve the financial stability of the enterprise are considered. Particular attention is paid to identifying and managing risks that pose a threat to the implementation of the financial sustainable of the enterprise. The author identified new factors affecting the financial stability of the enterprise in a digitalized economy.

Keywords: digitalization, digital transformation, managing, sustainability

1. INTRODUCTION

In the process of globalization, at a time of rapid development of information technologies, a number of social life experiences have been replaced by electronic and digital environments. Thus, the establishment of economic relations as a result of the use of ICT and network technologies, the use of local and global networks, the creation of corporate networks and systems in large enterprises, etc. Such issues have led to the emergence of the digital economy, which is a sector of the economy. Based on this, evolving information technologies have brought to society concepts and facts such as e-commerce, e-Commerce, e-Democracy, e-Governance and e-government. Looking at the essence of the concept of digital economy, it can be said that it has no borders, but Europe is still fragmented in the Digital Single Market and is characterized by different national market practices. Thus, Europe can earn 500 billion Euros in 2020 by fully developing the "Digital Single Market". Reuse of information belonging to government agencies, e-identification, e-signature, etc. Overcoming obstacles and solving problems, including proposals, is the basis of the European Digital Agenda.

2. DIGITAL ECONOMY AND FINANCIAL SUSTAINABILITY IN ENTERPRISES

In the context of the digitalization of the economy, corporate finance as a science and practice of Azerbaijani companies faces a number of organizational, technical, technological, as well as financial, economic and substantive problems, which play an important role in corporate governance and achieving sustainable economic and financial growth.

The use of digital information technologies is designed to promote and to some extent provide conditions for achieving high rates of economic growth by strengthening the management information base and facilitating financial decision-making processes in the corporate governance process. So, digital technologies are necessary for the growth of industrial efficiency, and in some sectors they become the basis of product and production strategies. Their transformative power is changing traditional business models, production chains, and driving new products and innovations. Digital technologies help to find sources of increasing the efficiency and opportunities of rapid competitive development of enterprises. At the same time, they require changing existing management models, reformatting communications, technologies and the organizational structure of enterprises on the basis of new values, priorities and benchmarks based on partnership, customer focus, innovation and synergy. At the same time, Telstra and Deloitte corporations [7] indicated the change in the priorities of the work of modern enterprises in the era of the digital economy, which noted that the following values are necessary conditions for enterprises seeking to succeed in the digital economy :

- investing in new abilities, rather than in old business models;
- high appreciation of their relationships with customers;
- increasing efficiency and speed;
- possession of full knowledge of their current competitors;
- investing in talent.

The digitalization of the economy and the use of modern information technologies by enterprises is changing the guidelines in their competitive positioning. So the new paradigm of a competitive enterprise includes:

- 1) stimulating the transition to electronic circulation of invoices and payment information between enterprises, which speeds up the money circulation between them, reduces printing and postage costs, ensures a reduction in the cost of storing documentation;
- 2) standardization of information and telecommunication technologies in order to unify their specifications and properties, as well as to maximize the opportunities for cooperation between various business entities;
- 3) the development of "electronic skills" for the effective use of digital technologies in industry and other sectors of the economy.

At the first stage of the digital transformation of enterprise management mechanisms, it is necessary:

- introduction of uniform programs for use in various departments of the enterprise;
- unification of operational processes in the corporate center and production units;
- pilot implementation of selected digital management technologies (in particular, SAP ERP).

The next step in the digital transformation of enterprise management should be the development of organizational processes in all structural divisions. To activate innovative development, a fast, unified, safe and comfortable common information exchange system is extremely important, especially for quick decision-making, flexibility and operational efficiency. The speed, depth and content of the digitalization process in the corporate sector of the economy depends on a set of internal and external factors. At its core, the difficulties of the digitalization process are derived from the state of the economy and finances in the state, as well as primary corporate structures as business entities. The development of the economy at the present stage is inextricably linked with the processes of globalization, affecting almost all spheres of society: political, social, cultural, economic. The growth of the direct implementation of information technology in the systems of activities of financial and economic units leads to increased communication, which directly increases the speed of development and transformation of the

global economic environment and community. A series of financial crises following one after another, various initiated military conflicts and confrontations lead to a difficult geopolitical situation that affects international relations and, accordingly, the economic situation within countries. The description of the current economic situation can be carried out with the characteristic features inherent in the current state of the national economy, such as: instability, unpredictability and increasing competition with the active introduction of digital technologies in all financial and business processes of the enterprise, which affects the relationship of companies with external business partners and affects financial stability enterprises. The creation of such conditions is supposed to be ensured through the formation of the ecosystem of the digital economy of Azerbaijan, which provides for the interaction at the level of digital data of business, the scientific and educational community, the state and citizens. This, in turn, is impossible without the institutional and infrastructural support of high-tech businesses. To solve this problem, a number of measures are envisaged in the areas of regulatory regulation, information infrastructure, staffing, and information security. The need to implement a program of transition to a digital economy is caused not only by the desire to increase the competitiveness of the Azerbaijani economy in the world market. Without digital technologies, the economy of our country will not be able to dynamically and efficiently develop, therefore, its digital transformation is a task of special importance. The digital transformation of the economy is a key element in transforming the economic system of Azerbaijan. At the same time, the model of managing the economy changes and it turns into a prognostic-program model. The penetration of digital technologies into all areas of the economy fundamentally changes the entire economic structure and turns digital technologies and related infrastructures into new sources of added value and the leading links in the development of the economy. The process of digital transformation of the economy is a vivid example of the transition of quantitative changes to qualitative ones. The increase in memory and the speed of computing technology allowed us to create and effectively use a number of new technologies, which in turn contributed to an even more dynamic development of hardware and software for computer systems. The traditional digital technologies that are widely used in digital economic systems are Big Data technologies, cloud technologies, neural network technologies, artificial intelligence, additive and 3D production technologies, cyberphysical systems (CPS), industrial Internet, robotics, sensors, quantum sensors, industrial analytics, mathematical modeling and forecasting, etc. The digitalization process also implements the principle of straight through processing (STP), when manual intervention at all stages of data processing is excluded. In addition, when managing in economic systems, it becomes possible to quickly, almost instantly respond to exogenous changes. In these conditions, ensuring the sustainability of the functioning and development of enterprises becomes especially important. Sustainable is a system that is able to maintain its basic functions and their parameters under the influence of changing external factors. With regard to the development process, the main function, the preservation of which is necessary, is, of course, making a profit. Then a sustainable enterprise can maintain the competitiveness of its products in the face of uncertainty and environmental variability. Sustainability is also a necessary condition for returning to an equilibrium state, even if competitiveness is lost for a short time. Ensuring the sustainability of the functioning and development of a modern enterprise is dedicated to the work, but they did not consider the issues of management of the sustainability of the enterprise in the conditions of the digital economy. In order for the enterprise to function and develop sustainably, it is necessary to have the potential for sustainability, which in modern conditions requires digital transformation in all spheres of its activity. The creation of modern production, possessing innovative technologies and equipment, which not only allows you to flexibly change the range, but also without the cost of changing the organizational and technological structure of production, the ability to produce.

However, it does not identify the potential for sustainability and innovation potential, as required for the creation of innovative potential, the cost of financial and other resources of the enterprise can be a common occurrence. This is exacerbated by the fact that the innovative restructuring of production requires a certain, and sometimes enough, period, during which it can reduce the volume of production, the result of which is the same as the result. At the same time, after the formation of the innovative potential, the sustainability of the enterprise naturally increases, but only on condition that this potential is effectively realized in an constantly changing and highly uncertain external environment.

2.1. Key models for managing sustainability of enterprises in a digital economy

For the effective realization of the sustainability potential, not only modern, effective management is needed, covering all levels of the enterprise management system, but also modern marketing for continuous monitoring and forecasting demand for manufactured products for a corresponding change in the range, which also requires the introduction of modern information technologies. However, the effectiveness of management and marketing can be reduced due to errors related to the human factor. Similar problems can arise during the formation of enterprise development plans, when the consequences of errors can be much more significant, therefore, conducting research in this direction is very relevant. In addition, some of the manifestations of anthropentropy are delays in the passage of information related to the human factor within the production environment, which also reduce stability. The digital transformation of the enterprise can reduce the impact of the human factor, but it is not yet possible to completely eliminate it. A separate problem, which is important for ensuring the sustainability of the enterprise, is the timely detection of tendencies to the violation of stability. Moreover, the sooner these trends are detected, the more time the company will have to take adequate measures. Therefore, to ensure sustainability, the enterprise must have a modern system for diagnosing its condition. Work is devoted to these problems. However, in the context of the digital transformation of the enterprise, a number of new opportunities for such diagnostics appear, also based on modern information technologies, such as Big Data, artificial intelligence, etc. This system should diagnose both the potential of the enterprise and its current activities, as well as predict the change in its condition, which can lead to loss of stability. It is especially important to ensure the operation of such a diagnostic system in an uncertain and unstable external environment. All this allows us to conclude that a high degree of relevance of the solution to the scientific problems and methodological foundations of managing the sustainability of the functioning, development and digital transformation of an industrial enterprise under exo - and endogenous uncertainties and digital transformation of all areas of enterprise activity. In a changing external environment, enterprise stability can be ensured only in the form of dynamic stability, when the production system has the ability to maintain its basic functional parameters and develop. Moreover, changes in exogenous factors can be very significant and cause corresponding changes in endogenous factors, which in turn will help restore the necessary production parameters. However, one should not forget that there always exists a certain limit or critical threshold for the change of exogenous factors, at which stability will ultimately be lost. Therefore, the task of managing sustainability is to increase this threshold level. Various behaviors of a stable and unstable economic systems are possible in different conditions of the external and internal environment. This approach uses elements of catastrophe theory, but differs in terms of its relationship to the economic system - the enterprise, that is, phase portraits are presented in the coordinates of exogenous and endogenous factors. As an exogenous factor, it is advisable to choose the factor that has the greatest impact on the stability of the economic system (enterprise). Such a factor may be, for example, the price level of materials and components for the company's products. As an endogenous factor, a factor or indicator is selected that is the most informative from the point of view of assessing

the danger of stability loss. With sufficient stability of the system, a change in the exogenous factor beyond the acceptable limits causes a change in the endogenous factor, however, in the future, if the exogenous factor returns to the acceptable interval again, the system returns to a state of dynamic equilibrium within the allowable changes in the endogenous factor. If the exogenous factor retains its value beyond the dangerous level, then the stable system will find a new state of dynamic equilibrium with new values of the exogenous factor. At the same time, it is also possible that for some time the endogenous factor can also change beyond the permissible limits, but in the future the system will again return to the state of dynamic stability. If the system is unstable, then a change in the exogenous factor will lead to dangerous changes in endogenous factors and further collapse. A variant is also possible when the situation of a possible loss of stability arises due to endogenous factors (for example, anthropentropy). Then, in the presence of a high degree of stability of the system after a temporary change in the endogenous factor over the allowable limits, the system returns to the state of dynamic equilibrium. With insufficient stability, this situation leads to loss of stability and collapse. However, in the context of the development of the digital economy, the influence of various exogenous and endogenous factors on the stability of the enterprise is transformed. The use of Big Data processing technology enables the processing and analysis of volumes of data measured not only in terabytes, but also exabytes. Naturally, exabyte volumes of information in enterprise management systems are unlikely to be formed, but terabyte volumes are enough to accumulate almost all current information about the financial and production activities of the enterprise. In this regard, there is a need to create new information processing techniques when, instead of collapsing financial indicators to various criteria, their entire volume is analyzed. For example, in the well-known five-factor Altman criterion, the following indicators are collapsed: liquidity indicator (ratio of working capital to assets), profitability indicator (ratio of retained earnings to assets), stability indicator (ratio of income before tax and interest to assets), solvency indicator (balance ratio value of shares to debt obligations) and an indicator of activity (the ratio of sales to assets). During convolution, for each indicator its own weight coefficients are established. When using Big Data or neural network technologies, the convolution of indicators can be replaced by an analysis of their dynamics in a multidimensional factor space. However, such techniques are currently not available and require development. Therefore, the digital transformation of industrial enterprises opens up prospects for increasing their stability on the basis of a more dynamic and effective analysis of the current financial situation, as well as modeling and forecasting financial stability for various strategic and tactical management decisions. An analysis of the dynamics of financial and material flows in the production system can be deeper, allowing timely detection of their possible deviation from equilibrium flow with a simultaneous assessment of financial risks to control the admissibility of their level. Big Data processing technologies (Big Data) also allow you to monitor the equipment available at the enterprise and quickly monitor its physical depreciation, and an analysis of the market situation and technological progress in the development and production of the equipment used will detect or predict its obsolescence. All this will also contribute to increasing sustainability, naturally, given the financial ability to timely update or modernize equipment. Another area of effective use of the advantages of digital transformation of the enterprise is the field of marketing. Here a number of new opportunities opens up: the Internet of Things, Big Data technology, the use of artificial intelligence for marketing research, etc. All these areas of digital transformation will undoubtedly have a positive impact on the effectiveness of marketing, which will contribute to increasing the sustainability of the enterprise. More complex and multifaceted is the evolution of the influence of the human factor in general and anthropentropy in particular on the sustainability of the enterprise during its digital transformation. At first glance, it seems that with the transfer of a significant amount of data processing operations to information systems, anthropentropy should decrease significantly.

However, the human factor will continue to affect the balance of information and communication processes in the enterprise, as this is determined both by the quality of the corresponding software and the ability of the staff to work with it and achieve the required speed of information circulation between elements of the production system. In this regard, one should also take into account the need for updating and retraining personnel for their successful work in the context of digital transformation, which also requires significant costs. At the same time, the value of qualified personnel with universal skills and competencies, capable of easily adapting to new conditions, is increasing. With the ubiquitous digital transformation, such personnel will be required in many enterprises, therefore, to consolidate it in the enterprise, it is necessary to increase the costs of material incentives. Under the new conditions, the task also arises of finding new optimal options for the degree of combination of specialization and division of labor. In addition, the vulnerability of the enterprise to external and internal hacker attacks, which have various goals, including a violation of manageability and bankruptcy of the enterprise, is increasing. In the field of innovative development, digital transformation also contributes to increasing the sustainability potential of an enterprise, especially since it itself is a very effective innovation. However, like any other innovation, digital transformation requires significant expenditures of various resources, which in the conditions of anthropocentrism with an insufficiently developed strategy of innovative development can lead to disruption of stability. The effect of digital transformation on the development and manufacturing of high-tech products and the introduction of a parallel engineering system may be similar. Potentially, digital transformation accelerates and improves the efficiency of these processes, but the cost of resources can reduce the positive effect of their impact on sustainability. A positive effect on the sustainability of enterprises will naturally be exerted by the digital transformation of the Azerbaijani economy at the macro level, affecting a number of exogenous factors. At the same time, it is possible to increase the volume of national income and increase the level of real incomes of the population, stabilize regulatory legislation and the tax system, reduce inflation and accelerate payment turnover. But at the same time, it is possible to predict an increase in unemployment among, first of all, the age population, which has limited adaptation to the conditions of digital transformation. At the same time, negative demographic trends can lead to a lack of personnel capable of efficient work in the new conditions. If measures are not taken to limit the growth of unemployment, a situation may arise in reducing the capacity of the domestic market, which will contribute to increased competition, especially from enterprises that have implemented digital transformation in a timely and effective manner. Another exogenous factor that can undergo significant changes in the conditions of digital transformation and have a significant impact on the stability of the enterprise can be the instability of the foreign exchange market, including the possible legalization of operations on the cryptocurrency market. All this allows us to conclude that in the context of the digital transformation of production enterprises, it is necessary, when choosing managerial decisions of strategic and operational levels, to take into account the change in the influence of exogenous and endogenous factors on the stability of the enterprise in the new economic conditions in order to take advantage of the digital economy and the fourth industrial revolution to increase sustainability functioning and development of industrial enterprises.

3. NEW BENCHMARKS FOR THE SUSTAINABILITY OF ENTERPRISES IN THE CONTEXT OF THE DEVELOPMENT OF THE DIGITAL TECHNOLOGIES

Thus, for the effective management of enterprise sustainability in the context of the digital transformation of the economy, it is necessary to combine forecasting of the state of the enterprise with monitoring and diagnosis of its real state. This can be done on the basis of the concept of multi-circuit stability control, which contains the following main points and can also be considered as a conceptual algorithm of the proposed control.

- 1) The stability of the enterprise is ensured by multi-loop control. The whole set of control loops can be divided into two groups. The first group includes model-based control loops. They carry out stochastic simulation of production and marketing of products, taking into account the uncertainty of exogenous and endogenous factors and parameters, including anthropentropy, and determine the probabilistic criteria for maintaining stability.
- 2) In the second group of control loops, a complex diagnostics subsystem operates, which, based on monitoring of exogenous and endogenous factors and parameters, makes an assessment of current real stability and a short-term forecast of sustainability or loss of stability in the current operational management and strategic direction of the enterprise.
- 3) When a tendency to its violation is detected in one of the group of control loops, a set of operational control actions or strategic decisions is formed aimed at the preventive elimination of the tendency towards loss of stability. At the same time, measures are being taken to reduce anthropentropy and limitations theory methods are used to identify weaknesses in the production system.
- 4) In the first group of control loops based on a stochastic simulation model, taking into account the uncertainty of exogenous and endogenous factors and parameters, including anthropentropy, probabilistic sustainability criteria and predicted endogenous indicators are determined in the development of the enterprise when implementing the selected set of operational control actions or strategic decisions. In this case, a forecast of the values of endogenous parameters is carried out and further and comparison with the achieved real values after a period of waiting for the results. With a significant discrepancy between the forecast and the real state, a search is made for new options for control actions at the operational or strategic level.
- 5) In the second group of control loops, the integrated diagnostic subsystem monitors exogenous and endogenous factors and parameters, as well as evaluates the current real stability and a short-term forecast of the preservation or loss of stability with the new version of the current operational management and new strategic decisions.
- 6) Next, the actions of the third paragraph of the conceptual algorithm are performed and the control cycle is repeated. During the functioning of both groups of control system loops, a single database of control actions of tactical and strategic levels, exogenous and endogenous factors, parameters and diagnostic indicators based on the use of Big Data technologies is used.
- 7) When the second group of control system circuits is functioning, it is necessary to use elements of artificial intelligence to operate the system in self-learning mode.

Thus, in the context of the digital transformation of the Azerbaijani economy for maximum efficiency at enterprises, this process should cover all areas of activity. In this case, there are both additional opportunities for maintaining and increasing the stability of the functioning and development of the enterprise, as well as new problems associated with the expenditure of resources for digital transformation, the dangers of hacker attacks and the destabilization of enterprise management. Therefore, an urgent line of research is the solution of these problems, since there is currently no alternative to digital transformation for the further development of the Azerbaijani economy and the preservation of its economic sovereignty. The complex of problems of modern corporate finance in the digital economy in Azerbaijan is largely determined by the lag in this matter, the impossibility of a one-time and quick transition of all organizations to the use of digital technologies at all levels of management and business entities. Even a simple share of reporting submitted to statistical authorities in electronic form now makes up 85% for large, medium and non-profit organizations, and more than 50% for small enterprises. Today, we are behind the leaders in the digital economy by about 5-8 years. The instability of the domestic economy and the problems formed in connection with this are even

more aggravated by the digital transformation of the economy, which affects not only Azerbaijani business, but also foreign competitors. Thus, we can note the existing need to search for opportunities to prevent the formation of crisis phenomena during the functioning of the enterprise and ensure its financial stability, due to the digitalization of the economy. Innovative technologies introduced in production and business activities enterprises are called upon to level out the possible negative impact of external factors due to the lack of stability in the economy. Highlighting the main and priority characteristics of business processes, it is necessary to highlight the most important element - the financial stability of financial and economic activities of the enterprise. The enterprise, which is characterized by high financial stability, has a number of advantages over similar economic entities in this industry in terms of attracting investments, borrowed funds, selecting the most stable suppliers, as well as staffing with qualified personnel. The centers of corporate finance in the digital economy, in our opinion, focus on the following crucial issues:

- correspondence of the content and orientation of foreign corporate finance to modern tasks and needs in ensuring sustainable economic and financial development of Azerbaijan;
- Forming a social order for Azerbaijani financial science to solve the problem of updating the content and creating an alternative to foreign corporate finance based on domestic approaches and developments;
- adaptation of the financial system and business to modern conditions in the conditions of existing restrictions, the creation of new value by expanding the number and strengthening the finances of producers, financial result, loss ratio, redistribution;
- Creation of a multilevel system of sources of financial support for digitalization processes, as well as the search for additional sources of financing for these purposes.

The enterprise, which is characterized by high financial stability, has a number of advantages over similar economic entities in this industry in terms of attracting investments, borrowed funds, selecting the most stable suppliers, as well as staffing with qualified personnel. A positive image is being formed of a company developing in a fiscal field, showing growth in profits with a simultaneous increase in tax burden, contributions to social funds and salaries of workers and employees, dividends to shareholders, which allows guaranteeing timely return of borrowed funds and their servicing. Digital technologies are most developed in the areas of government, central economic bodies, ministries and departments, a number of large companies, in payment and settlement, credit, deposit activities of commercial banks. There are inertial, technical and cost difficulties in the formation of the digital economy in Azerbaijan, which requires not only overcoming the inertia of management, but certain costs for setting up and using information technologies, as well as developing its own developments. Digitalization of the corporate finance management and decision-making process, in our opinion, reveals the problematic issues of corporate finance itself in their modern content, orientation and interpretation. Enterprises aimed at the direction of further development should analyze their own capabilities for carrying out global changes in the structure of the company and direct production. The development of the digital economy contributes to the growth of demand for products through its optimization. The introduction of digital technology will determine the fate and success of small and medium-sized enterprises. This change in the economy of our country will allow us to overcome stagnation and make a technological breakthrough. The digital economy is an unprecedented large-scale project aimed at changing the level and quality of life not only of the country, but also of an individual enterprise in particular.

4. CONCLUSION

The ICT sector plays a special role in achieving the goals of rapid development of the non-oil sector and increasing the efficiency of the economy in our country. In general, the state has the

necessary conditions and potential for the development of the ICT sector, as well as the business sector in this area. At present, the private sector dominates the sector. The analysis shows that revenues from the private sector have a positive impact on GDP growth compared to public sector revenues in the ICT sector. The expansion of opportunities will accelerate the financing of projects by collecting tokens in the direction of a creative and well-developed project with a high degree of transparency of efficiency parameters and profitability through the prism of the blockchain system. It must be emphasized that, in spite of the existing risks of implementing such systems, companies are actively introducing drivers of the digital economy - blockchain, artificial intelligence, big data, IT. The digital economy is a lo-motive for the development of companies, despite their size. Digital technologies are the tools for business, allowing you to change and manage the company in real time without the participation of a person and shifting emphasis towards the full automation of corporate business processes. The digitalization boom during and after the COVID-19 pandemic is unfolding in four technological areas. Keeping your business resilient during a coronavirus outbreak: A rapidly growing outbreak of coronavirus has hit the business hard. Many companies were forced to curtail their activities or completely shut down in an attempt to contain its distribution. Companies that are customer-oriented and manage to quickly introduce new digital technologies to solve the problems created by the new conditions are best adapted to use any emerging opportunities. It is important to create and maintain a strong and pervasive digital culture. As work becomes more distant, leadership style, mentality, habits, and ways of working become more important than ever.

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CURRENT SITUATION AND COMPARATIVE ANALYSIS OF SOCIAL POLICY IN AZERBAIJAN

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ABSTRACT

Nowadays, the social policy of states has a content that covers the most important aspects of public life. Social policy is the sum of all measures taken to address the problems of all social classes and groups in society, such as social protection, health, education, employment, etc., to resolve class struggles and conflicts in accordance with the principles of social justice and social welfare. The development of social policy is one of the main objectives because of these reasons specifically. In Azerbaijan, as in most other societies without mature welfare states, social policy has acquired new meaning in the context of economic globalization at the end of the twentieth century, and the environment of social policy has undergone serious transformations. Researches carried out in the field of social policy are important in terms of ensuring equal access of all segments of the society to social policies, finding the reflection of the social right in the society and raising healthy generations. Research in the field of social policy is important in terms of ensuring equal access to social policies for all segments of society, the reflection of social law in society and raising healthy generations. The article will first examine social policy, its history theoretically and systematically, and then examine the world experience, as well as social policies in low- and middle-income countries by other means. In addition, the study will examine social policy in Azerbaijan, its current situation, comparison with other countries and development prospects.

Keywords: *Social policy, Social justice, Welfare*

1. INTRODUCTION

Social policy refers to the whole of the measures to be taken in order to evaluate the multi-component welfare variables together and bring the society to a better position. Intense urbanization in recent years affects the access to basic needs such as education, health, housing and unemployment, which are the basic components of social welfare. Social problems such as ignorance, illness, misery and idleness, which emerged as a result of this situation, bring the issue of the effectiveness of social policies to the top among global development goals. Comprehensive and integrated social policy management and practices have become a necessity, considering the demands for better living standards in regions with high levels of welfare. Therefore, accepting the phenomenon of welfare as a whole and implementing holistic policies will ensure the efficient use of resources. In this context, sociopolitical development measurement should be brought to a comparable plane by standardizing the basic components related to social policy. The article was primarily investigated the concepts of social policy, social policy in a narrow and broad sense as theoretically and systematically. How the concept of social policy is applied by other means in low and middle income countries is examined. Then, the social policies of countries in the world - the European Union, the US - were examined. The current situation in Azerbaijan and the development prospects of social policy were examined.

2. CONCEPT OF SOCIAL POLICY

Social Policy is a broad concept that evaluates welfare in all its aspects and is an interdisciplinary field of study that is interest to citizens, policy makers and local governments.

Social policy can be expressed as a common concept that is given to all studies aimed at ensuring and improving the welfare of the society and all the academic research related to these studies (Alcock and Griggs, 2008). With the use of the concept of social policy in the writings of Homs Humphrey Marshall and Richard Titmuss, the concept took place in the literature and started to become widespread by gaining a scientific framework. As a science, social policy is frequently the subject of interdisciplinary studies. Although social policy is new compared to the basic sciences, it has a close relationship with these sciences. In this respect, social policy is not only an independent discipline, it is an interdisciplinary science that has its own methods of approaching issues. In particular, there are mutual areas of collaboration with basic disciplines such as economics, politics, law, philosophy, and sociology. Social policy uses both qualitative and quantitative research approaches (Alcock, 2011). It is observed that social policy has historically been more with interaction with sociology and economics. While sociology examines the behavior of the society, the individuals who make up the society, and its relations with the environment, the economy is mainly concerned with production, distribution and consumption. In this respect, the branches of economics and sociology address the basic issues of social policy (Güven, 2009). According to Blakemore and Griggs 6, who defined the concept of social policy as a two-way concept aimed at meeting the needs needed for the welfare and happiness of the society; Social policy is an academic branch of research, but it is a whole of policies implemented by citizens, government and volunteer organizations (Blakemore and Griggs, 2007). T. H. Marshall, while defining the concept of social policy; He stated that economic systems alone cannot reach states to their desired targets, and those social policies are policies that should be developed in order to overcome system-related deficiencies and take measures (Falkner, 2009). Titmuss, who defines social policy as the achievement of community-oriented activities to a certain target, stated that the status, experience and behaviors in the society should be positively influenced by the policies pursued and policies should touch the reality (Leibfried, 2005). The definition of social policy is shaped according to the ideological perspectives of the authors. Authors with different ideologies interpreted the concept from different perspectives and determined their limits accordingly. At the same time, ideological perspectives have been effective in shaping states' social policies (Midgley, 2008: 12.). In the social services dictionary prepared by Pierson & Thomas; "All projects and policies implemented within the framework of education, health, housing, social security, social assistance and services" are defined as social policy. According to Spicker (2008) social policy has two definitions; The first is the policies implemented for the provision of welfare and social services, and the second is the total of measures and measures taken by governments against all social problems. Considering the historical development of social policy, including narrow and broad scope is defined in two. Narrowly meaningful social policy covers only state activities and work for specific segments of society. According to this understanding, it is the ultimate goal to keep the state order alive against class conflicts in society. In doing so, it is fair between classes. Some thinkers, on the basis of all these, express social policy as a branch of science used to remove incompatibilities between the classes (Talas, 1992). Narrow policy social policy consists of that deal with the fundamental problems of the working class. Its main purpose is to reduce conflict the between labor and capital. When we look at the period that it emerged, there are important reasons for the state that some political rights will be understood to those who are privileged. Moreover, the injustices caused by the economic functioning are accepted as naturally by the bourgeois class it dominates (Koray, 2005). In this context, it is observed that narrowly working in social policies is the ultimate goal of finding solutions to the problems and crisis areas and that the work-centered studies are carried out (Yüksel: 2014). Social policy, which was handled extensively especially after the Second World War, now includes not only the workers but also all the people in the society. While only workers are included in the narrowly defined social policy, there is every class of society in need of protection under the

broader social policy. Broadly speaking, social policy deals only with social problems in society, rather than with the problems of a particular segment. It also includes public policies for the protection of individuals and groups who are dependent on society, face economic difficulties, and need support and assistance. With this expansion in the name of social policy, ensuring social equality in society has become the main goal (Altan, 2006). Broadly speaking, social policy addresses not only disputes between workers and employers, but all conflicts in society. Social policy in this sense includes activities to ensure the welfare of the society and to prevent inequalities (Talas, 1997). The topics covered by social policy have changed during the historical process. The fact that social policy covers not only workers and employers but also all classes in the society Shows the importance of this concept.

2.1. Social Policy and Welfare

The concept of the welfare state used for the countries where social policy is applied at the highest level started to be used in England in the 1930s in today's sense. However, welfare state practices in full sense It took place gradually in Europe after World War II. The radical changes such as the increase in public social spending, the development of social protection institutions, the strengthening of the organized working class and the recognition of the general voting right were effective in the development of the welfare state. In this period, the welfare state was perceived as the state responsible for the social welfare of all citizens, and especially the social rights discourse expressed by Marshall constituted the most important discourses of the welfare state (Leibfried and Steffen, 2008). As a result of the emergence of new social risks with urbanization and industrialization; Occupational accidents develop as the institutional structure of some welfare state such as sickness, old age and unemployment insurance (Flora, 1981). The development process of the Welfare State;

- The period of "starting and gaining experience" since the 1870s after the Industrial Revolution,
- The period of “consolidating” the developed applications until the late 1930s,
- The period of "growth and expansion" until the mid 1970s,
- As a result of the contraction caused by the economic crises and the comforts of high welfare.

It can be classified as the four basic periods as the “questioning and remodeling” period starting from the late 1970s and continuing to the present day (Şenkal, 2005: 272). Globalization, technological changes, changes in the family structure and demographic structure that have started to be experienced since the early 1970s have made the sustainability of the welfare states controversial today.

2.2. Social Policy by Other Means in Low- and Middle-Income Countries

Despite the recent increase in research on the provision of social policy in low and middle-income countries (Kim, 2010; Albertus, 2015; The Netherlands, 2017), we know relatively little about when and why such non-traditional social policies were repressed. Unlike most welfare states in Western Europe and North America, which have been characterized by a high degree of population coverage since the 1950s, the welfare states of many low- and middle-income countries have long been ways of engaging with workers in formal and informal sectors. For instance, in Latin America, “most governments have established vocational-based social insurance and health systems that favor formal sector workers but generally exclude informal urban workers and the rural sector” (Haggard and Kaufman, 2008). Although informal workers were not covered by traditional social policies, it may be premature to conclude that “the informal and rural sectors as a whole were excluded” from “social protection” (Huber and Niedzwiecki, 2015), as states often used non-traditional programs support the welfare of these

workers. One example of this is what Holland describes as “patience” or “a deliberate and revocable condescending attitude of the government to violate the law” (Holland, 2017) - to actions such as street trading or squatting. Furthermore, given the large rural populations in most low- and middle-income countries, they often provide wealth through land reform or agricultural subsidies (Kim, 2010; Albertus, 2015), which “can provide poor families with the opportunity to produce either for their own consumption or for the market” (Seekings, 2008). Other programs relate to both rural and urban populations, for example, by subsidizing basic goods such as food. While basic studies of the welfare state in low- and middle-income countries tend to neglect non-traditional social policies (Haggard and Kaufman, 2008; Mares and Carns, 2009; Huber and Nedzwiecki, 2015), it should not be argued that such non-traditional programs are of great importance for the “welfare state outsiders”. To some extent, they can provide all three of the basic functions of a welfare state. Government support for agriculture can provide income support, while a tacit squatter housing permit can function as a social service and, given investment in the life cycle, as a social insurance mechanism.

3. SOCIAL POLICY IN DIFFERENT COUNTRIES

3.1. European Union

Although the European Union is not a social integration, there is a social policy, if not comprehensive. This policy has followed a bumpy road over time, created by the liberal economic integration of the European Union towards the end of the 1990s. This unemployment has been translated into a policy to take non-binding measures against poverty and social exclusion (Erdoğan, 2005). The Treaty of Rome (1957) contained very few provisions in social policy. Think in terms of social policy, essentially the principle of the free movement of workers and the freedom to settle in the Common Market (Erdoğan, 2005). The Single European Law (1986) proposed a limited policy in the areas of occupational health and safety, dialogue with social partners, and economic and social integration. The Community Charter (Social Charter) on the basic social rights of workers accepted by 11 member states outside the UK in 1989 defines a set of rights that are not legally binding but are to be guaranteed by the European Union (Erdoğan, 2005). In the Maastricht Treaty (1992), social issues were regulated in the form of an additional Protocol that Britain has not ratified and a separate Agreement, which is considered part of it. In addition to the goals set in the Social Charter, this Agreement also included the improvement of employment, living and working conditions, better social protection, social dialogue, and development of human resources. Agreement social protection 21 area, has set as a policy area to be a unanimous decision by the Union (Erdoğan, 2005). The Amsterdam Treaty (1997) has a special place in social policy in general and social protection and social inclusion in particular. The new Article 13 introduced in the Treaty of Amsterdam and the Treaty on European Community addresses the adoption of provisions against discrimination and authorizes the Council to take necessary measures to combat all forms of discrimination on the basis of sex, race, ethnicity, religion and belief, disability, age or sexual orientation. However, these measures will be taken unanimously. The development of employment with the Amsterdam Treaty is included in the Community objectives. In addition, the Social Protocol was incorporated into the Treaty on European Community, thereby confirming that the social policy was the joint responsibility of the European Community and the Member States. The goals of social policy are identified as improving employment, improving living and working conditions, adequate social protection, dialogue between workers and management, developing human resources and preventing social exclusion. Social dialogue and equal treatment for women and men have also been strengthened provisions. Occupational health and safety, working conditions, integration of people excluded from the labor market, information and consultation of workers, opportunities in the labor markets and working life, after consultation with the Council, Economic and Social Committee and Committee of

Regions, after consultation with the Council, and qualified mostly determined as areas to adopt directives. The Council shall, however, with the same procedure on issues such as social security and social protection, protection of workers in the event of termination of employment contract, representation and collective defense of the interests of workers and employers, employment conditions of third-country nationals legally residing in Community territory, employment and financial contributions to create new jobs. will be able to arrange unanimously. Fees, the right to organize, the right to strike and lockout are excluded from the Community's jurisdiction (Erdoğan, 2005). Labor Movements in England- employees working in the metal machinery industry in the 1850s established some associations and the union of these associations formed the first union structures in which a privileged group was organized. Unions were organized by skilled workers, who were in high-wages, with good living conditions, and included in certain professions, to maintain their privileged positions. Towards the 1890s, the search for the masses of workers to organize was accelerated. As a result, new unionism, called New Unionism, involving low-wage workers and enabling the British working class to integrate more with union organization. Labor Movements in Germany-when we look at the workers' movements in Germany, it is seen that the idea of making international regulations regarding social policy is in those who advocate and oppose this idea, which was discussed with various political and scientific circles, especially after 1871. Those who disagree put forward two reasons. (Gülmez, 2003) The first was the diversity of national situations, and the second was the opinion that it would be difficult to implement international legislation unless an appropriate system was set up to resolve international conflicts. (Gülmez, 2003) However, the idea of the International Labor Legislation in Germany, where the first regulations on social insurance were made in Europe between 1883 and 1891, concentrated in the following years, especially among social democrats, Catholics and workers' associations (Gülmez, 2003). Labor Movements in France- social policy practices in France expanded further after the 1880s, and the law enacted in 1884 allowed workers to form unions without prior permission. Again with this law, the activities of the unions are limited to the defense of economic interests. The idea of making international regulations on labor, Christians and socialists who supported the French Parliament after 1880 defended this idea. For example, in 1884, Catholic Albert de Mun asked the French government to address the Swiss initiative in 1881 and to support international thought and support, and the right parliamentarians received the applause (Gülmez, 2003).

3.2. America

Since the beginning of 2006 and the Great Recession, the federal government has tried to tackle the economic and social impact of the recession. President George W. Bush and his successor, Democrat President Barack H. Obama, use the flickering economy to eradicate a major economic crisis. In 2009, the American Reinvestment and Recovery Act allocated \$ 787 billion to the coast of the states. The largest amount, \$ 87.1 billion, went to the states to help Medicare financing. In addition, the Complementary Nutrition Assistance Program has been allocated to other social programs, such as TANF, the US Department of Housing and Urban Development, housing assistance, energy bill assistance, public schools in low-income areas, and several low-income childcare. (Smeeding, Thompson, Levanon & Burak, 2011). So far, these efforts and others seem to prevent the country from dragging the country into a major depression, although controversial, although the economy remains unstable. Millions of workers lost their jobs as demand weakened and companies shrank or disappeared. 3.1 million jobs were lost in 2008, 4.7 million more in 2009 (Goodman & Mance, 2011). Increased unemployment pushed to respond needs for unemployment compensation, jobs retraining and services to assist local and state governments and social service organizations at economic and social risk. Social workers for their difficulties in providing services in times of crisis worked creatively and insidiously to respond to emerging challenges.

By 2013, unemployment is slowly falling, but the labor market sectors, including older workers and new university graduates, continued to face unemployment expectations. The middle class has an unknown economic future, as the labor market is changing and pensions of pensioners are threatened by irregular changes in the stock market. Social policies that address the unemployment crisis are issues in local, state, and federal policy. The corporate company and the public employee demand retirement and social assistance needs, arguing that such cruel measures are necessary to protect their economic conditions. Public services, such as retirees and social workers and teachers, increase their economic and social insecurity, resulting in job loss and reduced retirement income. Empowerment programs, such as Social Security, are the target of those who are inclined to reduce the scope of the government and are often described as failed "nanny state" experiments of conservative critics. Increasing needs and social policy challenges in areas where social workers are traditionally concerned. Twenty-one percent of children in the United States lived in poverty in 2011, a higher proportion than nearly all prosperous nations (Stanford University Center for Poverty and Inequality Research, 2012). 2012 Indiana University "White Book" "At Risk" (Seefeldt, Abner, Bolinger, Xu, and Graham, 2012) found that many states lost revenue, and as a result, "safety net" programs that traditionally supported economically and socially vulnerable citizens were interrupted. Age, ethnicity and family structure contribute to poverty. Race inequality among poor Americans is clear, 1 in 4 Hispani and African Americans live in poverty compared to 1 in 10 White. 46 million Americans lived in poverty in 2013, the largest figure in 53 years of poverty rates. Many families and children have not been homeless since the Great Depression. In 2010, 1 in 45 children were homeless (Bassuk, Murphy, Coupe, Kenney and Beach, 2010). Social security, food stamps and other programs provide a poverty-free safety net for millions of Americans.

4. SOCIAL POLICY IN AZERBAIJAN

Socio-economic policy in Azerbaijan is based on social orientation. It is not a coincidence that Azerbaijan, which is in the center of world attention due to the pace and model of economic development, is also characterized as a social state. Social policy is an integral part of the state's internal policy and is reflected in its social programs, in the regulation of relations in society, based on the interests of the main social groups of the population. The foundations of the modern social policy of the Republic of Azerbaijan were determined by the leader Heydar Aliyev. The established social policy implements the provision of decent living conditions for people, both today and in the future, through short-term and long-term programs aimed at raising the level of this position. The document, signed by the national leader Heydar Aliyev "On additional measures in the field of social protection of the population", played an important role in improving the well-being of the population at that time. A society without social contradictions is in fact a socially just society, and although the creation of such a society is the dream of any state in our time, the state has overcome this important problem. The social policy of the Azerbaijani state is a continuous and dynamic process implemented in the form of programs aimed at establishing social justice, ensuring the increase of national wealth, and the fair distribution of national wealth. The main contours and goals of social policy are fully reflected in the Development Concept "Azerbaijan 2020: Vision for the Future", approved by the Decree of the President of the Republic of Azerbaijan dated December 29, 2012 (<http://e-qanun.gov.az/framework/25029>). According to this concept, the main goal of the Republic of Azerbaijan in the field of social policy is to create a state of social security by ensuring fair social security for all groups of the population. One of the priorities in Azerbaijan is social policy. Serious infrastructure projects, higher wages and benefits, as well as steps taken to improve the welfare of the population can be cited as a logical consequence of this policy. As a result of the policy pursued by President Ilham Aliyev over the past 15 years, the average monthly wage increased by 7 times and the minimum wage by 6.5 times

(https://azertag.az/xeber/President_Ilham_Aliyev's_center_of_social_politics_in_the_center_of_Azerbaijan). Of course, the problems of the population in need of social assistance, the families of martyrs, disabled people, refugees and internally displaced persons are always in the spotlight. The first decree, signed by President Ilham Aliyev after his victory in last year's presidential election, is clear evidence of what they say about the payment of lump sum payments to the heirs of martyr military personnel. The Tariff Council is based on the appeal of the State Oil Company to increase the price of natural gas. The appeal noted that in recent years the company has invested heavily in expanding distribution networks, ensuring the sustainability of natural gas supplies and improving the quality of service. The appeal also emphasized that in accordance with the production sharing agreement, a certain part of the natural gas sold in our country must be purchased from the operating company in US dollars, and the cost of natural gas is higher than the prices regulated domestically. The appeal of the State Oil Company of Azerbaijan (SOCAR) states about the need to increase the tariff on natural gas for all consumers by 180 manat per 1,000 cubic meters. Taking into account the social policy pursued in the country and the new tariff regulation in order to socially protect the poor, social policy was taken as the basis, the approach using a differentiated tariff and the application of optimal prices were considered appropriate. Thus, the retail tariff for natural gas remained unchanged at 0.10 azn per cubic meter for consumers with annual consumption of up to 1,500 cubic meters. For part of the annual consumption of more than 1,500 cubic meters, it is set at 0.20 azn. It should be noted that the annual consumption of 62% of the population is less than 1,500 cubic meters. This means that as a result of the application of differential tariffs, there will be no increase in payments for natural gas for low-income families belonging to this category. In view of the important role of natural gas in the production of electricity in order to prevent a sharp increase in its price, the Tariff Council approved a tariff for natural gas in the amount of 120 azn per 1,000 cubic meters and 200 azn for non-resident consumers. So, the wholesale for 1 kilowatt-hour of electricity was approved at 5.7 azn, and the retail tariff was kept at 7 cents for consumers with a monthly electricity consumption of up to 250 kilowatt-hours in accordance with social policy. For part of the monthly consumption of more than 250 kilowatt hours, 11 cents. Note that, according to Azerishig OJSC, 72% of the monthly consumption of the population is less than 250 kilowatt hours (<https://www.azerishiq.az/page/strateji-yol-xeritesi>). Therefore, the use of differentiated tariffs will not affect those subscribers, including low-income families belonging to this category. The existence of a perfect union between the people and the government should ensure the democratic development of independent politics. The President of the Republic of Azerbaijan is the defender of the people of Azerbaijan, and his decisions are aimed at improving the well-being of people and ensuring their social protection. Azerbaijan is a social state, and all the steps we take confirm this. The social package that I initiated last year alone covers 4.2 million people. The regular increase in the minimum wage, minimum pension, of course, requires a large economic resource, and we are creating it. The ongoing processes related to transparency in our country, processes against the shadow economy strengthen our economic opportunities, expand our tax base, and are a very serious blow to the shadow economy (from a speech at the first meeting of the Milli Majlis of the Republic of Azerbaijan of the sixth convocation, 2020). One of the main features of the wide social policy pursued by Azerbaijan is that state aid in our country covers all sectors of the population. As the President of the Republic of Azerbaijan Ilham Aliyev noted, all citizens in need of state assistance are supported by the state. In this regard, it should be noted that the Azerbaijani government regularly takes serious measures to improve the situation of increase employment. Of particular note is government support for solving the problems of refugees and internally displaced persons, who are the most vulnerable part of the country's population.

5. CONCLUSION

In developing countries, social policy is considered as temporary practices and as an individual state expenditure rather than a material-moral investment by the state to its citizens. It would not be wrong to say that social policy, as a general characteristic of these countries, has been neglected by a series of limited measures designed to overcome the negative impact of structural harmony between certain segments of society. When social policy is neglected to a significant extent, millions of individuals, who make up the vulnerable population need the support of the state, struggle in a difficult situation under the shadow of social problems. In developing countries such as in Azerbaijan, examining the issue in the context of the development and enrichment of existing regulations in social policy always appears to be a meaningful effort in the context of social workers' advocating for the rights of the victims. In this study, it is highlighted to search for new ways and develop innovative perspectives to expand the scope of social policy and social services. As a result of the implemented socio-economic development policy and social projects, the welfare of the Azerbaijanis has increased, employment level has and unemployment has decreased significantly. Attention should also be paid to the progress made in poverty reduction in recent years, which is considered as one of the main indicators of high social security. The main purpose of state policy is to completely eliminate poverty in our country. And this manifested itself in a very short time, when the poverty rate fell from 50 percent to 5 percent.

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THE ROLE OF CLUSTERING IN INCREASING EXPORT POTENTIAL IN AZERBAIJAN

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ABSTRACT

As it is known, foreign trade is of great importance for small but resource-rich economies like Azerbaijan. To ensure continuous and sustainable development in the economy, the rational use of oil revenues plays an essential role in the growth of the non-oil sector and the development of non-oil export potential. One of the geo-economics ways to increase export potential is by clustering of economic activities. The purpose of this study is to assess the role of clustering in increasing the export potential in Azerbaijan and to develop proposals in this direction. The research focuses on studying practices of clustering in different economies around the world and evaluate their potential use in Azerbaijan. In addition, the identification of promising application fields by assessing the potential of clustering in different regions of the country, are encouraging early steps in this direction. Clusters are the grouping of interconnected industries in the region that serve to increase the wealth of the population through the export of goods and services. The fact that clusters cover all links in the supply chain, and incorporate support services and dedicated infrastructure, distinguishes them from traditional practices. The geographic concentration of such clusters in areas with a high flow of goods and services create added value for the country's economy. Clusters are formed by companies and enterprises that operate in the same geographical areas and have certain similarities, associations or operation links in trade and production. Another important advantage of clustering is the creation of broad innovation development opportunities. Today, all over the world, clusters are considered to be one of the most effective forms of innovation vehicle. The merger of companies in the form of clusters prevents the spontaneous accumulation of different inventions and creates a well-balanced system for distribution and transfer of innovation, new knowledge, and technology capabilities.

Keywords: *foreign trade, clustering, export potential, supply chain, clustering policy, innovations*

1. INTRODUCTION

The cluster model is a mechanism that has been in place since the 1960s and 70s and is economically important in most countries where it is applied. Clusters – are systems consisting of business entities that are operating in the same or similar sector and are running related or complementary activities in the same geographical area. They share common infrastructure, technology, and single market, labor and services, and build opportunities for mutual trade, communication and dialogue. At the same time, the clusters are intended to ensure both competition and cooperation between small and medium enterprises. Entrepreneurs operating in a similar field, both compete and act together in the same cluster. Operating within such a system gives small and medium-sized businesses a competitive advantage. As a result, the application of this system reduces the costs of businesses, expands marketing opportunities, increases productivity and exports, strengthens research and development capabilities. This leads to the launch of new products, and the establishment of new companies. It helps to increase employment rate, boosts regional development and the improvement of infrastructure services. Clusters are the grouping of interconnected industries in the region that serve to increase the wealth of population through the export of goods and services. The fact that clusters cover all links in the supply chain, and incorporate support services and dedicated infrastructure, distinguishes them from traditional practices. The geographic concentration of such clusters in areas with a high flow of goods and services create added value for the country's economy. Clusters are formed by companies and enterprises that operate in the same geographical areas and have certain similarities, associations or operation links in trade and production. One of the most important aspects of clusters is that, all the participants within a cluster complement and compete with each other at the same time. In addition, clusters shouldn't only be limited to the companies within them. The concept of clustering is to involve wide range of participants from other sectors, enterprises, and institutions that can also help to create added economic value for the cluster. For example, a cluster of household goods production does not just include enterprises that are engaged in the production, but also suppliers, enterprises operating in ancillary industries, equipment manufacturers and other entities that provide the necessary infrastructure. As well as, customers, retailers, and manufacturers of complementary goods are part of such a cluster. In contrast to the institutions that are created by external intervention, clusters are systems formed by the enterprises themselves based on their close geographical location and competitive capabilities, and most importantly without any external interference. This makes clusters stronger and more stable against foreign markets.

2. CLUSTERING APPROACH

Clustering is the geographical concentration of (i) enterprises, (ii) specialized suppliers, (iii) firms from related industries, and (iv) supporting institution (universities, vocational schools, trade unions, etc.) that operate and corporate with each other in the same field, and at the same time are independent and competitive against each other (Porter). Clusters are considered to be a successful mechanism in creating competitive business landscape by increasing the effectiveness of relations between geographically close entities. The key differences of the clustering approach from the traditional sector development are:

- in clustering, firms do not duplicate each other within the certain geographical boundaries, but complement and support each other within the same value chain
- each firm creates an added value in the link to another in the value chain,
- the production and services sectors operate under the same umbrella,
- and all the steps that are required to realize the final product takes place in the same location.

With a support of state incentives, enterprises that make significant profits in a short period of time within a certain geographical region are, in the long run, more likely to urge the need for further growth and expansion to the regions in which their competitors operate. The main reason for this is that, it is easier to establish contacts with specialized and professional suppliers of relevant fields, access to quality manpower, and technical knowledge and support in the regions where the clusters are located. In return this helps to increase the productivity and supports the economic development. The fact that competing companies operate in the same environment makes it easier for customers to choose the most affordable option in the region according to their needs. This leads to the competition between enterprises to further grow and the introduction of unprecedented innovations to accelerate. Thus, enterprises become more competitive in both local and global markets. Clusters can be conditionally grouped by their type as follows:

- Geographical clusters - formed as a result of the joint activities of the network of businesses, manufacturers, suppliers and other related entities in the same region.
- Sectoral clusters - created by a network of businesses operating in the same sector.
- Horizontal clusters - formed as a result of joint use and sharing of material and human resources, as well as through the organization of joint sales of manufactured products.
- Vertical clusters - formed by the links of supply to move goods and services from production to end consumers.

Clusters can have very different structures. However, the typical key players are end product manufacturers, specialized raw materials or semi-finished products, equipment, spare parts and other product suppliers, financial institutions, customers, specialized infrastructure service providers, and education, research and technical support organizations, and standardization agencies. Enterprises within the cluster can operate without losing their independence, and at the same time by implementing infrastructure projects for joint use (e.g. research centers, laboratories, warehouses, etc.). This provides enterprises with an opportunity to cooperate in the entire value delivery process- from the supply of raw materials to the launch of the product- from which they gain an access to cheaper resources, wider product launches, participation in international exhibitions and expanded export opportunities. As a result, while the value added to the products and services rise, the cost remains relatively low. The following participants are mainly involved in the formation of clusters:

- Small and medium business entities;
- Service providers (private and public);
- Education and research centers;
- Entrepreneurial groups (associations);
- Large business entities;
- Financial institutions and banks;
- Non-governmental organizations (NGOs);
- The state.

In a cluster, small enterprises can easily gain access to the knowledge and expertise of other enterprises. In addition, an exchange of experienced specialists among enterprises triggers a positive impact on work efficiency. Thus, clusters promote establishing exchange of information and forming cooperation between the network of enterprises. This creates a shared source of knowledge that emerges from the collected experiences of enterprise's, which all of the players can benefit from. In addition, clusters provide an opportunity to focus on specific areas within the cluster, rather than on all, which is a manifestation of the division of labor that emerges as a result of enterprise cooperation.

Another advantage of clusters is that, it helps to increase the competitiveness and overall development of enterprises. It provides a platform to easily address the challenges ahead. Identifying common needs, difficulties and shortcomings, creating conditions for taking more purposeful steps in getting support of state and other institutions, and more effective decision-making, stimulates the development of the enterprises within the cluster. One of the important points is that it is convenient to establish closer relations between universities and other educational institutions and industrial enterprises within the clusters. Competitive and interconnected organizations that are gathered in the same field and in the same geographical area facilitate the establishment of educational institutions in the region that will then contribute to the development of the field. Examples include the location of Stanford University near the Silicon Valley cluster, or location of clusters specialized in innovative technologies to be around the Massachusetts Institute of Technology (MIT) and the University of Cambridge.

3. CLUSTERING PROCESS

The clustering process can be divided into 4 stages:

1) Activity of enterprises in the same region

In the first stage, enterprises have nothing to do with each other and deliver their products directly to consumers in any region. At this stage, in order to create clusters, first of all, the highly competitive areas and their number should be identified, and the current state of enterprises and their relations with those operating in other areas should be analyzed.

2) Emerging clusters

In the second stage, the area where the clusters will be organized is determined. Government incentives and random formation of local social activities forms spontaneous clusters around the existing natural resources in the region. If one of the enterprises receives an order exceeding its production volume, it may negotiate with one or more of the neighboring enterprises producing similar products in the region and offer to produce the order together.

3) Emerging clusters

In the third stage, clusters will be developed with the help of other social mechanisms. For example, suppose there are 5 yarns, 15 fabrics and 25 knitting shops in one region. A fabric manufacturers' association is established, in which 80% of these workshops are members. There is also a university, located in the region, provides textile engineering education. Based on a project granted by the association to increase the potential of textile producers in the region, the university's laboratory will be reconstructed and provided with the necessary experimental equipment for textile production. At this stage, the support of various institutional mechanisms such as NGOs is widely used.

4) Formed clusters

In the fourth stage, the full formation of the cluster is completed; and companies, educational institutions, chambers of industry and other institutions operate harmoniously within the cluster. One of the most important points in the process of cluster development is the identification of an Agent. The Agent is appointed by the authorized body implementing the state policy in the relevant field, in order to coordinate and develop the activities of the cluster. The core responsibility of the agent's is to define and implement the cluster development strategy, over a period of time. The agent, who specializes in industry, especially small and medium-sized enterprises, deals with building and developing relationships between enterprises within the cluster, increasing credibility among entrepreneurs, and addressing other issues. Once the agent has been identified, it is important to conduct a detailed study of the economic situation in the following areas:

- Study of the socio-economic and institutional environment of the region to be clustered;
- Identify potential opportunities and areas for incentives;
- Establish institutional credibility between the cluster agent and the cluster participants;

- Strategic planning and action plan.

After conducting cluster research, the future development directions of the cluster are determined. These trends are regularly reviewed and adapted to changing conditions. The action plan includes measures to be taken to achieve development goals. The implementation of the measures envisaged in the action plan starts. The agent assists the development of the cluster by overseeing the overall activities and process. At the next stage, the cluster activity is constantly monitored and evaluated.

4. THEORETICAL AND METHODOLOGICAL VIEWS ON THE CLUSTER

M. Porter, the first researcher of the cluster, distinguishes three main types of clusters and notes that the existence of different types of clusters depends on the characteristics of the regional economy. The first type of clusters unites local industries and offer products and services in the local markets of the cluster. These types of clusters are usually formed in proportion to the distribution of the population in the region, and include local health services, utilities, retail, construction services, construction materials production, and so on. The second type of clusters mainly consists of resource-dependent enterprises located in areas with the most essential natural resources. An example of this is clusters of extractive industries. The third type of clusters is created to increase the competitiveness of such enterprises. Such clusters are based on enterprises united by professional types. These clusters are not dependent on natural resources. They sell their products and services in different countries in some cases [2]. According to Porter, the creator of the concept of "cluster", regional clustering is the regional concentration of the enterprises that are working in the same field and corporates with each other, and also are interdependent and competing, as well as their suppliers, and supporting institutions (universities, vocational schools, trade unions, etc.). The main differences between the clustering approach and traditional sector development is that, within certain geographical boundaries firms are complementing and supporting each other, but not duplicating one other. In such a structure, each firm forms a link in creating value to another in the chain, and both service and manufacturing sectors operate under the same umbrella and in the same location in order to realize an end product. Clustering can be organized based on both by sectors and geographical features. In practice, mixed models are also possible. By taking into account the characteristics of specific geographical areas to form field clusters is widespread in practice. Marshall laid the foundations of modern cluster theory in his book "Industrial Zones and Foreign Economies 1890-1920". According to Marshall:

- smaller firms engaged in similar activities can come together to share their resources
- to share their experience and knowledge,
- and also strengthen the regional development of the industrial sector by expanding their specialization in the field.

It is not the mandatory legal norms that unite the actors in the cluster, but the desire for trust and cooperation between them. In this business format, the central focus is always the private sector, and the remaining participants work for the development of that sector. In practice, the cluster is composed of 3 basic elements: firms (including all production, service and supply firms), supporting institutions (chambers, media, VC, associations, etc.), educational and research institutions, vocational schools [15]. According to the OECD approach, clustering involves firms that specialize in specific areas, focusing on a regional scale and doing business with supporting organizations on a horizontal and vertical basis. The organization's experts believe that the introduction of a cluster mechanism is very important to ensure balanced regional development. The development of clusters requires intensive and effective cooperation between business and local institutions, as well as between local and central authorities.

Table 1: Different approaches to the cluster

N	Author	Province	Source	Appointment
1	2	3	4	5
1.	Porter	1990	The competitive advantage of nations [5]	An industrial cluster is a chain of industries united through buyer-supplier or supplier-buyer relations, or through joint technologies, joint purchases or dispersal, or joint labor unions.
2.	Schmitz	1992	On the clustering of small firms [6]	A cluster is a group of enterprises belonging to the same sector and operating in a narrow proximity to each other.
3.	Swann and Prevezer	1996	A comparison of the dynamics of industrial clustering in computing and biotechnology	Clusters - groups of companies within the same industry, located in the same geographical area.
4.	Enright	1996	Regional clusters and economic development [7]	Regional clusters are industrial clusters in which participating companies are in close proximity to each other.
5.	Rosenfeld	1997	Bringing business clusters into the mainstream of economic development	A cluster is a concentration of companies that can create a synergistic effect, due to their proximity in a certain geographical area and interdependence, even though their employment volume may not be distinct or visible.
6.	Porter	1998	On competition	A cluster is a geographically close group of combined companies and interacting institutions in a specific area, connected by certain communities and complements.
7.	Feser	1998	Old and new theories of industry clusters [8]	Economic clusters are not only unified and helping industries and institutions, but rather unified and helping institutions that are more competitive based on their interconnections.
8.	Swann and Prevezer	1998	The dynamics of industrial clustering	“Cluster” refers to a significant group of companies in combined industries in a single locality.
9.	Elsner	1998	An industrial policy agenda 2000 and beyond [9]	A cluster is a group of companies that are functionally connected both vertically and horizontally. Functionality as an approach indicates the quality of existing relations between companies and institutions that support the cluster, and such relations are established through the market.
10.	Steiner and Hartmann	1998	Learning with clusters	A cluster is a chain of complementary companies (in the field of production and rendering of services) of social, private and semi-public research and development institutions, which are combined by the labor market and / or input-output relationships, and / or technological relations.
11.	Roelandt and den Hertag	1999	Cluster analysis and cluster-based policy making in OECD countries	Clusters can be represented as networks of manufacturers of products and services, companies that depend on each other (including specialized suppliers), combined with each other in the value chain of production.
12.	Simmie and Sennett	1999	Innovation in the London metropolitan region	An innovation cluster as a significant number of related industrial and / or service firms with a high level of mutual cooperation, usually through the supply chain of products, and operating in equal market situations.
13.	Bergman and Feser	1999	Industrial and regional clusters [10]	Industrial clusters can be established in a general guise as a group of commercial companies and non-profit enterprises, for which participation in the group is an essential element of the personal competitiveness of each member of the company. The cluster is joined together by the purchase and sale transactions or joint technologies, joint customers or distribution centers of goods and services, or labor unions.
14.	Bergman and Feser	1999	Industrial and regional clusters	Regional clusters are industrial clusters that are concentrated in a geographically defined area, usually within a region that organizes a frontier area, labor market, and other functional economic organizations.
15.	Egan	2000	Toronto Competes	A cluster is a configuration of an industrial organization, which depends on networks of highly specialized, interconnected small and medium-sized businesses and public sector organizations, whose final products make their way to markets outside the borders of the main (metropolitan) region.
16.	Crouch and Farrell	2001	Great Britain: falling through the holes in the network concept	The cluster concept offers something more extensive: a tendency for companies of a similar type of enterprise to be located close to each other.
17.	Van den Berg, Braun and van Winden	2001	Growth clusters in European cities	A popular definition is that a cluster is very closely related to the local or regional scope of networks ... Most of the definitions imply the concept of clusters as localized networks of specialized associations, whose activities in the production of products or services are closely related through the exchange of these goods, services and / or knowledge.
18.	OECD	2001 2002	World congress on local clusters Regional clusters in Europe [11]	Regional clusters are classified as geographically narrow concentrations of interconnected companies and can be used as a nodal word for older concepts like industrial areas, specialized industrial compact clusters, and local production forces.
19.	Visser and Boshma	2002	Clusters and networks as learning devices for individual firms	Clusters are defined as the geographic concentration of companies involved in a similar and cohesive process of active interaction.
20.	Andersson et al.	2004	The cluster policies white book [12]	General clustering is presented as a process of joint location of companies and other influential individuals within a concentrated geographic area, congestion around an established functional niche and identification of close relationships and labor unions to deepen their overall competitiveness.

Based on the above, it can be determined that: a cluster is a concentration in a certain geographical area of highly specialized, interconnected companies that have key success factors aimed at creating competitive advantages. In many definitions of a cluster, there is the concept of competitive companies, between which there are certain relationships. It should be noted that competitiveness cannot arise on its own and cannot be taken in its pure form from nowhere. So, the key success factors (KFU) is the very source from which competitiveness is then formed. KFU - these are elements that ensure the success of the company, in other words, all that contributes to increased profits. Among the KFU include strategy; properties of goods, on the basis of which consumers choose a brand or supplier; resources and opportunities that ensure companies victory in the competition; professional experience, performance, actions to achieve sustainable benefits. The competitiveness of the company and profit depend on KFU. Based on the foregoing, the author in the definition of a cluster introduced concepts such as key success factors. The cluster focuses on rivalry within the sector. It consists of a variety of functional persons, resources and types of production activities that are rallied together for the development, production and trade of various goods and services. The critical mass in the value chain makes companies more competitive because they draw preferences from the general labor market and other factor conditions. A cluster is usually not spatially riveted to any urbanized area. In contrast to the regional cluster, it has the tendency to exist within wider boundaries, perhaps even covering the whole region or country "Automotive clusters in the regional economy" / Yuri Ryabchenyuk, deer. National Institute of Competitiveness, www.Avtoprom.com. The study of the most important concepts of competition and the world experience of economic activity allows us to conclude that the theory of clusters created by M. Porter and other scientists underlies the development of the most prosperous companies and economic systems. Nowadays, clusters connect the most productive and interconnected picture of economic activity, grouping successfully competing companies that form the leading component of the entire national economic system of the country and ensure competitiveness in the industry, state and international markets. Cluster initiatives, first used in studies of the competitiveness of some groups of manufacturing enterprises, over time began to be used in solving an increasingly broad range of tasks.

5. CLUSTER-BASED REGIONAL DEVELOPMENT: WORLD EXPERIENCE

In connection with the creation of clusters in a country, the experience of some countries in this field was studied. It has been identified that the cluster model is a mechanism that has been applied especially since the 1960s and 70s. Clusters took very important economic position in the most countries where it is applied. A high level of interaction among the enterprises within the cluster, results with the reduction of a number of additional costs and allow the production of a product to be completed at a lower cost. Selection and provision of effective mechanisms of actions within the cluster model creates conditions for the interaction of various factors, a synergistic efficiency [4, p. 245]. Examples of countries with the best development of clusters are Italy, Germany, England, Sweden, Japan, France, USA, China, India, Pakistan, Brazil, Mexico and others. By purpose, clusters cover all areas of industry and stimulate the production of high-tech products in Singapore, Malaysia, Taiwan and other countries. Some European countries are examples of clusters engaged in traditional industrial production. Various sectors in Italy including textiles, leather, jewelry, optical glass, etc., hold an extensive experience in clustering and carry out large-scale exports of high-quality products. One of the main reasons for Italy's global popularity as "Made in Italy" is the existence of developed clusters in this country. Application of clustering model lead to the successful positioning of Italy as a global leader in the cosmetics and textile industries with the production for the both national and global brands such as Gucci, Armani, Prada, Fendi, Valentino, Yves Saint Laurent, Burberry, Diesel, Christian Dior etc.

This helped the country to gain an ability to compete with the large-scale production capacity of the Asian countries. Examples of well-known Italian clusters are Prato (wool knitwear), Treviso (weaving), Reggio Emilia (agricultural machinery), Bologna (automatic machines) and others. In Sweden, more than 50% of total exports (transport, forest products, metals, etc.) are carried out through industrial clusters. Tuttlingen (surgical equipment), Munich (automobile) and Frankfurt (chemical products) are well-known clusters in Germany. In the United States, Silicon Valley is one of the world's best-known clusters for ICT, Hollywood for entertainment, New York's financial markets, and North Carolina for furniture. Clusters also play an important role in the economies of many developing countries. Examples of these countries are Brazil (leather and leather shoes), Mexico (mechanical engineering, footwear), India (knitwear, traditional ready-made clothing, jewelry and leather goods, leather and leather products, handicrafts, etc.). And as part of the study Greenbook 2.0 in 2012 [13] was identical 2580 clusters worldwide have been cited. Currently leading world economies are half clustered and over 100 countries and regions have one or another cluster policy option [14]. Such states support the development of clusters through economic policy instruments and investment incentives and take various measures to develop the business environment. Currently, in many countries of the world, regardless of the level of development of global competition, the issues such as ensuring the competitiveness of small and medium enterprises, acquisition of raw materials, innovation in production, sales and marketing, as well as other economic entities can be easily overcome by establishing an active cooperation within and outside of the clusters. If we turn to international experience, we can see that states are not directly involved in the creation of clusters. Clusters are formed over a long period of time and there is no experience of creating clusters with any government intervention. However, in the world practice, the support of emerging and formed clusters by states through various measures can be found. Providing soft loans to entrepreneurs operating in the cluster is one of the main support mechanisms. When analyzing the experience of different countries, it is easy to see the characteristics of clusters. The most important feature is geographical concentration. This factor primarily indicates the availability of equal access to specific natural resources, human and financial resources at the local level. Research shows that the leading participants in the clusters are geographically close to each other. According to the latest data, 61% of clusters in the world are located within the same city or metropolitan area, and 20% within the same region or state. Only 19% of the cluster covers different regions or countries. The second important feature is the wide participation in the process. A study of 280 clusters worldwide shows that 42% of them have up to 100, 14% up to 200, 10% up to 400, and 25% more than 600 firms. There are many huge clusters in the world. For example, in the Prato region of Italy, the clothing cluster covers 9,000 companies. The third sign is specialization. The role of all actors involved in the production of end products in the same geographical area is fully known, each of them specializes in a specific activity. The fourth sign is innovation. All the entities operating within the clusters themselves are proactive and have the necessary knowledge of new ideas, and the geographical environment around them that provides them with the necessary opportunities to benefit from innovations. The existing research institutes in the area as partners, provide entrepreneurs with the most important innovations related to scientific and technical innovations. The fifth sign is the presence of communication and interaction between different participants. In order to ensure the continuity of the process, the production of quality products in accordance with market requirements, constant communication and interaction between the producers of the final product and service organizations is inevitable. Finally, the existence of competition and cooperation should be emphasized as a last point. Entities operating in clusters are in one hand in constant competition with each other to demonstrate that they contribute more to the final product and in accordance to make more profit from their contribution, and on the other hand holding a responsibility and obligation for the end product lead to the

formation of a cooperation between them. An analysis of the experience of different countries reveals many key advantages of the clustering approach compared to the traditional approach of economic development. For example, the promotion of investment expansion at the regional level, effective public-private partnership, rapid development of SMEs, facilitation of access to business resources, sharing of a large number of business structures with quality infrastructure are possible within the clusters. In some parts of the world, especially in European countries, official attention to cluster-based economic development has been felt since the early 2000s. About 17-18 years ago, national cluster development programs were adopted in about 20 countries of the European Union. After that, a network of organizations related to the development of clusters within the Union began to form. Clusters include institutions such as the European Cluster Observatory, the European Group on Cluster Policy, the European Cluster Alliance, and the Cluster Innovation Platform as key organizations providing information, knowledge, and advisory services. These institutions carry out key activities such as mapping clusters across EU regions, exchanging experiences between clusters, developing development initiatives for cluster development, building knowledge and skills, and consulting. In some European countries (for example, Norway and Denmark) there are special programs for training cluster managers. According to the latest data, 38% of the employed population in the European Union work in industries and enterprises covered by clusters, but in some regions this figure reaches 50%. The highest concentration of employment in the cluster category was recorded in tobacco, footwear, fishing, oil and gas, clothing, automobiles and leather processing. The concentration of employment in these sectors varies in the range of 50-80%. OECD statistics show that in some European countries, the share of clusters in the economy is very high, both at the national and regional levels. For example, 199 industrial clusters in Italy account for 40% of industrial employment, 12 giant clusters in the Netherlands account for 30% of industrial GDP, and 154 regional clusters in the UK account for up to 40% of regional employment. In the United States, clusters also play an extremely important role in economic development. 36% of the economically active population works in enterprises included in the clusters, and 97% of all patents in the country belongs to the clusters. In addition, research shows that there is a direct link between the country's innovative development and cluster development. For example, the United States is the world leader in terms of the total number of clusters (there are 380 clusters), and this country also ranks first in the ranking of the global innovation development index with a coefficient of 0.577. Or Italy ranks second in the world in terms of the total number of clusters (208 clusters operate) and is also ranked second in the ranking of the global innovation development index with a coefficient of 0.500. The next countries in terms of the number of clusters and the level of innovative development are Finland, Great Britain and France. In modern conditions, clustering can take place in any field - both high-tech sectors and traditional sectors (service sectors such as industry, agriculture or tourism). In the experience of developed countries, there are four approaches to government policy in relation to clusters: country-wide cluster support, SME-focused support programs, targeting the development of regional clusters, supporting clusters based on industry-university cooperation (such clusters are usually established at universities). The main difference between regional and sectoral clustering is that, the sectoral clusters bring together key players of a sector to produce a specific product or service, in which case the economic potential of the site is not the main goal and the geographical proximity is not an absolute criterion for such clusters. In regional clusters, the geographical proximity of all actors involved in the production process, the selection of regional development as one of the main goals of clustering policy, and the formation of a favorable environment for economic development in the region are at the forefront of policy.

Porter divided the regional clusters into 3 categories:

- "Local industrial-based clusters". They mostly offer products and services within the region in which they operate and have limited competition with other regions in the fight for markets. Such clusters typically specialize in the service sector
- "Source-dependent clusters". Such clusters are usually based on the natural resources of the region in which they operate (coal, oil and gas, forest resources, precious metals, etc.). Such clusters are forced to compete in both domestic and foreign markets to sell their products.
- "Net trade oriented" clusters. These clusters are formulated with the goal of proximity to both resources and markets, as well as the production of all kinds of products and services. Porter presents this model as the most competitive clustering model.

In some cases, the concept of "competitiveness" of the regions is equated with the competitiveness of a particular firm. However, according to Porter, the competitiveness of the regions does not mean that any firm competes for production, but to create an environment for more favorable business and higher living conditions. There are "good practices" in the formation and development of regional clusters on the example of different countries. Turkey's experience as a country that has achieved great success in this field in recent years is remarkable. Michael Porter, the main creator of cluster theory, was invited to the country in 1999 with his research team to assess the potential for clustering of the country's economy as part of the "Turkey's Competitive Advantage Project". As a result of these activities, a "National Competitiveness Research Association" was established in the country in 2003, followed by the adoption of clustering as one of the main goals in the SME development strategy adopted in 2007. Development of economic models for clustering in 36 regions was provided. As a result of the assessment of Turkey's competitive advantages in various sectors, 32 cluster categories and regions with conditions for the superior development of each cluster were identified. Each of these experiences is very valuable for the development of regional clusters in Azerbaijan, and the next article will analyze the opportunities and obstacles for the development of clusters in our country.

6. POSSIBILITIES OF APPLICATION OF THE CLUSTER MODEL IN THE INDUSTRY OF AZERBAIJAN

At this stage, two important challenges are very important for the Azerbaijani economy. It is a matter of eliminating inequalities in regional economic development, as well as increasing the competitiveness of the economy. The study of good practices shows that, the solution to these two fundamental economic problems can be achieved through a successful implementation of clustering approach. Although the Azerbaijani government has implemented various programs with regional development over the past 13 years, an analysis of official statistics shows that so far, the contribution of the regions to economic development is quite small. The regions account for about 24-25% of the value added to the economy, 5-6% of tax revenues and 3-4% of exports. In particular, the limited number of businesses producing export-oriented products in the regions, indicates that the development of competitive business in the regions should become one of the main goals. The algorithm for creating regional clusters can be implemented sequentially in 3 main stages (Table 2).

Table following on the next page

Table 2: Algorithm for creating regional clusters

First Phase	To justify the need to create a cluster
	Identify cluster potential of regions and identify cluster initiatives
	Development of programs for implementation of regional cluster projects
Main Phase	Establishment of a coordination center
	Defining the goals and objectives of the cluster
	Identification of cluster participants
	Development of communication between the key players of the cluster
	Implementation of the cluster development program
Final Phase	Evaluate the effectiveness of the cluster
	Correction and improvement of cluster development program

Clustering is the process of making political decisions, developing strategies, identifying cluster potential, and creating highly competitive clusters. Supporting the dynamic interaction of large and small businesses, universities, participants in the innovation system, financial institutions on the basis of cluster strategy at the regional level provides dynamism to the economy as a whole, increasing its competitiveness. The most economically viable direction of small business development in our country is the integration of large business through the formation of clusters [1]. It should be noted that there are already areas in Azerbaijan similar to the vertical industrial cluster model. Examples are the steel industry, the petrochemical industry and others. However, although it covers the supply chain from the production of products to the final consumer, it is difficult to call these structures clusters, as they do not cover all the qualities of clusters. Nevertheless, it is possible to start implementing a cluster mechanism in Azerbaijan using legislation and government programs, as well as existing institutional mechanisms, to support entrepreneurship. In particular, it is important to select clusters, to identify areas in the regional economy that are relatively competitive and where maximum results can be achieved in the short term with government support. At the same time, public-private partnership is important in the clusters to be supported. For this purpose, the active participation of the National Fund for Entrepreneurship Support of the Republic of Azerbaijan, "Azerbaijan Investment Company" OJSC, as well as large companies operating in the country in this process can lead to the positive results. The formation of clusters is important in terms of creating new industrial jobs in the country, expanding industrial production in the non-oil sector, developing industry-related services, supporting the activities of small and medium enterprises, improving industrial infrastructure and socio-economic development of regions. Considering the internal potential and experience of the regions, important steps must be taken to establish special clusters for each region, diversify, represent new products and services in domestic and foreign markets, and thereby increase production and exports in the non-oil sector. However, it should be noted that the establishment of clusters is not easy in countries such as Azerbaijan, where the tendency for individual development is stronger. Thus, national characteristics must be taken into account, and the process of clustering must begin after sociological research. The desire of small and medium-sized businesses to achieve results in a short period of time is one of the factors that can prevent clustering. Because this process requires a long-term strategic approach. In order to promote the clustering process, it is important to identify cluster agents and convince the participants of the cluster system of its prospects. In this regard, meetings and discussions with small and medium entrepreneurs specializing in relevant fields should be organized and they should be informed about the effectiveness of clustering. At the same time, in order to study the prospects of clustering in the country, the Research Institute of the Economic Reforms within the Ministry of Economy and Industry should analyze the economic situation in the relevant regions and identify areas suitable for cluster creation. After that, cluster agents can be assigned.

The scientific potential of the institute allows for the successful implementation of the planned applications. Taking into account the internal potential of the regions and the formed experience in the field of industry, in the future the production of furniture, production of decorative-applied folk art products with national ornaments (carpet weaving, kalagai, pottery, ceramics, weaving and embroidery, jewelry, artistic glass, artistic carving (wood, metal, stone, bone carving, etc.)), footwear and leather processing, silk and textile products, fruit and vegetable processing and canning, construction materials production, as well as the creation of industrial clusters in other areas would be viable applications. In addition, we propose to create at least 1 industrial district in each economic region, including cities in order to support clustering by the state, reduce infrastructure costs in the organization of the production process, and strengthen cooperation, as well as the development of small and medium enterprises. As it is known, in accordance with the “Action Plan on declaring 2014 as “The Year of Industry” in the Republic of Azerbaijan”, initiatives have been started to establish an industrial district in Neftchala region. As a continuation of the work done, industrial districts can be established in Sumgait, Masalli, Shirvan, Agdam, Ganja, Sheki, Shamakhi, Mingachevir, Guba and Lankaran. Considering the potential of small and medium-sized entrepreneurs specializing in the furniture industry in Sumgait and suburbs of Baku and the dynamic development of furniture production in our country, and in line with the Decree of the President of the Republic of Azerbaijan No. 288 of October 8, 2014 "On the establishment and organization of the activities of industrial districts", we consider it reasonable to submit proposals to the President of the Republic of Azerbaijan on the establishment of an industrial district in Sumgait. The establishment of industrial districts is an important contribution to the development and efficiency of industries, efficient use of land and other resources, support for small and medium enterprises, employment in industry, as well as support and development of clustering, as part of the diversification and industrialization policy of the country's economy. In this regard, it may be useful to develop cooperation with some international organizations, including the United Nations Industrial Development Organization (UNIDO), in order to further study the international experience of industrial clusters and apply it in our country.

7. RECOMMENDATIONS

- Taking into account the above, we consider it important to implement the following measures to support industry and create clusters in the Republic of Azerbaijan:
- Establishing cooperation with international organizations in order to apply the cluster model in key industries in Azerbaijan;
- Taking measures to create and improve the regulatory framework;
- Analysis of the economic situation in the regions by sectors and identification of areas suitable for cluster creation;
- Organization of meetings and discussions, initially with the participation of small and medium-sized entrepreneurs specializing in the furniture industry;
- Consideration of the provision of soft loans by the National Fund for Entrepreneurship Support as a stimulus measure to promote clustering.
- In an environment where the development of small and medium enterprises is weak, the opportunities for cluster-based development are very limited.
- Cluster development potential is weak when innovative development is not supported.
- Clusters cannot be formed without partnering with universities and research institutes.
- The development of territorial clusters is impossible without the development of human capital.
- Without the cluster maps and the strategy that includes the key performance indicators allowing to evaluate the criteria, principles and results of clustering, the success of cluster policy in the is hampered.

- Improving the competitiveness of the regions depends on the application of the cluster mechanism.
- In developed countries, the share of clusters in the regional economy is very high, and in some OECD countries the level of this indicator is around 40%.
- Although the cluster mechanism can be applied in any sector of the economy, in recent years the traditional areas are being replaced by innovation and high technology.
- Development of territorial clusters is possible only in the conditions of high specialization within the regions

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ASSESSING THE IMPACT OF FOREIGN TRADE ON SOME SOCIOECONOMIC INDICATORS: CASE OF AZERBAIJAN

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ABSTRACT

The paper investigates impact of import, export and liberalization rate of foreign trade on poverty, employment and income inequality. For this purpose, Dickey-Fuller test and Granger causality tests were applied. The author comes to the conclusion that there is not causality relationship between foreign trade indicators and poverty rate, but there is such relationship between foreign trade indicators and household income.

Keywords: *import, export, liberalization, poverty, granger causality, income inequality*

1. INTRODUCTION

One of the important factors for economic development for any country is foreign trade. Both aspects of foreign trade, i.e. imports and exports, affect the country's gross domestic product and socio-economic situation. The trade balance in each country plays an important role in increasing aggregate demand and the formation of macroeconomic balance. Quantitative assessment of the impact of foreign trade on economic growth and socio-economic indicators has great practical importance for creating an optimal foreign trade policy. Our study focuses on the socio-economic effects of imports, exports, trade balances, trade turnover, trade freedom and trade openness. Researches on the socio-economic impacts of the country's foreign trade activities are rare in the economic literature of Azerbaijan. The small number of the dissertations and the articles investigate this problem, as well as references to the monographs, suggests that the relationship between these indicators is not limited to simple and visual comparisons. In most cases, the volume of imports or exports on the one hand, and socio-economic indicators on the other, are compared, and only the dynamics of these indicators are considered. However, serious econometric calculations are needed to determine the cause-and-effect relationship between these indicators.

2. LITERATURE REVIEW

It should be noted that the impact of foreign trade on the socioeconomic situation is appearing by economic growth. the foreign trade impacts on economic growth investigated by many researchers, including by Akanni (2007). As well as foreign trade impacts on the socio-economic situation, especially on employment investigated by many economists. Sankaran et al. (2010) argue that foreign trade impact on employment rate dependent on national economy feature and differ from country to country. Some economists, e.g. Rodric (1997) argues that the import of intermediate goods stimulate domestic production and creating new jobs. But some researches, e.g. Davis & Mishra (2007) argue that import impacts on employment and production connected not with whether imported goods are intermediate or not, but connected with the facts that whether these imported goods are “complementary” or “substitution” goods. Özlem (2008) also support this approach. Greenaway et al. (1998) argue that the import impacts on economy connected with increasing of competitiveness of the domestic economy. Kletzer (2002) argues that increasing of manufactured goods import negative impacts on the employment rate. Foreign trade impacts on poverty problem investigated by many economists, including by Atkinson və Brandolini (2010), Bergh və Nilsson (2014), Dhongde və Minoiu (2013), Le Goff və Singh (2014).

These researchers argue that foreign trade increasing has positive impacts on poverty reduction. But some researchers, e.g. L'Huillier, (2016) argues that foreign trade increasing has negative impacts of poverty reduction.

3. METHODOLOGY AND DATA

In this study, there are assessing the impacts of the six main indicators of foreign trade activity, i.e. 1) the volume of imports (\dot{IMP}_t); 2) export volume (EXP_t); 3) trade balance (TB_t); 4) total foreign trade turnover (TT_t); 5) freedom of foreign trade (FTF_t); and 6) foreign trade openness (FTO_t) on household income, poverty and unemployment rate. Such an assessment process will be carried out using the following algorithm:

- The stationarity of timeseries of each of these indicators will be checked;
- If the time series of the indicators have stationary, the relationship between such indicators will be estimated based on the OLS method. Otherwise, the time series of first annualy differences of these indicators will be checked.
- we will determine the cause-and-effect relationship between independent and dependent indicators.

The data covering the years 1992-2018 for the study were obtained from the official website of the State Statistics Committee of the Republic of Azerbaijan (SSCRA, 2020).

4. RESULTS

4.1. Checking the stationarity of the time series of foreign trade indicators and their first differences

We will estimate the stationarity of the time series of indicators characterizing the foreign trade and socio-economic situation in Azerbaijan for 1992-2018 according to the formula $y_t = \alpha + \rho * y_{t-1} + v_t$. The results of such assessment are given in Table 1. As can be seen from the table 1, the F-significance of the autocorrelation between y_t and y_{t-1} is sufficient for all the indicators considered. The correlation coefficient is also high. On the other hand, for each of these indicators $|\rho| < 1$. However, difference between $|\rho|$ and one is a bit and it can even be considered $\rho \approx 1$ for GDP, IMP, EXP and TT. $\rho = 0.866$ for the TB. In other words, \dot{IMP}_t, EXP_t, TB_t , as well as TT_t time series have not stationarity. This can also be tested using the Dickey-Fuller test.

Table 1: For foreign trade indicators $y_t = \alpha + \rho * y_{t-1} + v_t$ some consequences of addition

	IMP	EXP	EXP-IMP=TB	EXP+IMP=TT
R^2	0.957	0.933	0.755	0.912
F- significance	5.7E-18	3.54E-12	8.7E-09	3.79E-14
Standard error -y(t-1)	0.0430	0.0735	0.1008	0.0612
t-statistika	23.254	12.748	8.593	15.739
$ \rho $	0.999	0.937	0.866	0.963
$\alpha = \mu * (1 - \rho)$	582.213	1677.451	952.304	2199.217
μ	582213	26626.21	7106.746	59438.3

Note: Calculated by the author

As a result of the calculations, we obtain the result in Table 2 for the stationarity time series characterizing the dynamics of \dot{IMP}_t, EXP_t, TB_t and TT_t . In order to study the cause-and-effect between some of the key indicators characterizing foreign trade in Azerbaijan and socio-economic indicators, including: 1) the level of poverty; 2) employment; 3) household incomes, it is necessary to apply the Granger test. Table 2 shows that \dot{IMP}_t, EXP_t, TB_t and TT_t time series have stationarity from degree I(1).

However, the time series characterizing the first differences of these indicators have stationarity from I (0) degree. FTF_t (foreign trade freedom) and FTO_t (foreign trade openness) indicators have stationarity from I(0) degree. The time series characterizing household incomes, poverty rate according to the national poverty line, as well as the level of employment have not stationarity in degrees I (0) and I (1).

Table 2: Stationarity of time series of some indicators related to foreign trade and socio-economic development

	τ – statistics	I(0)	I(1)
\dot{IMP}_t -import volume	(-0.348)	H_0	H_1
$\Delta \dot{IMP}_t$ -change in import volume	(-3.43)	H_1	-
EXP_t -export volume	(-1.156)	H_0	H_1
ΔEXP_t -change in export volume	(-3.232)	H_1	-
TB_t -trade balance	(-1.697)	H_0	H_1
ΔTB_t -trade balance change	(-2.867)	H_1	-
TT_t - trade turnover	(-0.889)	H_0	H_1
ΔTT_t - change in trade turnover	(-3.447)	H_1	-
FTF_t - foreign trade freedom	(-3.771)	H_1	-
FTO_t - openness of foreign trade	(-6.061)	H_1	-
$HHRPC_t$ - per capita in households income	(-2.217)	H_0	H_0
$\Delta HHRPC_t$ - change in per capita income in households	(-2.501)	H_0	H_0
POV_t - poverty level corresponding to the national poverty line	(-2.509)	H_0	H_0
ΔPOV_t - poverty level corresponding to the national poverty line	(-0.807)	H_0	H_0
EMP_t - employment level	(-1.567)	H_0	H_0
ΔEMP_t - employment level	(-1.868)	H_0	H_0

Note: Calculated by the author

4.2. Testing of the cause-and-effect relationship between per capita households' income ($HHRPC_t$) and foreign trade indicators

We will use the Granger test to test for cause-and-effect relationships between these indicators. However, first of all, it is necessary to check the possibility of co-integration between these indicators. Thus, we will check the stationarity of the time series of errors. According to econometric theory, the regression relationships between non-stationarity time series can be “spurious regression”. For example, since the time series $HHRPC_t$ has not stationarity in degrees I (0) or I (1), so its regression with \dot{IMP}_t , EXP_t , TT_t , TB_t , FTF_t vs FTO_t may be “spurious regression”. It should be noted that there is a strong regression between these indicators (excluding with the foreign trade openness) and $HHRPC$ (Table 3). However, it is necessary to test whether such relationships are “spurious regression” or not, because of these indicators have not stationarity I (0) degree.

Table 3: Regression between per capita households income ($HHRPC_t$) and foreign trade indicators

	R^2	F- significance	Standard error	1st coefficient	2nd coefficient
\dot{IMP}_t	0.859588	3.17E-08	0.566291533	1966.001	5.60457
EXP_t	0.775049	1.44E-06	7.424721	368.1016	0.069887
TT_t	0.879035	9.53E-09	0.004883	86.93161	0.052654
TB_t	0.409997	0.004203	0.022415	1166.366	0.074742
FTF_t	0.575075	0.000265	40.01221	-8905.87	186.191
FTO_t	0.063973	0.311235	1475.467	2761.552	-1542.92

Note: Calculated by the author

Based on Hamilton (1994), critical values of τ_c –statistics for the residual stationarity test can be used to show the effects of foreign trade indicators on per capita annual income in households. The time series of the errors of the regression analysis has not stationarity (Table 4). Therefore, there is no a co-integration relationship between these indicators and 1) $\dot{IMP}_t \rightarrow HHRPC_t$; 2) $EXP_t \rightarrow HHRPC_t$; 3) $TB_t \rightarrow HHRPC_t$; 4) $TT_t \rightarrow HHRPC_t$; 5) $FTF_t \rightarrow HHRPC_t$; 6) $FTO_t \rightarrow HHRPC_t$ although there is a strong correlation between these indicators, this relationship is “spurious regression” and there is no cause-and-effect relationship between these indicators. In other words, the H_0 hypothesis is proved that there is not a cause-and-effect relationship between these indicators.

Table 4: Testing the hypothesis H_0 for stationarity $I(0)$ for errors

	F- importance	τ	τ_c (5%)	$I(0)$
$\Delta\beta_t = \alpha * \beta_{t-1} + v_t$	0.417674	-0.83343	-3.37	H_0
$\Delta\gamma_t = \alpha * \gamma_{t-1} + v_t$	0.098628	-1.76086	-3.37	H_0
$\Delta\delta_t = \alpha * \delta_{t-1} + v_t$	0.193347	-1.36186	-3.37	H_0
$\Delta\varepsilon_t = \alpha * \varepsilon_{t-1} + v_t$	0.058744	-2.04564	-3.37	H_0
$\Delta\epsilon_t = \alpha * \epsilon_{t-1} + v_t$	0.497947	-0.69456	-3.37	H_0
$\Delta\theta_t = \alpha * \theta_{t-1} + v_t$	0.123202	-1.63336	-3.37	H_0

Note: Calculated by the author

Given the above results, let's perform co-integration tests based on the following hypotheses to determine the cause-and-effect relationship between the first differences of the indicators discussed above:

- 1) $\Delta HHRPC_t$ and $\Delta \dot{IMP}_t$ time series are not co-integrated, i.e. the H_0 hypothesis is proved;
- 2) $\Delta HHRPC_t$ and ΔEXP_t time series are not co-integrated, i.e. the H_0 hypothesis is proved;
- 3) $\Delta HHRPC_t$ and ΔTB_t time series are not co-integrated, i.e. the H_0 hypothesis is proved;
- 4) $\Delta HHRPC_t$ and ΔTT_t time series are not co-integrated, i.e. the H_0 hypothesis is proved;
- 5) $\Delta HHRPC_t$ and ΔFTF_t time series are not co-integrated, i.e. the H_0 hypothesis is proved;
- 6) $\Delta HHRPC_t$ and ΔFTO_t time series are not co-integrated, i.e. the H_0 hypothesis is proved;

$\Delta HHRPC_t$ time series has not stationarity. However, there is a significant regression between it and other time series (Table 5).

Table 5: First difference of households' annual per capita income ($\Delta HHRPC_t$) dependence on first differences of foreign trade indicators

	R^2	F- importance	Standard error	1st coefficient	2nd coefficient
$\Delta \dot{IMP}_t$	0.444186	0.003483	0.044206	-47.2275	0.153055
ΔEXP_t	0.245341	0.043206	0.013155	53.49835	0.029051
ΔTT_t	0.314609	0.019161	0.010566	29.89926	0.027725
ΔTB_t	0.146277	0.129745	0.01646	81.29495	0.026389
ΔFTF_t	0.01442	0.646188	67.88231	66.81144	31.80039
ΔFTO_t	0.009284	0.712963	338.1253	93.13423	-126.772

Note: Calculated by the author

Thus, the F-significance for 95% reliability is within the allowable interval for the regression between $\Delta HHRPC_t$ and ΔEXP_t , ΔEXP_t , ΔTT_t . However, the F-significances are outside the allowable range for regressions between $\Delta HHRPC_t$ and ΔTB_t , ΔFTF_t , ΔFTO_t . Therefore we have only 1) $\Delta \dot{IMP}_t \rightarrow \Delta HHRPC_t$; 2) $\Delta EXP_t \rightarrow \Delta HHRPC_t$; 3) $\Delta TT_t \rightarrow \Delta HHRPC_t$ and we will test the co-integration between these indicators in order to prove a cause-and-effect relationship

between these indicators. By applying the Dickey-Fuller test to test the stationarity of the errors of these regressions we can prove that only for $\Delta\beta_t$ H_0 hypothesis is rejected (Table 6).

Table 6: Testing the hypothesis H_0 of stationary $I(0)$ for residues

	F- importance	τ	τ_c (5%)	$I(0)$
$\Delta\beta_t = \alpha * \beta_{t-1} + v_t$	0.00446	-3.38311	-3.37	H_1
$\Delta\gamma_t = \alpha * \gamma_{t-1} + v_t$	0.029459	-2.42439	-3.37	H_0
$\Delta\varepsilon_t = \alpha * \varepsilon_{t-1} + v_t$	0.018532	-2.66356	-3.37	H_0

Note: Calculated by the author

4.3. Testing of the cause-and-effect relationship between poverty (POV_t) and foreign trade indicators

As well as to study the cause-and-effect of the main indicators characterizing foreign trade in Azerbaijan on the level of poverty, the regression relations between these indicators should be tested by co-integration. Estimates show that there is a strong correlation between foreign trade indicators and poverty levels (Table 7). However, these regressions are “spurious”. Thus, the time series of the regression errors of these indicators have neither stationarity nor $I(0)$ or $I(1)$.

Table 7: Regression dependence of poverty level (POV_t) on foreign trade indicators

	R^2	F- importance	Standard error	1st coefficient	2nd coefficient
\dot{IMP}_t	0.8719	1.51E-08	0.000229	46.28541	-0.00239
EXP_t	0.736026	5.29E-06	0.000158	39.05634	-0.00105
TT_t	0.853653	4.43E-08	8.3E-05	43.581	-0.0008
TB_t	0.363165	0.008122	0.00036	26.70794	-0.00109
FTF_t	0.770833	1.67E-06	0.45428	209.0818	-3.33263
FTO_t	0.034145	0.462922	23.17138	6.657838	17.42684

Note: Calculated by the author

However, since the time series $\Delta\dot{IMP}_t$, ΔEXP_t , ΔTB_t , ΔTT_t , ΔFTF_t və ΔFTO_t have stationarity degree $I(1)$ degree, but ΔPOV_t has not stationarity $I(1)$, so rejecting of the H_0 hypothesis needs to be tested by their co-integration. Note that only ΔPOV of this time series has not stationary. However, there is a significant regression between it and other time series (excluding the time series ΔFTO_t (Table 8)).

Table 8: Regression between first differences of the poverty level (ΔPOV_t) and the foreign trade indicators

	R^2	F- importance	Standard error	1st coefficient	2nd coefficient
$\Delta\dot{IMP}_t$	0.12453	0.164726	0.000361	-2.09951	-0.00053
ΔEXP_t	0.208847	0.065152	8.76E-05	-2.34535	-0.00017
ΔTT_t	0.21262	0.06247	7.36E-05	-2.24502	-0.00015
ΔTB_t	0.186274	0.083654	0.000105	-2.49646	-0.00019
ΔFTF_t	0.000533	0.929917	0.444538	-2.54961	-0.03976
ΔFTO_t	0.017615	0.611593	2.189565	-2.58115	-1.13555

Note: Calculated by the author

5. CONCLUSION

Thus, first differences of some indicators of the foreign trade, such as imports, exports and trade turnover have a positive effect on household incomes, but the foreign trade freedom and foreign trade openness have not significant effect on household's income in Azerbaijan. The foreign trade indicators and their first differences have not causal effects on the poverty rate.

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REGULATION OF INTERNATIONAL LABOR MIGRATION IN AZERBAIJAN

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ABSTRACT

In the age of globalization the borders among the states are being erased and the new opportunities are being opened, including for the usage of the professional skills. Labor migration has existed throughout the entire period of society's life and this process is currently increasing on a global scale. Migrants often meet the barriers in their search for the most acceptable working conditions.

Keywords: Migration, security, globalization, oil, region, employment, USSR

1. INTRODUCTION

The nature of modern migration reality is quite bright is reflected in the socio-economic trends of the Azerbaijani society. Given the current realities of migration processes, it can be found that the notion of labor migration today has acquired a comprehensive and multilateral nature, which includes different categories of migrants and types of movement of the population. In this context, with a view to concretizing the concept of "Migration" and prevention of discrepancies need to be detailed terminology by attributing refinement expressions that will help to understand the peculiarities of migration processes more thoroughly [1]. First of all, it is necessary to determine the status of Azerbaijan in terms of migration attractiveness, i.e. to determine which type of country it belongs to - countries that attract the international migration or countries that push migrants out of their territory. The mass influx of migrants from the CIS countries is a specific problem of post-Soviet history and does not provide the exhaustive answer to this question. The question is much broader and its geography goes beyond the borders of the territories of the former Soviet republics. It is about the general position of our Republic in the global international redistribution of the demographic resources.

2. FEATURES OF INTERNATIONAL MIGRATION IN AZERBAIJAN

The collapse of the socialist system led to the emergence of huge human areas – new exporters of labor to developed countries. Modern migration processes affected the republics most sharply. The former Soviet Union, in terms of such negative aspects as leakage the demographic problem, the weakening of some industries industry, the dependence of the economy of small states on the volume foreign exchange transfers of migrants to their homeland [2]. The phenomenon of "brain drain" occupies a separate place within the framework of theoretical research in the field of emigration processes, conditioned by priority for donor countries. "Brain drain" is capable of cause irreparable damage to the intellectual potential of the state, and so most poses a threat to national security. Permanent departure specialists from developing countries in highly developed capitalist countries. States can be interpreted as a form of purposeful pumping high-performance forces from poor countries to the rich. Loss state of its science and scientific and technical potential dooms it to further development of the most capital-intensive fuel and raw materials industries.

The solution of the problem of the outflow of personnel from the country requires a specific approach. At first of all, the state should reduce the detrimental impact of pushing factors. To achieve this goal, some tasks are required:

- an increase in government subsidies in priority areas of science, culture, art, sports in order to prevent the emigration of scientists, highly qualified specialists and talented people;
- carrying out works on stimulating re-emigration highly qualified specialists who went abroad for permanent residence or labor contracts;
- an increase in the number of state programs in the education system, with the purpose of distributing students in foreign educational institutions for Training of specialists in the sectors of the economy with a deficit qualified personnel;

As for the international labor market, it is labor migration forms the movement of labor in this sector. Displacement of the labor force form on the international market the mechanism of supply and demand, and in As a result, migration supplies specific specialized markets qualified personnel. As a combination of national labor markets, oriented towards a foreign employer, international markets contribute to the qualitative development of national labor markets. This process, in turn, is facilitated by the integration of states and globalization of the world economy, creating a favorable atmosphere for transboundary fluxes [8]. International labor migration is a complex interweaving social and cultural relations of many regions and peoples of the world. The current process of international labor migration requires special attention of scientists. In recent decades, the nature of migration movements has almost completely changed. On international migration has evolved into one of the parts of the world economic system [7]. The collapse of the USSR, accompanied by spontaneous processes in the socio-economic, cultural and political life of the Soviet people, the emergence of crisis situations manifested in hyperinflation, scarcity budget, production decline. Corruption, non-purposeful expenditure means of the national economy, as well as outbreaks of ethnic conflicts the whole country led to an unstable difficult state of society. All these contradictory processes in their entirety were reflected in the example Azerbaijan, which was the foundation of a large-scale flows of forced labor migration from the republic. In the 90s Azerbaijan was not the economic leader of the region. Then the country was in very bad conditions. And many displaced persons moved to Russia. That's why today we have such a large number. Today Azerbaijanis are considered the millionth Diaspora and there are a lot of them in Russia. This is the result of the Nagorno-Karabakh conflict. That is why we always say at different conferences that we cannot postpone the resolution of this conflict, because the resolution of this conflict will have a positive impact on many problems. According to the latest data from the Federal migration service, such outflow from Azerbaijan is not observed. Azerbaijan is definitely not the leader in the number of its migrants. In addition, many Azerbaijanis who found themselves on the territory of Russia after the 90's have already been naturalized here. In other words, they have received Russian citizenship. Of course, these 1.5 million are not all citizens of Azerbaijan. There are accurate statistics on the population census. About 700,000 Azerbaijanis are Russian citizens. [4]. They are not temporary migrants. They are Russians, all of them have Russian passports. One cannot see so many successful Azerbaijanis in other states as in Russia. It is worth paying attention to the Forbes list, there are quite a lot of our compatriots, and first of all from Russia. Azerbaijanis are involved in various sectors in this country and they are competitive workforce. Mobility, flexibility and the ability to adapt to the new conditions are extremely important for migrants and those who possess these qualities displace those who do not have them. Many people think that only unskilled Azerbaijanis go to Russia, but it is not always so. They work in the field of trade, in the construction and in many other fields, it all depends on the region. In the Siberia in the sector of oil and gas, in Moscow – trade and banking, etc.

Many Azerbaijanis work in the healthcare sector, they work in research organizations and many journalists of Azerbaijani origin have appeared in the Russian media [2]. It is necessary to understand what prevents people from working in their specialty. For example, if a person is a professional winemaker, why should he work in the field of trade, and not to be busy with what he knows? In Russia there are vineyards that make wine and the experienced people in this field should be useful there. And the same can be said for many other specialties. The host country itself should be interested in creating the enabling environment and making full use of the knowledge and experience of migrants. It is important for the latter not to lose their qualifications. The next most important message for creating the soil of the Azerbaijani development of new oil fields in Western Siberia and the Volga-Ural region. The shortage of oil industry was covered on a large scale by qualified personnel from Azerbaijan. It was this direction of migration that represented an outflow of the most elitist group of labor migrants. High qualification of workers force characterized this migration as a brain drain attributing it to irretrievable type. To predict the impact of immigration on current socio- political and economic processes in the country in the coming decades a review of the demographic situation in Azerbaijan is presented to the eve of the collapse The Soviet Union and the beginning of large-scale migration movements of the Republic's population. In parallel, reasons and incentives are given, encouraging people to make decisions about migration. In the article, the dividends of migration processes are the remittances of migrants are a fundamental criterion, according to which the efficiency of labor migration from the country. Cash payments Azerbaijani migrants stimulate domestic demand in the country. This factor creates a favorable atmosphere for the growth of production and employment, especially in the regions of the Republic of Azerbaijan, flow of foreign investment. An essential positive feature of foreign exchange income of migrant workers is the lack of additional costs associated with employment of people in the production sector export goods. This is due to the fact that a significant part of the migratory workforce from Azerbaijan is represented by unqualified working people. As the next detrimental effect of international migration, I want to note the fact of the de-qualification of Azerbaijani qualified labor migrants. This is due to the fact that because of competition to a migrant it is necessary to occupy vacancies not corresponding to his professional qualifications. As a result, the specialist is eventually exposed and the effect of winning re-emigration disappears. Continuing to list the negative aspects of migration, it is necessary affect the likelihood of the donor state becoming more dependent on foreign demand for labor. Involving more and more people in emigration processes and concentration of labor, the main Thus, in one country the economic well-being of the Republic of Azerbaijan from socio-political changes, occurring in the recipient country. In the case of our republic, this recipient country, of course, is the Russian Federation. Although the vector of migration flows from Azerbaijan differ in different directions (Turkey, Ukraine, Belarus; Iran; States of Western Europe; USA, Canada; Australia). The oil producing states of the Middle East.), the lion's share of migrants settled in Russia. In this context, Russia's exclusivity in the study of the peculiarities of the Azerbaijani emigration is beyond doubt. How completely would not the mechanism of state regulation, the process of employment of citizens in foreign labor markets through commercial firms cannot be 100% effective and without manifestations of offenses. Of course, in the process of labor migration for the role of private employment agencies to downplay would be wrong. But in the practice of the Republic of Azerbaijan to provide employment own citizens abroad on the responsibility of private agencies and to be limited only by regulation through the adoption of normative- legislative acts will not become a panacea for all problems of the Azerbaijani. The degree of state intervention in the employment process migrants with intensive migration of the population abroad implies a transition from a regulatory function to a new one the stage where the state participates directly as an intermediary. Unlike private agency employment state intermediary organization acts as a person who is not materially interested,

thus providing migrant alternative employment. Consequently mediation of the state in the Republic of Azerbaijan in the sphere of recruitment of citizens should tend to a phased monopolization separate directions of this process. Undoubtedly, state hegemony should not carry overwhelming character in the sector of recruitment of migrants. Necessarily, multilateral coverage state should leave real economic terms for activities of private employment agencies.

3. CONCLUSION AND RECOMMENDATIONS

In the light of the foregoing, the development of a set of measures to organize state intermediary agencies for employment abroad should be one of the primary directions in the activity migration service. Structure of the activity of the intermediary firm involves the following main tasks:

- Development of a system for registering the composition of the emigration workforce the level of qualifications and occupation;
- Issuance of individual temporary licenses for employment in other country;
- Study of the situation in foreign labor markets with the purpose of determining the most favorable regions for employment;
- Negotiations on concluding bilateral agreements on workplaces of labor migrants from Azerbaijan, if possible in accordance with their professional qualifications;
- Accommodation of representative offices at migration consulates;
- Timely response to the solution of problems encountered by migrants, licensed to work in another country;
- Identify the main directions of improving the legal regulation of international labor migration in Azerbaijan.

As for the migration in Azerbaijan in recent years, here mainly Arab countries. The visa regime was simplified for the countries of the Persian Gulf and some other Arab countries in 2016. As a result, according to official data, 500 tourists come from these countries every day. Azerbaijan is a convenient place for tourists from Iran and Arab countries. After the terrorist attacks and bloody events in Turkey, tourists who refused to go there come to Azerbaijan. The Arabs, in general, stay in four-, five-star hotels. And only tourists arriving from Iran prefer three-star hotels. Other reasons are the devaluation of manat (due to which it was not so expensive to live in the equivalent of a dollar equivalent), the relatively European look of the city, and the availability of entertainment, which cannot be in Islamic countries - to take at least alcohol. With migrants, we are still calm - they do not aspire to us, choosing countries richer, and we do not call them, because our problems are enough. Nevertheless, citizens from different Arab countries in Baku and even regions are more and more. This number of Arabs in our country was not, perhaps, since their invasion of the Caucasus in the IX-XX centuries.

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ROLE OF SMALL ENTERPRISES IN ACCELERATION OF SOLUTION OF SOCIO-ECONOMIC PROBLEMS

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ABSTRACT

The aim of the research is to analyze the current situation towards increasing the role of small enterprises in acceleration of solution of socio-economic problems in Azerbaijan against the processes occurring in the global economy and financial markets and to provide scientifically substantiated practical proposals and recommendations. To this end, the significant impact of small enterprises in weakening the role of large enterprises, increasing the number of manufacturing enterprises, creating a competitive environment, accelerating scientific and technological progress, the process of denationalization and privatization of state property, increasing of the amount of taxes entering the profits section of the state budget, formation of a mechanism of transfer of capital from one to other field, development of cooperative relations, reduction of social tensions, increase of employment and solution of other necessary socio-economic issues is studied. The research was fulfilled under the research methods as a scientific abstraction and systemic analysis, logic generalization and statistical analysis. As a result of the research, the existing situation of the small enterprises operating in our Republic is studied and their faced problems are analyzed. At the same time, the legislative framework in connection with the state support to small enterprises and other business forms and their activity opportunities are studied. Limited of the research: requires more extensive practical information. Practical importance of the research: may play a positive role in enriching scientific and practical knowledge of the specialists conducting researches in the field of small enterprises and other forms of entrepreneurship and working in this field. Scientific innovation and originality of the research: it was determined that the small enterprises in the transition economies and developing countries have greater potential to form a competitive environment in domestic market. This is also clearly seen from the experience of our Republic.

Keywords: *Competitive environment, Medium and large enterprises, Transition economy, Small enterprises, Socio-economic problems*

1. INTRODUCTION

As known, small business plays an important role in effective development of the national economy of individual countries in the modern time. The development of small business leads to emergence and development of various forms of property, free competition and initiative, encouragement of labor, realization of new ideas and inventions, as well as effective proposals in production, while eliminating monopolies and social tensions, which helps to solve socio-economic problems quickly [Hajiye N.U. (2013)]. It is not accidental that the small enterprises account for 80-90 percent of the enterprises operating in the developed countries, 45-60 percent

of GDP, 50-60 percent of all employees, as well as more than 70-80 percent of new jobs are. One of the strategic directions of the current economic reforms in Azerbaijan is to create a favorable environment for development of small entrepreneurship.

2. DEVELOPMENT OF SMALL ENTERPRISES AS A FACTOR OF QUICK SOLUTION OF THE SOCIO-ECONOMIC PROBLEMS

In the long term, development of small enterprises in the Republic of Azerbaijan would accelerate formation and expansion of the competitive environment among the economic entities operating in the economy, which is extremely important for the economy of a highly monopolized country. It is not accidental that the Western countries consider the development of small enterprises as a key factor in raising competitiveness. This is primarily explained with the fact that small enterprises are freely enter and operate in the economy. And this allows small enterprises to play an antimonopoly role in the economy. On the one hand, the small enterprises are less monopolistic than the big ones and are more interested in competing with other enterprises, on the other hand, small enterprises that are narrowly specialized and use new technology act as the main competitors, which weakens the role of big monopolies. Thus, development of small enterprises in the country would lead to an increase in the number of manufacturing enterprises in the economy and expansion of competition between them. We think, increase in the number of small enterprises in the economy and acceleration of formation of a competitive environment will occur as a result of the reorganization of the structure of the national economy in accordance with the requirements of the market economy. Development of small enterprises can bring significant wealth to acceleration of scientific and technological progress. In particular, the development of small enterprises in the country can play an important role in applying the results of scientific and technological progress to production, finding and developing new ideas, creating new technology, as well as mastering production and new ideas, technologies and product markets. We complain about the lack of incentives for growth of technical progress in the Republic, but small enterprises, even in the most difficult conditions, increase their number and eagerly undertake innovation. At the same time, they act as an accompaniment to the scientific and technological progress by serving the implementation of new technical and shareholding ideas and producing high-tech products. According to the world experience, ideas emerge where small enterprises are present, which subsequently plays a key role in development of an entire field of science and production. Development of small enterprises can help to accelerate both scientific and technological progress and emergence of legally independent small enterprises in this area within the institutes and research institutes operating in this field. Creation and development of small enterprises within the big enterprises operating in the economic spheres of the Republic, which take and apply new ideas, would ultimately lead to acceleration of scientific and technological progress. Such small enterprises can be created by involving highly qualified specialists on the basis of an employment contract, which will allow to make full use of the potential of technical specialists [Nazim O. Hajiyev, M.R Rasulova, R.A Bakshaliyev, F.F Rzayev. (2004)]. Establishment and development of small enterprises in this area would lead to the widespread use of laboratories and equipment of large state enterprises, institutes and research institutes. Accordingly, there is a natural differentiation in employment, deepening the specialization of workers not only in the formal features of their education and the object of their application, but also in the complexity, novelty and creative nature of the problem to be solved. Development of small enterprises would have a positive impact on the amount of taxes included in the revenue section of the budget of the Republic, that is, would increase budget revenues by paying taxes. And this plays an important role in meeting the general needs, especially in improving the welfare of the population at the end. Development of small enterprises would not only limit the monopoly of big enterprises, but also accelerate the process of establishing subsidiaries (subsidiaries) specializing in

supporting and additional production. As known, small enterprises in the advanced industrial countries specialize in the production of individual parts and components. However, big enterprises provide assembly of the finished products. In general, production relations between the small and large enterprises in industry and construction are very complex, which helps to accelerate the process of developing cooperative relations. Development of small enterprises in the country can have a positive impact on development of both cooperation and contractual relations, ensuring acceleration of relations between big and small enterprises. As well as, development of small enterprises could accelerate the process of exempting big and medium-sized enterprises producing mass and large-scale industrial products from small-scale production. Development of small enterprises would ensure that the needs of enterprises and the population in products and services are met quickly. Therefore, small enterprises are distinguished by their independence, freedom in directing their economic activities and are able to enter all spheres and areas of the economy. At the same time, the ability of small enterprises to produce products in flexible, mobile, small batches and take risks, and other similar features allow them to adequately meet the needs of the population in products and services. Because it is allowed due to small size of enterprises. Note that in the first stage, small enterprises would play an important role in strengthening the economy. Moreover, small enterprises would manufacture those products and provide those services, which are not profitable for big enterprises. Development of small enterprises could accelerate the process of production of large quantities of consumer goods by involving industrial waste in recycling, which could lead to stabilization of the tense situation, social and political conditions in the current transition period by product range and types. The recycling of industrial waste would also have a positive impact on the environment in addition to saving raw materials. Thus, as a result of development of small enterprises, the recycling and utilization of industrial waste would accelerate solution of not only the economic, but also important social problems. At the same time, it would allow small enterprises to increase their revenues through production and sale of products in addition to industrial waste and recycled raw materials. Development of small enterprises would also help addressing issues such as formation of market infrastructure during transition to a market economy. It should be noted that creation of market infrastructure is a new problem for the economy of the Republic. For this purpose, small enterprises would accelerate development of local-regional structures through establishment of the territorial-economic centers that are able assist in planning and forecasting of production, supply and turnover, solving social problems, unification of products, organization of advertising, provision of scientific and technical information and other types of information services. It would also help formation of the material base of market infrastructure: small warehouses and depots, small mobile enterprises, i.e. productions for selection and sorting of primary products, small transport enterprises, etc. Development of small enterprises can accelerate the process of establishing inter-regions repair plants and packaging plants to meet the needs of regional enterprises in the regions. Furthermore, the development of small enterprises has a positive impact on the establishment and expansion of the provision and service enterprises covering all sectors of the economy, such as intermediary trading companies, brokerage firms, consulting and auditing companies, trade, currency and stock exchanges, independent legal offices, and other similar service systems. Small and medium enterprises operating in the economies of a number of countries have great economic and social importance in the foreign trade. Thus, in France, they provide about 50 percent of non-governmental exports, including the share of enterprises with up to 10 employees is 9.5 percent. In Italy, 82% of all enterprises involved in export activities are small enterprises. It should be noted that small and medium enterprises account for about 40 percent of the exported industrial products in Germany and Netherlands, 25-30 percent in Italy, 20-25 percent in France and 10-15 percent in Japan. At the same time, taking into account the participation of small and medium enterprises in the assembly of industrial products exported

to big firms, this figure increases to 60 percent in Italy, 50 percent in France and 40 percent in Japan. However, the share of small and medium-sized businesses in export operations in Japan is 4 times less than their share in total output in the manufacturing industry, and 2 times less in the UK and France. 52 percent of the companies that export their products in the USA are small companies with up to 100 employees. It is estimated that along with the capture of new markets, economic growth and income growth, each billion export product will create 25 thousand new jobs. So, small and medium-sized enterprises play a major role in the foreign trade of the country, which is very beneficial in terms of both economic and social significance. At the same time, the increase in the share of small and medium enterprises in the country's export products creates ample opportunities for solving socio-economic problems, especially the creation of new jobs, increasing the country's foreign exchange reserves and, most importantly, strengthening the integration process. The socio-economic significance of small enterprises is their quick reaction to changes in market conditions with great their flexibility. And this shows the mobility of small businesses. The main reason for this flexibility is their small size. That is why small enterprises are moving freely in the market to meet the changing needs of the product. Development of small enterprises can also accelerate the process of solving a number of social problems that exist in the Republic and arise in connection with the transition to the market relations. First of all, development of small enterprises will create new jobs for the dismissed or laid-off workers and the able population due to closure and improvement of inefficient enterprises as a result of implementation of economic reforms and restructuring of the economy. It should be noted that the lack of conditions for development of small enterprises in the country has led to a steady rise in unemployment and the deepening of social problems inherited from the former Soviet Union. Nevertheless, as known, more than half of all employed and more than 70-80 percent of new jobs in the industrialized and developing countries are created by small enterprises. At the same time, according to the foreign economists, the cost of one job in small enterprises is 10 times less than in the big industrial enterprises, and the sensitivity to use of scientific and technical innovations is many times higher. In the absence of sufficient funds for this purpose, the development of small enterprises as one of the social problems can open wide opportunities to increase employment, i.e. to involve them in social production. In the current situation and in the long term, the development of small enterprises will help solving the problem of employment (unemployment) in the country as a whole, as well as the employment of workers in the large cities and regions with large labor resources, especially low-skilled. Development of small enterprises in small towns and regions of the Republic, as well as in mountainous areas with a shortage of labor resources will allow identifying local raw materials and resources in these areas and accelerating the process of their involvement in production. This will reduce migration of the population to the capital and other large cities. Specially it should be noted that development of small enterprises would involve the population with socially poor having great importance for the republic, mainly housewives, pensioners, disabled, IDPs, students and others studying in secondary education centers to the production and would accelerate the process of using their work. The world experience shows that this category of employees is not very attractive for large enterprises, because such large enterprises usually want to use highly qualified personnel. Thus, the development of small enterprises in the country would have the advantage of attracting this group of people in the context of radical economic reforms and in times of crisis, compared to the big enterprises, and would weaken the very important social tensions. In such case, both the population's demand for goods and services would be fully met, and it would help to increase the income level of families, especially the poor. Due to the decline in living standards in the Republic, the composition of the poor has also changed in the recent years. Thus, while the poor were mainly socially less protected groups in the past, especially pensioners, large families, the disabled and the unemployed, now they include citizens working in various sectors of the economy.

This category includes mainly employees of budget-funded organizations and enterprises in a difficult financial situation. We think, in such conditions and in the long term, the increase in the welfare of the economically poor could be achieved through their direct involvement in total production, which would also accelerate the development of small enterprises in the country. At the same time, the development of small enterprises, being the main source of development of the republic, could give a great impetus to elimination of urgent problems such as employment (unemployment), poverty or destitution. In the current conditions and in the long term, development of small enterprises in the economy will be of great importance in formation of the market relations and weakening of social tensions in the republic. According to the world experience, just the small enterprises are the fundamental basis for formation of the middle class and weaken the tendency of social stratification inherent in the market economy. Development of small enterprises in the country would open up a wide range of opportunities for people and their families or a small group of people to discover and realize their creative abilities, as well as increase people's sense of initiative and entrepreneurship. Development of small enterprises could help meeting the needs of the poor in the service sphere. Due to the development of small enterprises in the country, there would be a process of increasing the number of producers, which in turn would have a positive impact on increasing the volume and range of products and services, and most importantly, reducing prices in the service sphere. As a result, the needs of the poor could be met more fully through small enterprises than through supermarkets. In general, in the present conditions and in the long term, development of small enterprises, in addition to the above, would allow increasing the country's export potential, improving environmental protection and solving other similar important economic and social problems. The fact that the development of small enterprises can play a very important role in accelerating the solution of each of the economic and social problems in the country could be extended to the economic regions as a whole. Despite the name of the republic is mentioned in general, the development of small enterprises could have a very positive impact on the solution of these problems in the economic regions. Failure to assess the role of small enterprises in the present conditions and in the long run and not paying attention to its technical-production and socio-economic potential could lead to errors in large-scale strategic estimations. Therefore, the development of small enterprises should be considered one of the strategic directions of the country's economic policy in the transition from a system of administrative management to the market economy.

3. DIRECTIONS FOR STIMULATING DEVELOPMENT OF SMALL ENTERPRISES IN THE LONG RUN

Business activity in the economic spheres of the republic, mainly development of small enterprises, which is a unique field for formation, testing and application of scientific and technical achievements, requires solution of a number of problems, primarily financial problems. For this purpose, a complex system of measures should be implemented in the country. Thus, in order to withstand competitive conditions, a system of concessions should be established for small enterprises, especially those engaged in production, and they should be given interest-free short-term (1-2 years) or long-term (3-5 years) loans at very low interest rates. It is also important to establish an effective insurance and credit system for their activities and to be exempt from all taxes for at least 2 years. The financial problem in the country can be solved at the account of the budgetary funds, targeted loans, long-term loans by commercial banks, as well as the internal capacity of entrepreneurs - profits, amortization charges, savings, etc. If at present and in the long run, the state does not provide investment assistance to farms, small and medium-sized enterprises that have been privatized and are under privatization and the enterprises created by the population at their own expense, then the development of entrepreneurship in the country will face with serious difficulties.

Because, presently, small enterprises operating in the country economy are in great need to the state investment assistance. Another direction of investment assistance to small and medium enterprises in the country is to receive loans and financial assistance from foreign countries and international organizations, to attract foreign investors to the country. The funds allocated by international financial institutions for this purpose should be used as efficiently as possible [Almas L.K, Hajiyeu N.U. (2014)]. As known from the world experience, the differentiation of taxes applied to entrepreneurial activity is provided depending on the form of employment in the economy. Aggregate taxes are set at the lowest level in the manufacturing sector compared to intermediary, commercial structures. Therefore, in the long run, the country needs to reduce aggregate taxes on small enterprises operating in the manufacturing sector, which could help stimulate the capital flow from the circulation of capital to the manufacturing sector. One of the key issues in development of entrepreneurial activity is to create incentives to attract bank funds and savings of the population for investment purposes. For this purpose, the state should create incentives for banks to invest in this area, i.e. give them certain tax concessions and privileges. As well as, a guarantee fund should be established with the help of the state for loans to small entrepreneurs. Moreover, it is important for the state to assist in establishment of investment institutions, mutual aid funds, on one hand, and finding of forms of participation of entrepreneurs and population in implementation of profitable projects and issuance of securities, on the other hand. Thus, the state can attract the savings of the population for investment purposes by protecting the interests of investors, providing certain guarantees and other measures, which could bring a certain level of socio-economic benefits to the republic. At the present conditions, the perspective development of the country's economy, especially in the industrial sector, which is in a state of severe crisis, should be based on the process of innovation and use of scientific and technological innovations. Unfortunately, small entrepreneurship is not developed in the areas of scientific and technical innovation in the republic. This is associated with the state subordination of research institutes on one hand, and to the fact that the government agencies do not pay serious attention to this area, on the other hand. As a result, existence of a state monopoly in science has led to the absence of such a structure in material production. In the long run, the modernization of industrial enterprises on the basis of the latest achievements of the scientific-technological progress, application of advanced technologies, increasing the production of high quality products that can withstand fierce competition in the market will depend more on development of innovative entrepreneurship. Therefore, the state should pay special attention and assistance to the development of innovative entrepreneurship, which reflects all stages of production and economic activity of enterprises. It is important to note that development of innovative entrepreneurship is associated with investment. For this purpose, it is necessary to use foreign capital and leasing services on a large scale. According to the experience of the developed countries, by using the services of leasing companies, industrial enterprises have the opportunity to purchase the necessary means of production for temporary use without investment in large amount. In the long run, the state should create favorable conditions and provide assistance to organization of the leasing services to allow small business owners operating in the economy to acquire equipment and technology. As known, small entrepreneurs usually do not have necessary scientific and technical base to bring their ideas to the level of application. Therefore, based on the experience of the developed countries, assistance should be provided in establishment of state technological parks in the republic. In these technological parks, small entrepreneurs can use the necessary equipment and technical means to turn their ideas into production samples by paying a discountable rate. In connection with transition to the market relations, establishment of universities in different cities of the country provides the initial basis for establishment of technological parks in the regions. Thus, it is possible to create technological parks on the basis of Ganja Institute of Technology, Sumgayit and Mingachevir

Technical Institutes. This will stimulate development of small enterprises in those regions. In Baku, the capital of the republic, there are more opportunities to create technological parks. Because there are many technical and economic universities, research and design institutes with rich material and technical base and scientific potential. Perspective opportunities for creation of technological parks on the basis of the Academy of Sciences of the Republic of Azerbaijan and the Azerbaijan Technical University are especially wide. As we know, small entrepreneurs often do not have the opportunity to create separate enterprises and offices. Therefore, it is possible to create offices for such entrepreneurs, by creating business incubators in the country. This will allow small entrepreneurs to come here and build their business relationships using existing jobs and communications. Also, in the long run, the state can organize small enterprises equipped with modern equipment and technology at its own expense and grant them on lease to entrepreneurs [Muradov A.J., Hajiyevev N.O. (2014)]. Organization of the state contract (order) system can play an important role in assisting in development of small industrial enterprises. The state order allows small enterprises to obtain a secure market for their products, accelerate capital turnover, expand production capacity and strengthen competitiveness. In the long run, formation of the market of production means, which is the most important of the infrastructure units for development of small enterprises, should be accelerated. In order to form a competitive structure in the economy of the republic in the new economic conditions, it is necessary to apply a policy of stimulating exports in the country. For development of small export-oriented enterprises and other forms of entrepreneurship, the state should assist them in exporting their products to foreign markets, advertising, importing small equipment and technology from abroad, and establishing business relations between foreign and national entrepreneurs. State aid should be aimed primarily at reducing or eliminating the import tax on new equipment and technology. Accordingly, the import of technically and morally obsolete equipment into the country should be prevented and the minimum level of their operation should be set at 80 percent. As well as, the concessions made for foreign entrepreneurs in the import of equipment and technology to local entrepreneurs will help to stimulate them. Based on the world experience, in order to form a competitive environment between small and state-owned enterprises and, in a word, to create a free competitive sector, the state should create ample opportunities for private enterprises in competition and widely apply the price and rate regulating method in relation to monopolies, including natural monopolies. At the same time, the main areas of the antimonopoly policy such as the relevant legal framework, regulation of monopolies and further improvement of forms and methods of control over monopolistic activities should prevent any transactions that lead restriction of competition, violation of the interests of the economic entities and citizens and unfair competition and seriously fight against the cases where monopolistic economic entities abuse their dominant position in the market. The state support should be increased for small enterprises engaged in development of new ideas and inventions and their application in production. According to the world experience, it would be expedient to finance 50-60% of the investments in these enterprises at the expense of the state. The state should also take necessary measures to expand and develop scientific and technical cooperation between large and small enterprises. The state support to the small enterprises and other forms of entrepreneurship in the Republic of Azerbaijan should be selective choice - stimulating in nature. First of all, the state should promote establishment and development of small enterprises in those sectors of the economy so that their development can contribute to implementation of the economic and social policy of the state in the transition to a market economy. The state should provide certain preferences to and stimulate emergence and development of the entrepreneurship in the following fields:

- 1) peasant (farmer) farms and small enterprises engaged in production and processing of agricultural products;
- 2) small enterprises producing food and consumer goods;

- 3) small enterprises providing production, household and communal services;
- 4) small enterprises engaged in construction of residential, industrial and social facilities;
- 5) small enterprises engaged in innovation activities;
- 6) small enterprises engaged in export-oriented production activities;
- 7) small enterprises producing import-substituting products.

The entrepreneurship development strategy should be based on the historical and national characteristics of the republic, socio-economic and geographical conditions, modern economic and intellectual development trends in the world. Formation of a flexible entrepreneurship structure, coordinating small, medium and large enterprises in itself, can have a strong impact on adaptation of the economy to the needs of the population and the competitive conditions of the world economy. Development of a healthy business environment and establishment of a modern entrepreneurial spirit as an integral part of the thinking and behaving style of people are the most important condition for rapid formation of an effective market economy in Azerbaijan and stabilization of the socio-political situation in the society.

4. CONCLUSION

We think that the main factor in the high efficiency of small enterprises is their narrow specialization in the field of production and in use of labor means. Therefore, such enterprises usually produce a limited number of products, and at the same time are distinguished for their use of narrow specialized equipment and high productivity, which allows changing the production technology in a short term and intensifying both the process of production of goods and the process of reproduction of assets. We think, in addition to being an economic category, small enterprises play an important role in creating new jobs, applying technology and technical means, developing foreign trade, accelerating the integration process, fully meeting the needs of consumers in domestic and foreign markets, increasing production and sales, addressing the socio-economic issues that appear in crisis times, especially the problem of unemployment, and other similar problems, and consequently, have very great socio-economic importance.

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DYNAMICS OF STATE BUDGET EXPENDITURES AND ECONOMIC GROWTH: INTERNATIONAL EXPERIENCE AND CURRENT CONDITIONS

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ABSTRACT

At present, analysis of the effectiveness of fiscal policy through optimization issues, research of the cause-effect relationship between macroeconomic indicators such as economic growth, revenues and budget expenditures, and the evaluation of a number of econometric models are necessary factors in political decision making. The necessity of these fields makes it important to research and analyze the effects of fiscal policy on the economy and therefore, the subject of the article can be considered actual. In order to examine the role of this macroeconomic phenomenon in the development of the economy and social welfare, the goals and objectives determined in the article have been consistently analyzed. Although the initial signs of the "2008 global financial crisis", which caused great losses in the world economy, were felt in the banking system, they also caused significant losses in fiscal structures. The next global economic crisis, which began mainly with the problems in the political relations of the world's leading countries and formed in late 2014, has created very difficult conditions in the fiscal environment of the states. These negative shocks in the world oil market have affected the economy of Azerbaijan and led to a several-fold decrease in the strategic foreign exchange reserves of the Central Bank of the Republic of Azerbaijan. In the article, the existing international experience of governments on fiscal policy frameworks has been analyzed and the effect of changes in budget expenditures in Azerbaijan on non-oil GDP for the period 2005Q1-2017Q3 has been assessed. As a result of the analysis, it has been elucidated that the Russian Federation, the Republic of Lithuania and Latvia, from the post-Soviet countries, chose a wider fiscal policy course during 2000-2017 years. After the 2008 global financial crisis, in post-soviet countries other than Azerbaijan, Moldova, the Russian Federation and the Kyrgyz Republic, financial spending declined for several years. As a result of econometric assessments, it has been determined that in the short term, a 1 percent increase in the current price of state budget expenditures led to a 0.36 percent increase in non-oil GDP, while in the long term, a one percent increase in state budget expenditures led to a 0.69 percent increase in non-oil GDP.

Keywords: *budget expenditures, economic growth, fiscal expansion, fiscal policy framework, government debt, non-oil GDP*

1. INTRODUCTION

At present, analysis of the effectiveness of fiscal policy through optimization issues, research of the cause-effect relationship between macroeconomic indicators such as economic growth, revenues and budget expenditures, and the evaluation of a number of econometric models are necessary factors in political decision making. The necessity of these fields makes it important to research and analyze the effects of fiscal policy on the economy and therefore, the subject of the article can be considered actual. In order to examine the role of this macroeconomic phenomenon in the development of the economy and social welfare, the goals and objectives determined in the article have been consistently analyzed. Although the initial signs of the "2008 global financial crisis", which caused great losses in the world economy, were felt in the banking system, they also caused significant losses in fiscal structures.

The next global economic crisis, which began mainly with the problems in the political relations of the world's leading countries and formed in late 2014, has created very difficult conditions in the fiscal environment of the states. These negative shocks in the world oil market have affected the economy of Azerbaijan and led to a several-fold decrease in the strategic foreign exchange reserves of the Central Bank of the Republic of Azerbaijan. Much work and scientific studies have been realized to evaluate the impact of fiscal policy and budget expenditures on economic growth in Azerbaijan and to analyze the effectiveness of the state budget. Research studies of many economists have been published on the topics discussed in the article and presented to the scientific community. D.Sc. (econ.) D.Baghirov's books "Finance" and "Corporate Finance" in this field covers a wide range of theoretical and practical problems of the financial system and provides interesting explanations [2], [3]. The report prepared by the International Monetary Fund staff on the Azerbaijani economy [7] can be considered as a detailed analysis of fiscal policy and its contours. They researched the macroeconomic situation in Azerbaijan and the spectrum of fiscal policy on the basis of the neoclassical growth model. Azerbaijani scientists Yadulla Hasanlı, Vilayat Valiyev and Namig Bakhishov conducted a study on the socio-economic consequences of budget spending channels for this problem [6]. They made an econometric assessment of the impact of Azerbaijan's budget expenditures on a number of macroeconomic indicators, such as inflation, wages, GDP growth, etc. The research conducted by Jurgen F. Conrad, an expert of the Asian Development Bank in the field of analysis of Azerbaijan's fiscal policy, is also noteworthy. He analyzed the financial system of Azerbaijan in general and compared its current financial situation with other post-Soviet countries. Furthermore, Kh. Aliyev, O. Nadirov, J. Mikayilov, J. Yusifov and others have researched in detail the assessment of the effects of fiscal policy on economic development. Based on this research and many other international articles, the article analyzes the effectiveness of fiscal policy and examines the cause-effect relationship between economic growth, revenues and budget spending. The article also provides an assessment of a number of econometric models.

2. INTERNATIONAL EXPERIENCE IN FISCAL POLICY

This problem has been extensively covered in international practice. This problem is researched in depth in both developed and developing countries. The modern world economy has faced some economic difficulties since the crisis. Global debt in 2016 was 164 trillion dollars, which is estimated to be 225 percent of global GDP. In 2016, the total amount of debt accumulated in the world amounted to 12 percent of GDP, and thus renewing the previous record level, ie in 2009. The growth of public debt has an important role in the growth of global debt, and according to the expectations of the International Monetary Fund (IMF), no significant improvement is expected in this trend in the medium term [8, p. 1]. The increase in government debt was mainly due to the global financial crisis and the response of government policies to it, as well as falling commodity prices and rapid cost growth in 2014 against the background of developing and low-income countries. For developed economies, the debt-to-GDP ratio has stabilized at more than 105% since 2012, and no such level of debt has been observed since World War II. There are several reasons why high public debt and budget deficits encourage governments to create reserve buffers to reduce the deficit and manage debt [8, p. 1]:

- Firstly, high public debt results in countries in being at risk due to the need for large financial assistance, especially short repayment periods.
- Secondly, countries may experience unexpected increases in the ratio of public debt to GDP, which can lead to more risks.
- Thirdly, high levels of government debt make it difficult to implement contour cyclical policies, especially in times of financial crisis.
- Fourthly, a high level of government debt could slow the potential growth rate.

The financial situation among developed countries was neutral in 2017 and the budget deficit accounted for an average of 2.6 percent of GDP. A weak fiscal expansion policy has been implemented in several countries, for instance, rising current spendings in the United States, and capital spending in Canada and Japan. In countries such as Denmark, Finland, the Netherlands, Norway and Slovenia, as the share of unemployment decreases, the amount of social spending in the state budget has also decreased. In countries such as Australia, France, Germany, Korea and the Netherlands, significant increases in income taxes have led to positive changes in the revenue side of the state budget. Since 2012, reductions in interest expenditures in France, Germany and Italy, employee payments in Cyprus, Finland and Spain and and some expenditures in other countries have led to a 1.6 percent drop in GDP in total spending.

Table 1: Dynamics of the world budget balance (as a percentage in GDP)

	2012	2013	2014	2015	2016	2017	2018	2019
World	-3.7	-2.9	-2.9	-3.3	-3.5	-3.3	-3.2	-3.3
Developed countries	-5.5	-3.7	-3.1	-2.6	-2.6	-2.6	-2.7	-2.8
USA	-7.9	-4.4	-4.0	-3.5	-4.2	-4.6	-5.3	-5.9
Eurozone	-3.6	-3.0	-2.6	-2.1	-1.5	-0.9	-0.6	-0.5
France	-4.8	-4.0	-3.9	-3.6	-3.4	-2.6	-2.4	-3.1
Germany	0.0	-0.1	0.3	0.6	0.8	1.1	1.5	1.7
Italy	-2.9	-2.9	-3.0	-2.6	-2.5	-1.9	-1.6	-0.9
Spain	-10.5	-7.0	-6.0	-5.3	-4.5	-3.1	-2.5	-2.1
Japan	-8.6	-7.9	-5.6	-3.8	-3.7	-4.2	-3.4	-2.8
England	-7.6	-5.4	-5.4	-4.3	-3.0	-2.3	-1.8	-1.5
Canada	-2.5	-1.5	0.2	-0.1	-1.1	-1.0	-0.8	-0.8
Others	0.5	0.2	0.2	0.1	0.6	1.0	0.6	0.6
Middle-income countries	-1.0	-1.5	-2.4	-4.4	-4.8	-4.4	-4.2	-4.1
Asia	-1.6	-1.8	-1.9	-3.2	-3.9	-4.2	-4.2	-4.3
China	-0.3	-0.8	-0.9	-2.8	-3.7	-4.0	-4.1	-4.3
India	-7.5	-7.0	-7.2	-7.0	-6.7	-6.9	-6.5	-6.5
Europe	-0.7	-1.5	-1.4	-2.7	-3.0	-2.0	-1.4	-1.4
Russia	0.4	-1.2	-1.1	-3.4	-3.7	-1.5	0.0	0.1
Latin America	-3.1	-3.3	-4.8	-7.2	-6.6	-6.2	-5.8	-5.6
Brazil	-2.5	-3.0	-5.4	-10.3	-9.0	-7.8	-8.3	-8.3
Mexico	-3.7	-3.7	-4.5	-4.0	-2.8	-1.1	-2.5	-2.5
Arabia	11.9	5.6	-3.5	-15.8	-17.2	-9.0	-7.3	-5.6
South Africa	-4.4	-4.3	-4.3	-4.8	-4.1	-4.5	-4.2	-4.1
Low-income countries	-1.7	-3.3	-3.2	-4.0	-4.2	-4.3	-4.2	-4.0
Nigeria	0.2	-2.3	-2.1	-3.5	-3.9	-5.8	-4.8	-4.6
Oil-producing countries	1.5	0.4	-1.2	-4.5	-4.9	-3.2	-2.2	-1.9

Note: The negative numbers in the table indicate the share of the budget deficit, and the positive numbers indicate the share of the budget surplus in GDP. The data for 2018 and 2019 are forecasted.

Source: International Monetary Fund [8, p. 14]

Data on the special share of the budget balance in GDP for the world and some countries have been summarized in Table 1. Based on the data on the table, it can be said that the world's main fiscal policy framework in the post-2012 period was mainly characterized by a deficit budget. After this period, a certain decrease was observed in investment costs. Examples of such countries are the UK and the USA. However, the interval of decline in investment spending has been smaller than in the 2010-2012 period. Even in Greece and Norway, there has been an increase in investment spending to stimulate economic growth.

Forecasts for 2018 and 2019 support weak fiscal expansion for this period, and debt is expected to decline by 100 percent of GDP by 2023. The main fiscal policy framework, given in Table 2, shows that they will generally focus on developed countries' fiscal consolidation policy for 2018 and the next medium term. Moreover, developed countries also intend to take measures to reduce tax rates and increase the social burden on the budget.

Table 2: The main fiscal policy framework expected for some developed countries (for 2018 and the next medium term)

Countries	The main fiscal policy framework
Canada	After significant fiscal expansion over the past two years, Canada is expected to follow a significantly neutral stance in 2018, remaining determined to implement its long-term infrastructure investment plan.
France	The long-term draft budget plans to gradually reduce the annual spending increase to zero by 2022, which aims to bring the budget deficit to 0.2 percent of GDP. To this end, special reforms in budget expenditures should be determined. Moreover, the government has admitted to support employment as a policy issue by reducing corporate tax rates and implementing structural reforms.
Germany	The draft budget for 2018 is characterized by a soft fiscal policy. Thus, soft tax policy, especially the implementation of tax credits for children and social compensations are the main fiscal policy framework this year. Besides financial expansion, the basic structural balance will not change in the medium term.
Italy	Plans to increase VAT rates in 2018 have been canceled and fiscal policy is expected to remain broadly neutral.
Japan	An additional 0.5 percent budget of GDP was approved and which had been calculated to partially eliminate the fiscal contraction resulting from the expiration of the previous fiscal stimulus package. Part of the growing revenue will be used for child support programs and education.
Spain	Despite the fact that the government does not yet have a specific financial plan for the medium term, it is planned to increase the budget deficit to 0.5 percent of GDP by 2020. To this end, the government plans to gradually consolidate spending.
England	It is planned to gradually continue financial consolidation, which means keeping the public sector's net borrowing below 2% of GDP in the current period and reducing the debt-to-GDP ratio in 2020-2021. The consolidation policy aims to reduce welfare and current expenditures, excluding defense, education and health expenditures.

Source: International Monetary Fund [8, p. 16]

In Table 3, a brief overview of the general state of fiscal policy in 2017 for some developing and middle-income countries has been indicated. Overall, budget deficits in developing countries and middle-income economies fell marginally in 2017 for the first time in four years of steady growth. Thus, the budget deficit in these countries fell from an average of 4.8 percent of GDP in 2016 to 4.4 percent of GDP in 2017. This is mainly due to the reduction of existing financial dependence between countries. In the Gulf Cooperation Council member states and in mainly commodity-exporting countries such as Mexico and Russia, the fiscal balance has significantly improved as a result of rising prices in global markets and cost-cutting policies. On the contrary, non-commodity exporters such as China, India and Thailand have a relatively weak fiscal balance. However, the development trends that took place in 2017 did not completely eliminate the existing trends in income and expenditure indicators in these countries over the past 5 years.

Since 2012, tax revenues among non-commodity exporters have been reduced by an average of 1 percent of GDP. This is due to stimulus policies and cyclical regulatory measures in countries such as China and Turkey. Due to the reduction of corporate income tax rates, mainly from oil companies, a decrease in tax revenues was also observed in commodity-exporting countries.

Table 3: The main fiscal policy framework for some developing countries in 2017

Countries	The main fiscal policy framework
Brazil	In 2017, the financial consolidation policy that started from previous periods continued. As a result of income recovery, possible reductions in some expenditures and low interest rates on loans, the budget deficit fell from 9% of GDP to 7.8%.
China	The budget deficit increased to 4% of GDP in 2017. During this period, extra-budgetary investment expenditures have been reduced. However, these reductions have been fully offset by tax reductions for a number of small businesses, in particular by lowering VAT rates.
India	Fiscal consolidation policy was suspended at the federal level for the 2017-2018 fiscal year, and a new national tax concept for goods and services was developed, which led to the recovery of the economy. Policies to support the growth of budget revenues and low capital expenditures by expanding the tax base was substituted by a high fiscal spending policy.
Indonesia	In 2017, the budget deficit has been maintained at 2.5 percent of GDP, and fiscal expenditures have been rebalanced to target education, health, social defence and energy subsidies.
Mexico	Due to significant reductions in capital expenditures, continued reduction of the salary fund on the envisaged project and one-time transfers from the Central Bank, the budget deficit was reduced to 1.1 percent of GDP in 2017.
Russia	As a result of the freezing of nominal spending and the support of budget revenues by rising oil prices, the fiscal deficit was reduced from 2% of GDP to 1.5% in 2017.
Arabia	The budget deficit, which was 17 percent of GDP in 2016, was reduced to 9 percent in 2017. The reason for this was measures to increase non-oil revenues and reduce capital expenditures by 2.5 percent of GDP.

Source: International Monetary Fund [8, p. 17]

Although commodity-exporting countries such as Mexico and Saudi Arabia have implemented reforms to increase non-commodity revenues, this has not yet led to a significant reduction in the share of raw material revenues. In about 40 percent of developing countries and middle-income economies, the share of tax revenues in GDP remains below 15 percent. Moreover, in all of these countries, the share of all expenditure categories in GDP, except for investment expenditures, has increased. In the medium term after 2017, it is expected to partially limit spending in middle-income and developing countries, which is designed to control the budget deficit. In these countries, keeping the growth of current expenditures below the growth of nominal GDP is one of the key issues. Although investment costs are expected to weakly increase in non-commodity-exporting countries, it is expected to decrease in commodity exporting countries. As the article is related to Azerbaijan's fiscal policy, it is more expedient to study international experience in terms of post-Soviet countries. In the Table 4, statistics on per capita government spending in post-Soviet countries have been indicated. These indicators cover the years 2000-2015.

Table 4: Per capita state budget expenditures in post-Soviet countries, in dollars

	Azerbaijan	Belarus	Estonia	Georgia	Lithuania	Latvia	Moldova	Russian Federation	Ukraine	Kazakhstan	Kyrgyz Republic	Armenia
2000	70.1	323.4	85.3	80.0	359.7	1542.6	102.4	374.9	170.8	168.6	44.2	-----
2001	68.3	334.4	88.7	79.4	359.4	1509.4	90.8	478.0	215.6	202.3	48.6	-----
2002	75.5	365.1	103.5	87.8	399.3	1738.6	-----	535.8	255.0	210.4	-----	-----
2003	104.3	513.3	140.0	99.2	509.0	2045.5	121.8	685.7	311.6	287.2	-----	-----
2004	126.4	696.1	173.0	176.0	611.6	2532.8	196.5	885.0	451.0	404.4	-----	202.1
2005	183.1	945.7	198.1	265.0	709.3	2996.6	243.7	1061.9	659.2	-----	-----	298.3
2006	363.5	1247.3	237.3	380.3	831.3	3814.5	302.9	1349.5	847.4	-----	85.9	370.1
2007	616.2	1641.2	311.4	570.5	1126.7	5108.6	398.8	2093.9	1072.5	-----	130.6	534.9
2008	1031.7	2164.7	397.3	924.6	1507.1	6862.4	555.9	2505.3	1451.9	-----	161.9	847.7
2009	1142.5	1700.3	381.9	837.5	1444.1	6318.2	580.3	2749.4	1036.2	-----	163.9	714.4
2010	1219.5	1821.6	354.3	781.2	1385.1	6205.1	570.7	2922.5	1217.3	1493.7	186.1	740.1
2011	1328.5	1659.2	385.1	906.9	1659.7	6270.9	646.7	3341.6	1366.2	1769.3	244.4	796.0
2012	1663.1	1917.1	377.5	1051.5	1420.2	6003.7	681.5	3731.2	1583.4	1956.7	270.0	787.6
2013	1648.0	2254.4	414.7	1042.1	1520.5	6475.8	724.0	3930.7	1619.9	2029.3	274.1	876.3
2014	1744.1	2280.1	437.5	1136.6	1581.6	6885.5	776.4	3730.0	1351.8	1960.5	268.8	958.2
2015	1363.5	1672.3	400.0	967.1	1368.9	5800.3	621.6	2860.9	794.0	1627.7	246.0	907.3
average	796.8	1346.0	280.4	586.6	1049.6	4506.9	440.9	2077.3	900.2	1100.9	132.8	669.4
minimum	68.3	323.4	85.3	79.4	359.4	1509.4	90.8	374.9	170.8	168.6	44.2	202.1
maximum	1744.1	2280.1	437.5	1136.6	1659.7	6885.5	776.4	3930.7	1619.9	2029.3	274.1	958.2

Source: The World Bank, World Development Indicators

<http://databank.worldbank.org/data/reports.aspx?source=2&series=GC.XPN.TOTL.GD.ZS>

3. THE RELATIONSHIP BETWEEN THE DYNAMICS OF STATE BUDGET EXPENDITURES AND ECONOMIC GROWTH

In this chapter, the contribution of state budget expenditures to economic growth, which is one of the most active components of fiscal policy, has been analyzed. To this end, the assessment of the impact of budget expenditures on economic growth by econometric methods, and more precisely, the changes in non-oil GDP caused by a 1 percent increase in budget expenditures have been researched. In the Table 5, statistical indicators of state budget expenditures and non-oil GDP have been indicated. The table shows that statistics on non-oil GDP and state budget expenditures are on a quarterly basis. It is known that statistical indicators of economic variables collected on a quarterly basis are very sensitive to seasonal factors. For this reason, both variables have firstly been cleared of seasonal factors. After that, the statistics have been converted into real values in the prices of the second quarter of 2007 through the deflator (2007Q2 = 100).

Table following on the next page

Table 5: *Quarterly statistics of GDP and state budget expenditures of Azerbaijan Republic*

Date	Y	X	O	Date	Y	X	O
2005Q1	2282.09	450.60	53.55	2011Q3	10534.25	4001.23	113.24
2005Q2	2583.79	462.67	59.47	2011Q4	13154.62	3328.75	116.36
2005Q3	2918.09	511.19	72.27	2012Q1	13049.12	3118.79	118.79
2005Q4	3311.79	470.78	65.71	2012Q2	13580.52	4321.18	110.91
2006Q1	3586.39	871.93	68.78	2012Q3	13383.68	4401.24	106.04
2006Q2	4008.33	885.24	79.20	2012Q4	13072.20	4211.66	105.84
2006Q3	5152.20	910.35	78.89	2013Q1	15442.73	5500.06	106.57
2006Q4	4974.29	902.46	66.24	2013Q2	14785.99	4424.78	105.26
2007Q1	5848.91	1373.23	65.29	2013Q3	15179.70	4547.72	110.80
2007Q2	5612.93	1420.22	75.72	2013Q4	13722.47	4760.09	99.56
2007Q3	5726.75	1553.95	84.95	2014Q1	15401.27	5171.72	100.25
2007Q4	9097.40	1347.52	98.23	2014Q2	15556.10	4370.09	104.46
2008Q1	6949.86	1193.79	105.73	2014Q3	14875.20	4369.08	99.13
2008Q2	7966.83	2156.14	134.79	2014Q4	13340.40	4531.35	75.62
2008Q3	8695.40	2276.06	129.31	2015Q1	16292.17	6012.36	49.42
2008Q4	6767.60	2283.99	61.29	2015Q2	17193.27	5186.34	59.36
2009Q1	10943.37	3868.91	47.81	2015Q3	15892.74	3779.53	48.08
2009Q2	11921.88	3313.69	67.54	2015Q4	13291.70	5087.76	39.93
2009Q3	12937.93	3278.92	77.30	2016Q1	12918.12	2918.90	30.43
2009Q4	13681.52	3683.50	84.41	2016Q2	13459.18	3843.88	42.23
2010Q1	8254.32	1786.71	86.85	2016Q3	14156.41	3670.63	42.95
2010Q2	8256.63	1889.48	85.78	2016Q4	13092.01	4664.84	46.03
2010Q3	8099.95	2472.27	84.37	2017Q1	13680.75	3329.35	49.29
2010Q4	10468.26	3247.19	92.28	2017Q2	13780.49	3309.11	47.41
2011Q1	10896.12	2291.29	106.17	2017Q3	15458.89	4099.59	48.55
2011Q2	10973.21	2542.70	121.43	2017Q4			56.07

Note: Y indicates Azerbaijan's non-oil GDP in million manats and X indicates the state budget expenditures in million manats. Both variables have been converted to real value in the second quarter of 2007 by deflator (2007Q2 = 100).

Source: Non-oil GDP indicators have been taken from the Central Bank's official website (<https://en.cbar.az/pages/publications-researches/statistic-bulletin/>). The state budget expenditures have been taken from the official website of the Ministry of Finance (<http://www.maliyye.gov.az/node/1551>). World oil prices have been derived from The Short-Term Energy Outlook (STEO) of the U.S. Energy Information Administration's (EIA) (U.S. Energy Information Administration, EIA Short-Term Energy Outlook).

During research with the implementation of econometric methods, one of the main features to be considered is that statistical indicators are in a period of time. Thus, this feature of statistical indicators often leads to their non-stationary. So, statistical indicators stationary of non-oil GDP and state budget spending have been researched. Stationary means the stability of the variation in the middle and around the middle of the indicators. According to the statistical indicators of state budget spending in Table 5, Augmented Dickey-Fuller test [4, p. 427-431], [5, p. 1057-1072] have been implemented using the application of Eviews program. It has been determined that the statistical indicators of budget expenditures for the period 2005Q1-2017Q3 are non-stationary. The first order differences of these series are used to convert non-stationary series into stationary series. Thus, the statistical indicators of the first order differences of budget expenditures were re-tested and the first order differences of the statistical indicators of budget expenditures for the period 2005Q1-2017Q3 are stationary. Similarly, the stationary variability of the non-oil GDP variable has been analyzed.

The non-oil GDP variable is also stationary from the first order difference for the period 2005Q1-2017Q3. So, after the initial statistical analysis, the impact of budget expenditures on non-oil GDP growth was assessed, and the equation that allows for short-term and long-term analysis was obtained as follows:

Short-term relation analysis:

$$\ln(Y_t) = 0.26\ln(Y_{t-1}) + 0.36\ln(X_t) - 0.24\ln(X_{t-1}) - 0.91Eq(-1) \quad (1)$$

(0.03) (0.00) (0.00) (0.00)

Y is non-oil GDP, X is state budget spending, and Eq is remainder of long-term relation equations between state budget spending and non-oil GDP. The numbers in parentheses indicate the probabilities of the t test. Equation (1) will allow us to analyze both short-term and long-term causal relations. It is accepted that in the short term, state budget expenditures will lead to non-oil GDP. The F-test which measures the combined significance of both current and past period cost coefficients of state budget spending, should be applied to do this. But there will be no need to apply this test. Because, both the coefficient of current prices (X_t) of state budget expenditures and the coefficient of previous prices (X_{t-1}) of a period were statistically significant. Therefore, the result of the co-significance test applied for short-term causal analysis will also be important. So, a 1 percent increase in the current price of state budget expenditures in the short term led to a 0.36 percent increase in non-oil GDP. In the analysis of short-term relations, the positive effect of current budget expenditures on non-oil GDP is in fact completely normal. That is, one of the components involved in the calculation of GDP is government spending, and a significant part of it is the state budget. However, as in Equation (1), the ratio (-0.24) characterizing the impact of previous state budget expenditures on the current state of non-oil GDP was negative. The explanation of such a conclusion can be based on macroeconomic theoretical frameworks and can be considered correct in a sense. According to the accepted macro principles, the current state budget expenditures could have a negative impact on economic growth after a certain period. Thus, the government usually raises tax revenues to increase spending, which in turn narrows the investment portfolio of producers by increasing the tax burden. As a result, as investment is one of the components of GDP, economic growth begins to slow. Therefore, the result obtained is consistent with macroeconomic theory. So, one percent increase in state budget expenditures in the previous quarter in the 2005Q1-2017Q3 period leads to a 0.24 percent decrease in non-oil GDP in the current quarter.

3.1. Long-term relation analysis

Based on Equation (1), the long-term impact of state budget expenditures on non-oil GDP will be analyzed. In this equation, the $Eq(-1)$ limit allows the analysis of the long-term relation. According to the methodology, if the coefficient of the $Eq(-1)$ limit in equation (1) is statistically significant with a negative sign, then it can be accepted that the state budget expenditures will lead to non-oil GDP in the long term. As in the Equation (1), the coefficient of this limit (-0.91) is negative. It is also statistically significant at a level of significance greater than 99%. So, it can be accepted that the state budget expenditures for the period 2005Q1-2017Q3 will lead to non-oil GDP in the long term. The resulting coefficient -0.91 can be used to test for long-term causality, but it cannot be used as a long-term causal coefficient. To explain this long-term relation, the corresponding equation can be written as follows:

$$\ln(Y_t) = 3.80 + 0.69\ln(X_t) \quad (2)$$

(0.03) (0.00)

Y is non-oil GDP, X is state budget spending, and the numbers in parentheses is the probabilities of the t test. Equation (2) can be used to analyze the long-term impact of state budget expenditures on non-oil GDP. The resulting coefficient 0.69 is the coefficient indicating this relation. The coefficient was statistically significant at a significance level higher than 99%. So, one percent increase in state budget expenditures in the long term increases the level of non-oil GDP by 0.69 percent.

4. CONCLUSION

Another result is related to the effects between state budget expenditures and economic growth. In this part, assessments have been conducted in two directions and relevant results have been obtained. Firstly, the impact of budget spending on economic growth has been assessed using econometric methods, and it has been revealed that in the short-term, a 1 percent increase in the current price of budget expenditures led to a 0.36 percent increase in the current level of non-oil GDP, and a 1 percent increase in the previous price of budget expenditures led to a 0.24 percent decrease in the current level of non-oil GDP. The explanation of such a conclusion can be based on macroeconomic theoretical frameworks and can be considered correct in a sense. According to the accepted macro principles, the state budget spending in current period can have a negative impact on economic growth after a certain period. Thus, the government usually raises tax revenues to increase spending, which in turn narrows the investment portfolio of producers by increasing the tax burden. As a result, as investment is one of the components of GDP, economic growth begins to slow. Therefore, the result obtained is consistent with macroeconomic theory. It should be noted that a 1 percent increase in state budget expenditures in the long term led to a 0.69 percent increase in non-oil GDP. This is one of the results obtained. Apparently, this does not correspond to the macroeconomic theory in the previous paragraph. Because with a certain period of delay (i.e. in the long term), the effect of public budget expenditures on economic growth is usually negative. It can be accepted that it is normal for the Azerbaijani economy not to be provided with this theoretical framework in the long term. Thus, Azerbaijan's state budget expenditures have significantly exceeded revenues over the past decade. This deficit has been provided not by increasing the tax burden, but by transfers from the oil fund to the budget, which prevented the negative impact of taxes.

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PROBLEMS OF THE IMPACT OF THE ECONOMY OF BANK LOANS ON THE DEVELOPMENT OF THE NON-OIL SECTOR

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ABSTRACT

Today, one of the most serious problems of most oil-producing countries is to minimize the dependence of the economy on oil. To reduce the dependence of the economy of all spheres on oil, the governments of these countries are taking steps to ensure superior development of the real sector. However, studies show that in some oil countries, although these goals have been set for many years, they are practically impossible to achieve. In developing countries, there are a number of reasons that impede the superior development of the real economy of these countries. And, if one of the conditions for solving this problem is the creation of a real business environment by the state, then another condition is to ensure the availability of financial resources for business. That is, if both of these conditions are met at a time, it will be possible to ensure superior development of the real sector. But, as research shows, it is almost impossible to witness cases of compliance with both of these conditions at a time in either of the developing countries. The main goal of the article is to analyze the role of bank loans in the business environment existing in Azerbaijan. Our main responsibility in this article is to determine the impact of bank loans directed to the real sector of the economy on GDP growth, including on GDP related to the non-oil sector. For this, ergometric modeling was used during the study. The study revealed that if the structure of general lending is not fundamentally changed, the impact of bank loans on the development of the country's economy will not be able to exceed the lower level. In addition, the primary problem that hampers the change in the existing lending system in favor of the real sector is that the level of annual interest rates on loans often exceeds the level of profitability in the real sector by up to two times. Another problem is that loans to the real sector are short-termed. Through our research, we offer an optimized option for the terms and interest rates of loans issued to the real sector.

Keywords: *Lending, Interest rates for bank loans, Annual interest rate, Non-oil sector, Real sector*

1. INTRODUCTION

The dependence of the economy on resources, as a rule, does not allow it to develop in a balanced way. The "light" money coming into the country from the sale of resources, ultimately leads to an unjustified appreciation of national currencies and the collapse of a competitive environment for the development of other sectors of the economy. However, this does not happen in all cases. Another experience shows that some countries with large resources have achieved substantial economic growth by skillfully using them. Countries such as the United States, Canada, Norway and Malaysia are examples of this. In other countries, the situation is quite different. For example, Saudi Arabia can balance its budget normally, while oil prices on world markets are \$ 80-85 per barrel. Russia and Azerbaijan feel comfortable with oil at \$ 60 a barrel. Even worse is the situation in oil countries such as Venezuela and Nigeria. This is not to say that these countries are doing nothing to make their economies dependent on oil. For example, in early 2016, Saudi Arabia set out a plan for structural reforms in the economy until 2030; although they said, "By 2020, we will live without oil," today Saudi Arabia's economy is dependent on oil. The resource countries were also the countries that suffered the most from the impact of the coronavirus pandemic on the world economy.

Again, the leadership belongs to the oil-producing countries. For countries whose economies and budgets can breathe normally when oil prices are between \$ 60 and \$ 80, oil prices are now more than three times lower than they were in early January 2020, creating a real opportunity for an irreversible financial crisis. But are there real ways for countries whose economies and financial systems depend directly on world oil prices to get rid of their dependence? Undoubtedly, there are these ways, you just need to identify and implement them properly. If one of these ways is to boldly direct oil money directly to the real sector of the economy in countries engaged in oil production and export, the other is to be able to direct bank loans for the development of the real sector of the economy. Currently, the issue of attracting bank loans for the development of the real sector of the economy is being discussed by many researchers, and since this is important and very relevant both theoretically and practically, we will try to explain this problem in the article.

2. THE ROLE OF AZERBAIJANI BANKS IN THE DEVELOPMENT OF THE REAL SECTOR OF THE ECONOMY

The global financial and economic crisis that began in the US banking sector in 2007/2008 began to have a serious impact on the Azerbaijani economy and its financial system only in mid-2014, when oil prices began to fall sharply on world markets. The first blow of this crisis hit the country's financial system and banking sector. In February and December 2015, the national currency underwent two sharp devaluations and lost 2.2 times its value by the beginning of 2016. This financial crisis has revealed all the shortcomings in the country's banking sector. Prior to the crisis, banks provided billions of dollars in consumer loans (sometimes with an annual interest rate of up to 30%) to individuals and legal entities due to the strong foreign exchange resources they attracted from abroad and at home. Although independent experts have repeatedly criticized banks for preferring more expensive consumer loans to the real sector of the economy, there has been no turning back yet. Despite the fact that the Central Bank has reduced the discount rate more than twice in the last two years, the share of consumer loans with high interest rates in the loan portfolio of banks is still higher. The similarities between consumer and business loans of commercial banks are that the annual interest rates on these loans do not differ much, as evidenced by the data in Table 1.

Table 1: Annual interest rates on consumer and business loans in Azerbaijani commercial banks

Banklar	Consumer loans				Business loans		
	Cash	Car loans	Repair loan	Mortgage	Micro	Small and medium business	Agricultural loans
Bank of Baku	23– 29%	-	-	-	26-30	20-22%	26-30%
BTB Bank	18-21%	25-27%			18-26%	16%	-
NBC Bank	22-29%	10-26%				18-25%	
AccessBank	19%		28%	28%	19%	-	19%
Turanbank	16%	19-21%	21-24%	12-15%	19%	19%	-

Source: The table was prepared on the basis of the Azerbaijan Banks Association

From the data in Table 1, the interest rate of consumer and business loans of Azerbaijani banks is clear. The fact that the annual interest rates on micro and agro loans sometimes rise to 30% means that their fate is already known when these loans are issued. As a rule, loans with such high interest rates cannot be repaid. At AtaBank, which closed in May 2020, the share of problem loans in the bank's total loan portfolio reached 88%. A similar situation is observed in many banks today.

n our study, we tried to relate the volume of loans provided by banks to the real sector of the economy to the volume of their loan portfolio and the overall level of development of the economy, especially the level of development of the real sector.

3. EXISTING PROBLEMS IN LENDING TO THE REAL SECTOR OF THE AZERBAIJANI ECONOMY

From 2015 to the present, the country's banking sector can not get out of the difficult situation. Fifteen banks have been closed over the past four years, and as many are expected to close in the near future. The current credit load of the real sector of the economy once again suggests that the creditworthiness of business in Azerbaijan is very low and it is necessary to eliminate this situation as soon as possible (see Table 2). A large part of the banks' loan portfolio consists of consumer loans to households, which cannot be directly linked to the development of the real sector.

Table 2: Structure of credit investments by sectors (at the end of the period), (in million manats)

Years	Total credit investment	including									
		Household		Trade and services		Agriculture		Architecture and construction		Industry and production	
		Total	%	Total	%	Total	%	Total	%	Total	%
2005	1441,0	389,2	27,0	361,0	25,1	97,6	6,8	82,2	5,7	83,3	5,8
2008	7191,3	2334,9	32,5	1911,3	26,6	261,5	3,6	461,4	6,4	427,5	5,9
2012	12243,7	4316,7	35,3	2649,3	21,6	546,2	4,5	1270,3	10,4	1297,6	10,6
2015	21730,4	8383,6	38,6	3158,0	14,5	508,1	2,3	3063,2	14,1	1948,3	9,0
2016	16444,6	5858,7	35,6	2467,0	15,0	441,3	2,7	1908,6	11,6	1265,6	7,7
2017	11757,8	4606,5	39,2	2069,2	17,6	429,2	3,7	546,2	4,6	621,2	5,3
2018	13020,3	5319,6	40,9	2379,5	18,3	470,0	3,6	388,8	3,0	706,6	5,4
2019	15298,2	6978,7	45,6	2491,3	16,3	543,4	3,6	477,1	3,1	872,6	5,7

Source: The table was prepared on the basis of information of the Central Bank of the Republic of Azerbaijan

As shown in Table 2, 45.6% (or 6978.7 million manats) of the banks' loan portfolio of 15298.2 million manat in 2019 consists of loans to households. The non-oil industry, which is the leading sector of the real sector, was able to get 5.8%, the construction sector - 3.1%, and agriculture - 3.6%. The credit load of the economy and the optimal level of this load is very important. In developed countries, the credit load, defined as the ratio of loans to the economy to GDP, is several times higher than the GDP in some countries. In our opinion, it is not normal for the credit load of the economy to exceed GDP. In general, the optimal level of the credit load in the economy is a very important issue that needs to be kept in mind. How can this level be determined? It may be a better choice to first look at the experience of other countries in this area and only then form a concrete opinion.

Table following on the next page

Table 3: Private sector credit load in different countries and groups of countries in 2018 (ratio of loans to GDP)

	Countries	Credit load, in %
1	On the world	89,1
2	Eurozone	85,9
3	Europe and Central Asia	88,0
4	Denmark	161,8
5	Germany	78,2
6	Japan	107,5
7	Singapore	121,9
8	Georgia	59,5
9	Turkey	63,8
10	Azerbaijan	20,0

Source: <https://data.worldbank.org/indicator/FD.AST.PRVT.GD.ZS>

According to the relevant report prepared by the World Bank, in countries with a high credit load on the private sector, the level of development of this sector is sufficient (World Bank (2018); <https://databank.worldbank.org/home.aspx>). In the world as a whole, this figure is close to 90%, which means that in the most economically developed countries of the world, the credit load of the real sector of the economy is usually more than 60%. According to a report submitted by the World Bank, among the countries with the lowest credit load are economically underdeveloped countries such as Afghanistan, Angola and Nigeria.

4. ERGOMETRIC ASSESSMENT OF THE IMPACT OF BANK LOANS ON GDP

What is the situation in this area in Azerbaijan and how has the credit load of the economy changed in recent years, and what have been the effects of this change on economic development? In order to clarify these questions, we try to determine how the credit load of the Azerbaijani economy will change and the impact of this change on the economy.

Table 4: Credit load of the Azerbaijani economy

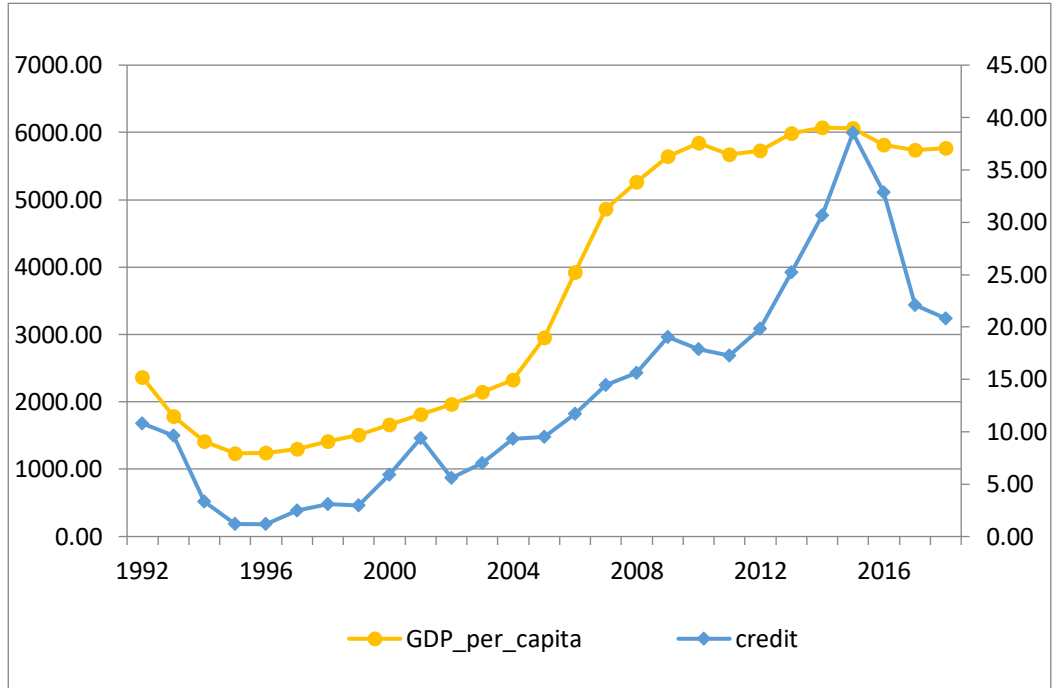
	Gross Domestic Product	Including		Total credit investment	Including	Credit load of the economy (in %) (5 : 2)	Including
		Non-oil Gross Domestic Product	Share of Non-Oil Gross Domestic Product in Gross Domestic Product (in %) (3 : 2)		Credit investment in industry, construction and agriculture of the non-oil sector		Credit load of industry, construction and agriculture of the non-oil sector (in %) (6 : 3)
1	2	3	4	5	6	7	8
2012	54743,7	28474,9	52,01	12243,7	3114,1	22,37	10,94
2015	54380,0	37670,0	69,27	21730,4	5519,6	39,96	14,65
2016	60425,2	39403,1	65,21	16444,6	3615,5	27,21	9,18
2017	70337,8	44061,9	62,64	11757,8	1596,6	16,72	3,62
2018	80092,0	46671,3	58,27	13020,3	1565,4	16,26	3,35
2019	81681,0	50391,8	61,69	15298,2	1893,1	18,73	3,76

Source: The table was prepared on the basis of information of the Central Bank of the Republic of Azerbaijan

In 2019, 61.7% (or 50.4 billion manat) of the 81.7 billion manat GDP produced in Azerbaijan fell to the real sector of the economy (<https://www.stat.gov.az/news/macroeconomy.php>?)

page=1&lang=en). In the same year, the total credit investment in the country was equal to 18.73% of GDP, of which more than 45% were consumer loans issued by the banking sector to the population at high interest rates (sometimes 40 and more percent) in the name of households (<https://www.cbar.az/page-42/monetary-indicators>; <https://aba.az/banklar/banklarin-siyahisi/>). In 2019, the credit load of the industrial, construction and agricultural sectors of the non-oil sector amounted to only 3.76%, which means a 3.9-fold decrease in lending to these sectors compared to 2015. However, in 2015 and 2019, non-oil GDP increased by 33.8%. This increase was primarily due to foreign capital inflows and the implementation of a number of projects from the state budget.

Figure 1: Visual description of the relationship between GDP per capita and credit load



Source: <https://databank.worldbank.org/home.aspx>

As can be seen from Figure 1, both variables move together. Thus, increasing the credit load of the economy and its real sector to the optimal level could result in a faster growth of GDP in Azerbaijan. To make the analysis more accurate, we used the World Bank's electronic data center as a database, taking the period 1992-2018. Using the Unit-root test, we found that both variables were non-stationary, as can be seen from the following data.

Table 5: Stationary test on credit load

Null Hypothesis: CREDIT has a unit root		
Exogenous: Constant		
Lag Length: 4 (Automatic - based on SIC, maxlag=6)		
	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.338102	0.9749
Test critical values: 1% level	-3.769597	
5% level	-3.004861	
10% level	-2.642242	

*Mackinnon (1996) one-sided p-values.

Source: Author's calculations

Table 6: Stationary test on GDP per capita

Null Hypothesis: GDP_PER_CAPITA has a unit root
 Exogenous: Constant
 Lag Length: 1 (Automatic - based on SIC, maxlag=6)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.705190	0.4166
Test critical values: 1% level	-3.724070	
5% level	-2.986225	
10% level	-2.632604	

*Mackinnon (1996) one-sided p-values.

Source: Author's calculations

Table 7: GDP's growth per years

Years	Credit	GDP	GDP growth	GDP per capita	Non-Oil Real GDP Growth
1992	10,81	17426057713,95	-22,60	2360,61	.
1993	9,60	13400638502,35	-23,10	1787,94	.
1994	3,33	10760712620,58	-19,70	1416,44	.
1995	1,19	9490948560,19	-11,80	1235,00	.
1996	1,17	9614330840,70	1,30	1238,48	.
1997	2,45	10171962030,65	5,80	1297,73	.
1998	3,08	11189158352,25	10,00	1414,02	.
1999	2,97	12017156024,09	7,40	1505,39	.
2000	5,90	13351060283,10	11,10	1658,81	7,86
2001	9,36	14672815268,51	9,90	1808,96	7,85
2002	5,58	16057770026,78	9,44	1964,99	11,48
2003	7,01	17696995366,20	10,21	2149,23	15,44
2004	9,32	19334640158,11	9,25	2327,65	12,05
2005	9,53	24740902926,33	27,96	2948,21	12,23
2006	11,72	33268154327,41	34,47	3921,03	14,33
2007	14,43	41739296291,78	25,46	4863,98	14,86
2008	15,59	46160087685,64	10,59	5267,37	14,80
2009	19,07	50485058386,53	9,37	5642,53	4,10
2010	17,88	52902703376,11	4,79	5842,81	4,78
2011	17,28	52070545110,51	-1,57	5676,45	8,95
2012	19,81	53217627468,07	2,20	5724,92	8,70
2013	25,21	56326959563,02	5,84	5981,54	9,91
2014	30,64	57902587621,89	2,80	6072,59	6,65
2015	38,52	58510999630,18	1,05	6063,73	1,39
2016	32,87	56718105558,80	-3,06	5812,58	-4,92
2017	22,10	56558154150,49	-0,28	5739,59	2,83
2018	20,84	57357249337,79	1,41	5768,99	2,32

Source: The table was prepared on the basis of information of the Central Bank of the Republic of Azerbaijan and www.stat.gov.az

The analysis (Tables 5 and 6) shows that our T-statistics are greater than the critical values corresponding to the interval of 1%, 5% and 10%, so the variable is assumed to be non-stationary. Since both variables are non-stationary, the regression equation is based on the first differentials. Thus, the OLS (method of the smallest squares) equation was calculated on the credit load of UDM per capita, and the balances were corrected by the Newey-West method for disproportion (heteroskedasticity) and autocovariance.

Table 8: Result of the regression

Dependent Variable: DGDG_PER_CAPITA

Method: Least Squares

Date: 05/18/20 Time: 22:30

Sample (adjusted): 1993 2018

Included observations: 26 after adjustments

HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 3.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DCREDIT	35.50972	16.29753	2.178841	0.0394
C	117.3895	88.58789	1.325119	0.1976
R-squared	0.166558	Mean dependent var		131.0915
Adjusted R-squared	0.131832	S.D. dependent var		343.5928
S.E. of regression	320.1445	Akaike info criterion		14.44923
Sum squared resid	2459820.	Schwarz criterion		14.54600
Log likelihood	-185.8399	Hannan-Quinn criter.		14.47709
F-statistic	4.796254	Durbin-Watson stat		0.542878
Prob(F-statistic)	0.038476	Wald F-statistic		4.747347
Prob(Wald F-statistic)	0.039392			

Source: Author's calculations

The result of the regression supports the hypothesis that the credit load has a positive effect on GDP growth. Thus, an average increase in the credit load by one percent increases GDP per capita by \$ 35.5. At the same time, the result obtained is statistically significant: both the t-test and the F-test confirm that the credit load factor is positive. Note that our result is valid in the 5% interval.

5. CONCLUSION

Our analysis has shown that the credit load of the Azerbaijani economy, and especially its real sector, lags far behind the credit load of developed countries and even developing countries. According to the World Bank, the credit load of the global economy as a whole is 89.1%. However, in Azerbaijan, this figure could not exceed 18.73% in 2019. In a country whose economy is dependent on oil, and trying to get rid of this dependence, the credit load of the leading sectors of the real sector of the economy was only 3.76%, or up to 5 times less than the national average, and up to 24 times less than the world average. Our calculations show that an average increase in the credit load of the economy by one percent can increase GDP per capita by \$ 35.5. Thus, a 10% increase in the credit load of the economy would mean an additional 3,550 million manat of GDP in Azerbaijan, which has a population of 10 million. Increasing the credit load to an optimal level of 50% could ensure the growth of the overall economy to 10 billion manat a year. Providing the real sector of the economy with this level of credit load would allow it to fully optimize its dependence on oil in the next 10 years.

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BASIC PROBLEMS AND INNOVATIVE PRIORITIES BY DEVELOPMENT OF THE TRANSPORT SYSTEM

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ABSTRACT

The article analyzes the essence of the concept of "transport system" in modern Ukrainian economic thought. The main groups of functional factors of the transport system development in Ukraine are identified. The priority measures, the realization of which will help to increase the efficiency of the transport system functioning and intensify integration processes with international transport systems. The place of autotransport in the structure of the national economy as a high-tech type of activity in the article was determined. The systematization of types of innovations in the field of autotransport into groups of industrial, infrastructure, logistic, service, information, security, environmental was carried out. The initial steps towards enhancing innovation in the field of auto transport were substantiated. The advantages of stimulating start-up activity in the field of auto transport were disclosed.

Keywords: *Transport system, Transport infrastructure, Development strategy, Social and economic well-being, National security*

1. INTRODUCTION

The transport system, as one of the key factors for the effective development of the national economy, requires a specialized branch of science, and seeks research in this field, which tries to implement innovative technology at this level and, therefore, motivate not only transport systems, and require its own units, but also deal with other. Such, exempted from the functioning of the transport system, are all spheres of life, because transport used by the catalyst and the "necessary condition of the necessary economic complex and social sphere" [10]. In view of this, using the basic theoretical and methodological foundations of the functioning of the transport system at different levels, considering its multifunctional and multi-vector character, using the factor of analysis, using spheres of economy with the use of isolation, which requires its development. The second part of the study is devoted to autotransport, which is a powerful factor and an excellent indicator of the economic development process. The economic importance of this company is explored in its innovative functionality.

In order to present an industrial functional autotransport, this is very important in view of: the growing vision from the world's leading powers for a dynamic innovative person; it is possible to potentially develop autotransport in production, making it and in almost all cases.

2. THEORETICAL ASPECT OF THE DEVELOPMENT OF THE TRANSPORT SYSTEM

The authors have considered the transport system in synergy with such components as logistics systems [7; 23; 25; 26], a communication system [21], investigating murder and using it in different strategic ways of developing the transport system [17; 18; 16; 1], using the state and perspective integration of the country into international transport systems [18; 12; 13; 15]. The transportation system is the highest dynamic process that needs new research and processing, requires the organization to function through its services and improve the economy, improve economic relations, using the most important issues related to the integration transport systems used in other fields, national security, the spread of security. We consider the concept of "transport system" to be justified. There are many interpretations of this term. More interpretation of "transport systems" remains in the scientific achievements of economics, which reach this concept, as a set of transport networks that are distinguished by moving transport (or objects of linear, used, socio-technical issues), as well as work resources used with the use of known process of transportation in different regions, economic and other [10, 22; 5]. Other interpretations of the "transport systems" allow to obtain part of the infrastructure of the economy, which works with its own infrastructure, management system and inter-system source of development [1]. The subsequent interpretation of the "transport systems" made it possible to ensure a substantial ability, by caring for a person and satisfying their needs for vehicles. The next interpretation of transport system is good socio-economic well-being of man [2]. The following interpretation of the "transport system" allows to use the strategically existing factor of development and competitiveness of the national economy of the country, as well as its national security [16]. The following interpretation of "transport systems" has proven to be produced in comparison to other economic relations supplied by one's own consumer, linking production and use between one another, clearly located in locations that are members and regions, and necessary for economy, as the user seeks, humming [8]. The following interpretations of "transport systems" make it possible to obtain as an integral product, transport-logistic systems [23], or necessarily complex transport and communication systems [21] with the characteristics of multipurpose, multifunctional, modern, protected in relation to strategic states used. in all kinds of relationships. Generalizing these designs, we use that the transport system is a multifunctional, long-term, permanently produced complex amount of mobile transport, transport places, labor-intensive resources, which, when moving to a single place, and properly considers that it is possible to use, but of course, using freight and passive itineraries by highlighting national security, it helps to achieve human well-being. The development of the transport system is must be considered at the local, regional, national and international level, taking into account strategic goals, as well as geographical, territorial, socio-economic, political, ethnic, cultural factors. Analyzing the theoretical aspect of the development of the transport system, it should be noted that in present there are not detailed scientific and methodological studies and evaluations of the functional-factor process of growth of the transport industry in general. There are no reasoned forecasts of different terms, there are no effective programs of strategic development by the state. Since the activity of the transport system is a difficult and capacious process, characterized by a complex multilevel hierarchical structure, different internal and external interconnections, the integrity of the elements, let us consider the basic functional factors of the transport system development [7]. Note, that the essence of the functioning of the transport system - meeting the economic needs of society in passenger and freight transportation, and the social well-being of the population is a dominant

factor. Therefore, this systematic approach will make it possible to understand the relationship between the needs of the population and the main goals of the transport system of the national economy. In our view, political, legal, environmental, marketing, socio-economic, financial-investment, innovation-technological and integration factors should be considered as the most important functional factors for the development of the transport system.

- 1) Political and legal factors which include: improvement of the mechanism of state regulation of transport system development; updating existing and developing new legal bases for ensuring the effective operation of all subsystems of the industry; taking the necessary measures to guarantee national security; creation of a complete information field with effective channels of communication for information interchange within the transport system, as well as with the environment, consumers, authorities, while protecting the information space from external negative factors.
- 2) Ecological factors include environmental protection, minimization of harmful emissions into the air, conversion to environmentally friendly fuels, etc. This group of factors should include the development of an emergency response program related to the operation of transport, for example, violations of the rules of carriage of dangerous goods, which leads to excess levels of harmful substances in the environment, accidents with such carriers, etc. Environmental monitoring of transportation system activities is also advisable to maximize environmental safety.
- 3) Marketing factors should include: developing a management model that would enhance the effectiveness of organizational functions, as well as the management and control functions of all subsystems of the transport industry; restructuring of management and production services with delineation of production and regulatory and control functions, improvement of staff qualification; transition to new organizational forms of transport system management at different levels; introduction of the latest information technologies.
- 4) Socio-economic factors are characterized by a binary character: on the one side, it is meeting the needs of consumers as passengers, customers, citizens, as well as ensuring the fulfillment of the main tasks of the national economy. On the other side - support of the transport system, which envisages the implementation of all necessary measures for the formation and expansion of the markets of transport services, development of entrepreneurship, achievement of competitiveness, in particular, in international markets, creation of such conditions under which the client-user can always freely choose acceptable at a price vehicle. The key here is that the quality of the vehicle itself and the level of service provided must be equally high. Effective predominance of this group of factors is possible provided: the development and implementation of appropriate programs for the development of the transport system, including the necessary legislative framework; introduction of new, in accordance with international, standards of quality of transport services, certification of vehicles, systems of licensing of international transportations; permanent improvement of the transport service system. Achieving social well-being is a key factor, and therefore the key role in this system belongs to the state and its control and regulatory, regulatory levers of influence.
- 5) Financial and investment factors include the following actions. Improving the pricing process in the sectors of the transport system, taking into account market trends on the one hand and social position of the society on the other. In today's realities, the existing imbalance between these criteria leads to dissatisfaction with the population, although for

the effective development of the transport industry an adequate tariff policy is required with the establishment, if necessary, of fixed tariffs for the transport services of monopoly carriers. Control over the actual costs and profitability of transport enterprises. Improvement of the tax legislation on the regulation of the tariff policy of transportation. Weighed investment policy aimed at introducing new technological equipment, expanding the transport network, replenishing vehicle parks and more. At the same time, the state must retain the obligation to subsidize socially disadvantaged categories of people, as well as to reimburse the costs associated with socially important transportation and services that do not cover existing tariffs.

- 6) Innovation and technological factors are closely intertwined with environmental factors, since technological updating of vehicles in accordance with the requirements of time helps to preserve the environment, increase the safety of transport use. The main factors in this group are: timely repair of defective or final elimination of obsolete vehicles and equipment; development and implementation of a special program for the selection and development of personnel servicing the transport equipment, responsible for its condition and operation; to stimulate the production of transport equipment with a high level of operational capacity and safety of transportation of passengers and cargo; development of state-of-the-art diagnostic systems for the technical condition of vehicles and equipment. In this list of factors, due consideration should be given to the financial support of current sectoral research and development. The role of the sponsor should be assumed by the state or, with its support, investors.
- 7) Integration factors stem from strategic initiatives where the state seeks to join the most important international organizations, and therefore integration into the world transport systems is a necessity. Moreover, foreign trade relations are possible, first of all, due to the developed transport network in accordance with international requirements. Therefore, this group of factors implies: active participation of the state in international transport organizations; development of international transport communications on the territory of the country; compliance of the legislative framework with international legal norms; technical and technological convergence of the transport system with the transport systems of all countries of the world.

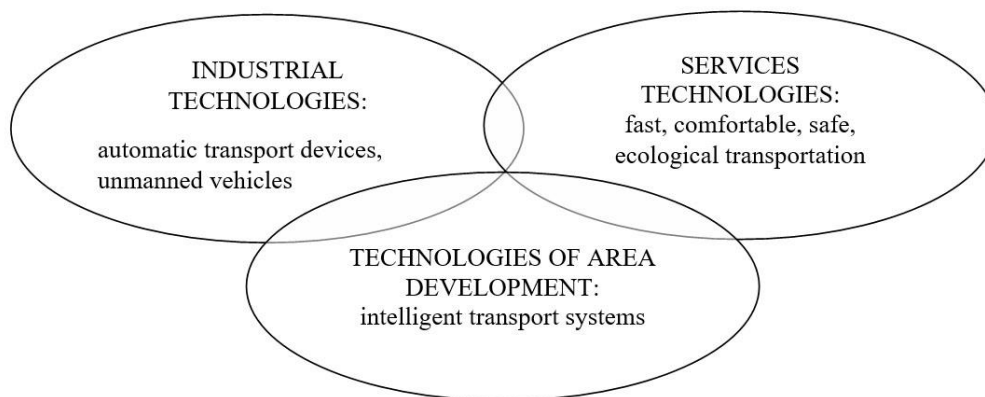
Therefore, the systematization of the factors of development of the transport system is due, first of all, to its multifunctionality. According to various estimates, among the most important functions of this system - organizational, accumulating, integrating, differentiating, managerial, morphological, redistributive, transit and others [10]. All these functions are intended to ensure the implementation of state development strategies, and only under this condition, as well as, given the economic and social well-being of the state, the effective development of the country's transport system is possible.

3. INNOVATIVE PRIORITIES OF AUTOTRANSPORT DEVELOPMENT

Most of the economies of the world in terms of technology structure are significantly inferior to the leading countries, at present. According to the technological arrangements in the structure of the economy of most countries, according to the experts' findings, the IV form is characteristic for the developed countries of the 1930-1990 year of the 20th century (automotive, non-ferrous metals, synthetic materials, production of durable goods); the presence of the second form (steam engine, railway construction and transport, coal industry, ferrous metallurgy) and a small share of the fifth form (electronic, measuring, optical fiber equipment, software, telecommunications, robotics, information services) [11].

Experts from the "Forsyth Economics Research Group" provide a sound prediction of the major constituents of the VI technology framework for any economy for the period up to 2020-2025 as knowledge-intensive activities. These are: biotechnology; medical technologies; optoelectronics; computers and telecommunications; radio electronics; flexible automated production modules; robotics; automatic transport devices; new materials; aerospace technologies; armament; atomic technologies [28]. This list identifies automatic transport devices. Properly distributed, such devices form intelligent transportation systems that involve the use of computer, information and communication technologies to manage vehicles and networks in real time, including the movement of people and goods [6]. Among the priority technologies of the VI technological way are also the latest industrial technologies, in particular robotic unmanned vehicles. In Figure 1 shows which high-tech activities of the autotransport play a leading functional role - both as a producer of an innovative product and as a consumer of innovative technologies that provide competitive advantages in terms of cost savings and profit maximization. For the economy of the country it is necessary that the autotransport industry is encouraged to develop industrial technologies. At the same time, the center should put the quality of transportation services, determined by human needs. Their innovative component should enhance the properties of speed, comfort and safety of transportation. In view of the goals of sustainable development, the value of eco-innovation is increasing.

Figure 1: High-tech activities with major involvement of autotransport



Source: 29

Certain high-tech activities with the presence of autotransport form a general vision of its basic functional role. However, the variability of innovation can be wider. The result of the proliferation of automatic transport devices and the formation of intelligent transport systems is sufficient innovative activity in the field of autotransport. In doing so, innovations of different nature and uses can be produced and implemented. Below are their systematization:

- Production innovations: improvement of vehicles with the aim of enhancing their safety, comfort, speed; the use of automated and robotic (unmanned) vehicles and vehicles as a whole;
- Infrastructural innovations: new approaches to the construction of the road network, quality assurance of their coverage (road surface / bridge junctions (practice of Asian and American metropolises) / tunnels (project initiatives by A. Mask)); intelligent transportation systems in spatial planning (cities, including metropolitan and metropolitan status, "Smart City");
- Logistical innovations: information databases on loading, moving, storage of goods / moving of passengers, including in intermodal transportations; customs control information databases;

- Service innovations: electronic tickets; electronic payments for freight and other services; inclusive technologies in transportation services (for persons with disabilities);
- Information innovations: on public transport - traffic timetable; navigation systems and access to them by Internet, special software and mobile applications; web-resources of booking and payment of tickets;
- Safety innovations: video surveillance, automation of traffic control (loads on roads and infrastructure, accidents); elimination of consequences (damages) of accidents, weather conditions; weather forecast;
- Eco-innovations: use of electric transport on an autonomous course; use of electric trucks and infrastructure for their movement and maintenance; building energy-efficient transport infrastructure (for example, roads).

Certain types of innovations in the field of road transport are of the utmost importance for the country's entry into the world transport space and for improving the organization of transport at the interstate level. While in developed countries, new technologies for the provision of motor vehicles, quality control, and the use of motor vehicles are being produced and implemented, in most countries the situation is at the stage of resuscitation of infrastructure (road repair). In view of the current state of affairs, the following steps should be the primary steps towards enhancing innovation in the field of autotransport:

- 1) Segmental concentration of innovative activity - ecological transport, intellectual roads (for the movement of unmanned vehicles);
- 2) Spatial concentration of innovation activity - industrial parks specialized in the production of industrial innovations for the autotransport industry;
- 3) Subjective conceptual initiative - motor transport startups;
- 4) Institutional cooperation in the field of innovative projects implementation - public-private partnership, cluster (cross-sectoral) forms of cooperation;
- 5) International brand investment breakthrough - attracting the investments of reputable international companies in the development of motor transport infrastructure ("Tesla", "Uber", "Google", "General Electric", "Bombardier" (the leader of the market for road and aerodrome testing of unmanned vehicles [14]) etc.);
- 6) The development of intermodal transport with the development of "Hyperloop" infrastructure (this is an innovative type of land (or underground) transport, which is a train on an air cushion, which moves in the conditions of a forward [27]).

Among the priorities highlighted is the promising prospect of supporting truck startups. A startup is a process of entering the market of a newly created enterprise with an innovative project, usually in the short term and with minimal investment [11]. These are team or individual projects that are capable of generating new thinking and ideas in the context of a scalable business model of economic growth [20]. In fact, startups produce technology ideas and participate in their transfer through partnerships with other stakeholders. It is those projects that are created not by professionals, but by real innovators, whose purpose is to realize their potential, become relevant for economic development [9]. Autotransport startups are a popular trend in the world. According to experts at the 2018 in Los Angeles (USA) international exhibition "Automobility LA", nowadays, trucking starts to take on a new meaning when, for the most part, these were mobile applications for calling taxis and booking tickets. Experts highlight the following most revolutionary vehicle startups [3]:

- Online carpooling / riding platforms for private vehicles (a successful example of "Lyft" and "Uber");
- Drone delivery networks (for example "Zipline");

- Production and use of simulation software (innovative sensors) for unmanned vehicles, self-driving radars to avoid accidents, in particular pedestrian fixation sensors and other vehicles (examples: "Columbus", which produces radar sensors that are virtually unaffected by radar sensors) external factors that will play a decisive role in the distribution of unmanned vehicles; "Neteera Technologies", a company that manufactures Terahertz sensors to provide unmanned vehicles usefulness scan the environment through a single device connection technology radar and lidar, the company «Innoviz Technologies», which manufactures solid lidar for receiving and processing information using optical systems);
- "Training" artificial intelligence for vehicles of the future using robotic technologies (an example of "Mighty AI").

In addition to these startups, the following are the powerful innovative areas for autotransport:

- Production and infrastructure support for the use of electric trucks (example of "Tesla" and "EV Safe Charge" companies, which develops infrastructure for charging electric trucks);
- Design of future vehicles with air transport - electric cars, air drones, including the use of carpooling / ridersharing principles for the financial accessibility of travel [4; 19].

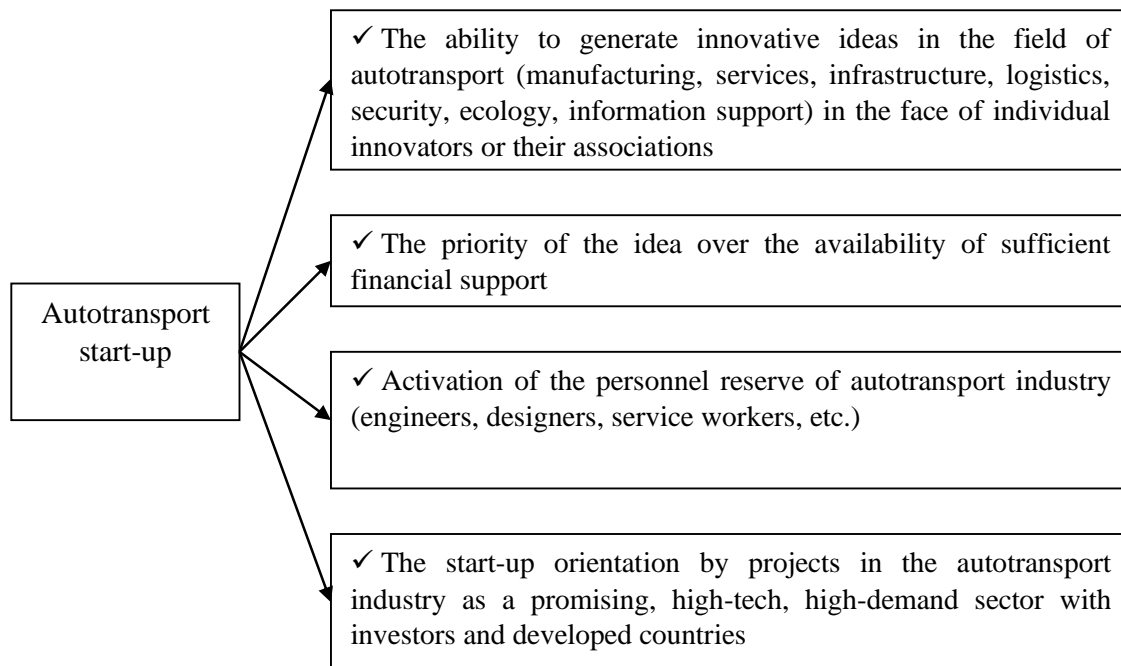
To encourage startup activities in the field of autotransport, you need:

- Improve the legal framework of start-ups, in particular regarding the use of innovative ideas in entrepreneurial activity (regulation of relationships between startups and investors, especially foreign; the possibility of implementing projects with the involvement of scientific institutions that can carry out research and development work and have a basic material for this purpose; technical base and personnel);
- Improve legislation and procedural issues regarding the protection of intellectual property rights, conduct patent investigations to confirm the absence of violations of the rights of third parties (innovative idea);
- Develop public-private partnerships in co-financing start-ups;
- Hold grants competitions for the implementation of innovative ideas;
- Stimulate the spread of online platforms on the principles of end-funding, search for "business angels";
- To stimulate the functioning of business incubators;
- Support the opening of networks of Internet cafes, co-working centers with the ability to communicate innovators and exchange ideas.

In our view, startup initiatives should be concentrated and their production and distribution supported through online platforms. This form of innovation activity provides a number of advantages for the development of autotransport (Fig. 2). The development of start-ups will also encourage creative-minded young people to engage in autotransport. In this context, we need positive experience in the implementation of a startup project, its support at the highest state level and an active promotional company. This will serve as a kind of "locomotive" for the implementation of other innovative ideas. Startups in the field of autotransport are a stepping stone to accelerate innovation, develop effective technology transfer with a model for other industries. At the same time, individual innovation initiatives should be supported at the state level or at least within the framework of regional socio-economic development strategies.

Figure following on the next page

Figure 2: Advantages of activating startup activity in the field of autotransport



Source: 30

4. CONCLUSION

At the moment, there are all the necessary conditions for the efficient delivery of the transport system, the increase of services and the volume of transportations both passenger and cargo. However, in order to implement the strategic directions of its development, priority must be given to:

1. Updating and development of a complete legal framework to ensure the efficient functioning of the transport system and all its subsystems at all levels. In order to ensure integration factors, legislation needs to be adapted to international norms;
2. Manufacture of new vehicles and upgrading of existing ones using the latest technologies and taking into account environmental factors aimed at environmental protection;
3. Development of a modern management model of the transport system with improvement of organizational, managerial and controlling functions;
4. Restructuring of the transport system in accordance with its main mission: achieving socio-economic well-being and ensuring the interests of the national economy;
5. Improvement of tax legislation on the formation of tariff policy of the transport system;
6. Certification and licensing of vehicles, transportation services in accordance with international standards. Compliance with the rules of safety, quality of transport services for the society and economy of the country as a whole;
7. Creating conditions for integration of the transport system with international transport systems.

At the same time, the innovative vector of autotransport development should combine different forms of activity activation with the efforts of business, science, education and government. The real scenario is that the innovative breakthrough of autotransport will be a factor in the transition from deformed systemic principles of industry development (informal arrangements, shady business, substandard and uncompetitive services, etc.) to market innovative principles of management.

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TRANS-CASPIAN GAS PIPELINE-REAL OPPORTUNITIES OR ENDLESS PROMISES

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ABSTRACT

The energy wealth of Central Asia and the Caspian Territory is an important opportunity for the regional development. In fact, natural resources have become the engine of economic growth in these countries, and their current importance has increased due to the huge infrastructure plans and strategic transport routes passing through this region. In this way, fossil wealth presented the battle an excellent opportunity to scale to the markets of Europe and China. From this point of view, the Trans-Caspian gas pipeline could become a symbol of the Eurasian connection. In this article are analyzed the prospects and current opportunities for implementing the long-term Trans-Caspian Gas Pipeline project. This infrastructure could transport Turkmen gas from Turkmenistan to Azerbaijan, from where it could be transported to Europe thanks to the Southern Gas Transport Corridor. Such a global network of gas pipelines could connect Western Europe and Far East thanks to the reserves of Turkmen gas. But, the implementation of the Trans-Caspian gas pipeline seems to be far away, and the "responsibility" for this lies with the main partners and other regional stakeholders. Some internal problems and the lack of guarantees from Turkmenistan affect the implementation of the project, as well as doubts and other priorities from the Azerbaijan. In addition, Russia and Iran have always carefully assessed possible scenarios for the development of this plan, fearing the likely change in the usual gas route and the loss of their intermediary role. The convention signed in Aktau on the status of the Caspian Sea opened two possible ways: either the Trans-Caspian project will find new life due to the renewed interest of all parties, including the EU, or nothing will change and Russia and Iran will have legal instruments, allowing them to better control the future of this ambitious project.

Keywords: *Caspian Sea, Energy Projects, Eurasian connection, Gas Pipeline*

1. INTRODUCTION

The energy wealth of Central Asia and the Caspian Territory is an important opportunity for regional development. In fact, natural resources have become the engine of economic growth in these countries, and their current importance has increased due to huge infrastructure plans and strategic transport routes passing through this region (e.g. New Silk Road or North-South corridor). So thus, fossil wealth presented a battle an excellent opportunity for in order to deploy large-scale to the markets of Europe and China. From this point of view, Trans-Caspian gas pipeline could become symbol of the Eurasian connection. With over the years, conditions and factors resolutely changed and excessive procrastination main partners led to a complete stoppage of the project for stakeholders. Turkmenistan pays off again for its geopolitical isolation. Lack of entry into any regional or continental organization (EAEU, CSTO, SCO) complicates everything future development and cooperation plans, although Ashgabat has the largest in the world gas reserves. According to BP Statistical Review of World Energy, Turkmenistan ranks fourth in the world in terms of proven reserves of natural gas. The total size of raw materials is estimated at approximately 19.500 billion m³., and annual production volumes are more than 62 billion m³. Central Asian Republic receives 80% of sales tax revenue gas, which makes up 90% of Turkmen exports. These numbers show the classic situation for "gosudarite". However, self-exclusion from regional cooperation and international relations greatly limits development opportunities.

With the exception of the Russian company Gazprom, and currently even Chinese CNPC Turkmen time the government has always avoided direct interventions of other international "Actors", only forcing them to make investments. Thus, most gas pipeline infrastructures do not changed since soviet times. On the west coast of the Caspian Sea, Azerbaijani strategy is radically changed especially after opening Shahdeniz offshore gas condensate field in 1999. Its common reserves are estimated at 1,200 billion m³ of natural gas and 240 million tons. Gas condensate. Unlike Turkmenistan, Azerbaijan immediately opened the opportunity participation for foreign companies, which together with the state SOCAR and with other subsidiaries manage production. In addition, Baku has realizable supply plans gas to Europe through an existing Baku-Tbilisi-Erzurum gas pipeline, from where through the Trans-Anatolian pipeline (TANAP), hereinafter referred to as the Transadriatic gas pipeline (TAP) gas flows to Europe. The beginning of deliveries is scheduled for 2022-2025. Over the past years, Azerbaijan successfully attracted the attention of the EU, in which he found a profitable buyer who actively supports and invests in this project, seeking to diversify its suppliers. The ability to connect with a larger dynamic and profitable network would allow Baku to look to the East based on other priorities. Interest in current implementation trans-Caspian project declined because Azerbaijan has already become a semi-valid supplier of Europe, and, Of course, the need for transit of Turkmen gas along the Caspian Sea (whose final prices, benefits and competitiveness would have to be rated) is not the main thing now target for Baku. Talking about other interested countries, Russia and Iran are closely following the development of this project. Having restored their influence in the international ring, after the crisis of the 90s, Moscow and Tehran are constantly monitoring the situation in order to avoid their exclusion from the plans for the Caspian region. At the same time, the attention of Russia and Iran is focused on the energy future territories from the Arctic to the Indian Ocean. According to their strategy, the transit role of Central Asia and the Caucasus should be to remain a priority of its foreign policy, and a short and new gas route to Europe, excluding the control of Moscow and Tehran over the transit of resources, clearly explains big concerns about future implementation of the trans-Caspian project. Signing of a convention on the legal status of the Caspian Sea suggests Russia and Iran have new, and now legal, opportunities to block the development of the project. After all, the European Union with for years has shown less and less interest in this project. It can be explained discovery of the natural resources of Azerbaijan and the prospect of a quick, profitable and effective cooperation. At that however, Ashgabat did not seem to be a really reliable partner, since far from true modernization and innovation. It must also be emphasized that that only with Turkmenistan among countries In Central Asia, the EU has not implemented the ratification of the Partnership and Cooperation Treaty (PCA). Despite this, Brussels and Ashgabat signed in 2008 a memo on energy cooperation, which is slowly continuing without significant results. It is in this state that we can today to observe the Trans-Caspian gas pipeline project, the success of which, it seems, is still far away.

2. HISTORY OF THE TRANS-CASPIAN GAZ PIPELINE PROJECT

In the early 1990s Caspian Sea and its energy resources became the center attention of many countries thanks to the new the political course of President Heydar Aliyev of Azerbaijan and its location towards Washington. Also necessary remember that, in 1994, "Contract of the Century" was signed in Azerbaijan by Azerbaijan government and foreign mining companies oil representing 8 countries (e.g. BP, Exxon, LUKOIL, Equinor). As a result of this and the following agreements, at the end of the century the interest of Turkish, Israeli, American and European companies in other likely projects. And so, in 1996, it became possible to discuss the implementation of the plan for the export of Turkmen natural gas through underwater the Trans-Caspian gas pipeline, the implementation of which became the topic of discussion more than 20 years ago.

Its distance from Turkmenbashi to the Azerbaijani Sangachal terminal would be 300 km. There the network would connect to South Caucasus gas pipeline, and from there Turkmen gas should have been transported to Europe by TANAP and by other infrastructures. The first agreement, in order to assess the feasibility of all forced installations, was signed in 1998 by a joint venture PSG (General Electric and Bechtel Group - USA; Royal Dutch Shell - Holland). However, the life of this agreement has run into difficulties from the beginning. In the same year, Turkey and Russia signed an agreement on the Blue Gas Pipeline. flow ”, and a year later a huge Shahdeniz field was discovered in Azerbaijan, and thus attracted attention to the western coast of the Caspian. Despite on a number of gas pipeline agreements signed during the meeting Economic Cooperation and Development Organizations by Turkey, Georgia, Azerbaijan and Turkmenistan in 1999, the project immediately met the opposition in the person Russia and Iran. Major discrepancy opinions became legal questions about the territorial borders of the Caspian Sea and exposure needed to implement environmental project Wednesday Due to this disagreement, the subsea pipeline was for the first time since the beginning postponed for 2000 and only the South Caucasus gas pipeline project was really continued. After several years of general lack of interest, in January 2006, attention to the Trans-Caspian gas pipeline again appeared due to gas conflict between Russia and Ukraine. This crisis greatly excited Europe, which immediately resumed negotiations through diplomatic channels. Two months later President of Turkmenistan – Saparmurat Niyazov announced his intentions actively discuss the issue of the gas pipeline. At May 2006, European Commissioner for Energy has witnessed full EU support for the construction of the Trans-Caspian pipeline, while the Minister of Industry and Energy of Azerbaijan Natig Aliyev at the international energy conference in Baku, also emphasized all the details and advantages of the project in terms of diversifying supplies and lowering prices. Brussels began to accelerate negotiations in order to get real results, and in 2009 published EU Energy Security and Solidarity Action Plan, which classifies this project as a priority EU energy project security. By signing the joint gas transit declaration in Europe through the South Caucasus gas pipeline between the EU and Azerbaijan in 2011, the development of the trans-Caspian project seemed real. In December of that year, the European Commission received a negotiating mandate for meetings with Azerbaijan and Turkmenistan over the Trans-Caspian gas pipeline. EU financially also facilitated supply Turkmen natural gas to Europe, guaranteeing support for banks, services and EU specialists. Over the past decade, the European Union has become a major stakeholder in success project, while Azerbaijan and Turkmenistan played a more passive role, due to inside political change. Azerbaijani newfound activism and Turkmen inertia of course led to opposite results so same as the fact that external factors brought the gas pipeline project into a stage of slow and gradual shelving. Not only the aforementioned gas crises in 2006-2009, but also Permanent Russian-Iranian opposition implementation of this project, unrealisation gas pipeline project Nabucco, as well as construction and development new pipelines Dauletabad Hangiran and Korpeye-Kordy-kui between Iran and Turkmenistan strongly impeded all progress. In the end, phased deterioration Russian-Turkmen trade relations for 2006-2010, numerous breach of contract between Gazprom and Turkmengaz followed by a drop in the amount of gas transported led to a new and very interested player - China. Today, China actually monopolizes the gas market and attention Turkmenistan, and at the same time, Ashgabat with negotiates with such pleasure huge and needy consumer like China. According to the data, 45% of gas Chinese imports come from Turkmenistan [Indeo], which thus became Beijing's main supplier. Numerous Chinese investments in infrastructure projects in Central Asia (e.g. Turkmenistan-China gas main) and bilateral agreement on gas production concessions directly in the Turkmen field for CNCP (already signed in 2007) clearly show what level of influence on Turkmenistan China is having, leading Ashgabat to virtually absolute dependence. In the current situation, current prospects Trans-Caspian gas pipeline cannot break the deadlock.

3. CONVENTION ON THE LEGAL STATUS OF THE CASPIAN SEA- NOVELITIES AND CONSEQUENCES

The history of the legal status of the Caspian Sea is long and rich in negotiations, far-reaching intentions and different interests of coastal countries. Coming back to last century, from the initial legal regime the Caspian basin was determined by two Soviet-Iranian treaties of 1921 and from 1940, regulating the freedom of navigation and fishing at a distance from 10 miles offshore, and forbade swimming ships flying the flags of non-Caspian countries. However, the issues of subsurface use and protection were not determined by these agreements. natural environment, as well as transit transport cooperation, etc. New puzzles have come to pass USSR since the division of the Caspian the sea has become a five-sided affair. Since moment, Moscow and Tehran immediately understood the importance of maintaining their influence on new state. Already in 1991, Russia and Iran signed the Declaration of the CIS with Azerbaijan, Turkmenistan and Kazakhstan in Alma-Ata, stating obligations for new participants to adhere to previous agreements established in the Soviet-Iranian treaties. Actually, the document was never doable. In addition, over the next two decades, the legal status of the Caspian has become a history of violations of maritime borders, claims and court cases, due to attempts to regulate the Caspian basin through the domestic legislation of each country. Russia and Iran in turn these unilateral actions have never been recognized as legitimate. In 1996, coastal states created a Special Working Group. (AWG), in order to compile a document, offering mutually beneficial decision and legal future of the Caspian Sea. After ongoing negotiations and after more than 60 among the meetings of the AWG and foreign ministers, and 4 presidential summits (in 2002 in Ashgabat, in 2007 in Tehran, in 2010 in Baku and in 2014 in Astrakhan) August 12, 2018 finally, all participants signed the convention on the legal status of the Caspian Sea, as part of the Fifth Caspian Summit in Aktau. For the first time, by the Caspian basin legal boundaries recognized all five coastal countries and with of this moment, all future agreements across the Caspian will be signed on its basis. Speaking of geopolitical importance of this contract, the Convention approves the impossibility of transit and the presence of naval vessels of non-Caspian countries. Obviously, the inclusion of this paragraph symbolizes a very important success to guarantee the security of Iran and Russia, which thus took possible future threats due to the possible entry of NATO and US forces into Caspian Sea. Military sale logistics equipment and growing cooperation between Azerbaijan and Kazakhstan suspicions with NATO and US Moscow and Tehran, fearing the expanding influence of their largest rivals in the Caspian. Secondly, after the signing of the convention, new ways have been opened that reinforce economic and commercial opportunities cooperation. Indeed, during last year, many meetings took place, most of which drew attention to the development of new paths and projects. Among recent meetings, it must be emphasized first Caspian Economic Forum (KEF), which was held in Avaza (Turkmenistan) August 11-12, 2019 the event was to attract foreign investors and, especially, once again introduce the Caspian countries as reliable trading partners. Members the Forum emphasized the increasing strategic importance of the Caspian Sea as his pool has become an alternative way for export of China and Southeast Asia to Europe because of sanctions between the EU and Russia, as N. Bukeikhanov stated , Deputy Chairman of the Chamber of Commerce of Kazakhstan. Not only trade, but also tourism can become factors of cooperation, but “You need to do this in the long run” , said W. de Pretto, Secretary General of the International Road Transport Union. KEF seems to be is the only platform for really useful and productive negotiations between all interested countries.

3.1. Caspian Energy and Ecosystem - Unresolved Issues for the Future Trans-Caspian gas pipeline

According to documents, Caspian recognized by the sea, not by the lake, and by virtue his status is governed by international rules in this area. Thus, the convention would create conditions for

solutions to problems associated with sovereign maritime borders and exclusive state zones. Each country has the right to directly administer 15 miles offshore and engage in fishing activities up to 10 miles offshore. In general, all countries that have signed convention, gave their consent to the protection environment and the Caspian ecosystem, which are under serious threat of pollution due to deteriorating water quality, as well as due to an increase in the number of oil refineries and installations in the marine pool. Due to this commonality of objectives, the treaty allows coastal states to lay pipelines along the bottom the Caspian Sea, provided that neither side jeopardizes the fragile ecological balance. This decision is recorded in articles No. 14 and No. 15 convention, but the text of the document seems ambiguous enough. Article 14 of the Convention recognizes opportunity for countries to lay submarine pipelines along the bottom of the Caspian sea, adhering to the requirements and environmental rules established by international treaties. In addition, the parties involved must cooperate with all others whose marine sector is involved in the project. Looking at a specific case of the Trans-Caspian gas pipeline, only Turkmenistan and Azerbaijan would be the only interested parties and would be held accountable for meeting the agreed conditions. However, the text of the convention continues to be very mixed. Article 15 of the Convention confirms obligation of contracting parties protect and preserve the ecological system of the Caspian Sea and recognizes that they can independently or jointly take all necessary measures to ensure sustainable and rational use of biological resources seas. So every coastal country has the right to vote in any project and in its implementation, regardless of its direct participation, which partially contradicts the previous article. The convention does not resolve the issue of this long environmental issue, which, however, has also become strategic a tool for the plans of the driving powers in Caspian basin - Russia and Iran. Already in 2006, after a public statement Azerbaijani Ministry of Industry and Energy Aliyev about the details of the Trans-Caspian gas pipeline project, his Russian counterpart Viktor Khristenko immediately spoke about the many the risks of that project, while emphasizing the lack of strong political support, without which the future of the plan would be very short. 12 years later, the situation has not changed. Permanent opposition of Moscow and Tehran to the project gas pipeline continues to draw attention to the environmental side of the issue. Russian President V. Putin, precisely during Fifth Caspian Summit in Aktau, noted the importance of various framework documents on ecology and biodiversity basin stating “these documents provide a rigorous environmental review infrastructure projects creating potential risks to well-being Caspian Sea ”. Putin's speech is clear shows that Russia and Iran agreeing with it still have intentions and that's it guns to block implementation the Trans-Caspian project, in addition, the lack of a legal framework strengthens their position. Recently, it was the ambassador of the Russian Federation in Baku, Mikhail Bocharnikov, emphasized the unchanged position of Moscow, emphasizing obligations under international agreements in the field of environmental protection and protection, emphasizing: “that the hypothetical and far from obvious benefits separate "economic operators" should not to prevail over the long-term interests of the population of the Caspian littoral states ”. The Convention, in fact, does not regulate distribution of the bottom of the Caspian Sea between five coastal countries. The bottom of the sea would have to be divided in accordance with international rules; therefore, all Caspian states would need to sign an agreement. Today only Azerbaijan, Russia and Kazakhstan have signed bilateral agreements on the division of the Caspian bottom, but similar documents do not exist with Iran and Turkmenistan, complicating more longer way trans-Caspian gas pipeline. Despite this, recently Baku and Ashgabat seemed to find new deals. November 21, 2018, President of Azerbaijan I.G. Aliyev visited Turkmenistan and, after signing 20 bilateral cooperation agreements, together with Berdymukhammadov discusses future project capabilities and likely options for its implementation. Over the years, due to the ensuing difficulties and events, interests each side has changed. Thanks to its rich natural reserves, Azerbaijan is still not an interested partner in the implementation of the project.

As it was said earlier, Baku already has its own plan, looking at Europe: send your exports there, and functioning of the South Caucasus gas pipeline has demonstrated excellent implementation of the trilateral agreement between Azerbaijan, Turkey and Georgia. Of course, the latest treaties and Azerbaijani-Turkmen memorandum on 2017 mutual understanding are steps forward. Participation of the Turkmen delegation in ministerial meetings on Southern Gas Transport Corridor and the periodic convening of bilateral Azerbaijani-Turkmen working groups, apparently aimed at expanding energy cooperation through joint projects for which the EU delegation, which was present at various summits, constantly hopes. But the design solution is far. Turkmenistan, unlike Azerbaijan, does not have sufficient export capacities and necessary deep-hole drilling technologies (which, for example, SOCAR received from BP), nor financial resources for the development of offshore fields. Before reaching these goals, Ashgabat is increasingly in need Chinese support, risking thus increasing its already strong dependence on Beijing. On the one hand, Baku continues offer its territory and infrastructure, but meanwhile declares its with the firm intention not to invest excessive funds in the Trans-Caspian project, expecting that Turkmen and European companies. On the other hand, Ashgabat is persistently adhering to its passive policy regarding pipelines and based on the difficult-working principle of “zero financial costs - 100% efficiency”.

4. CONCLUSION

Despite real problems, there was an enthusiastic response from the West to signing of the convention. Last may US Assistant Secretary of State for Energy S. Oudkirk said Washington praised the signing Caspian basin status treaty and calls on Turkmenistan to take advantage agreements reached by the Caspian states to connect to the Southern Gas Corridor, which will give a positive impetus to the country's development. By her opinion, opening an export corridor became a very important and strategic step: for Ashgabat - it will reduce dependence on the Chinese market, for Europe - This is a huge opportunity for a potential buyer. USA seems carefully looks at the possible development of the region, but due to the formal impossibility of deploying US military forces in the Caspian Sea, specified in the convention, the possibility of effective cooperation and influence on the situation for the United States declined. The same applies to the European Union, who developed a new behavioral strategy for Central Asia, but in fact did not take specific actions, limited to general support words. Without pragmatic and more accurate decisions from Western shareholders will be difficult to give a decisive impetus to the project and its main actors - Azerbaijan and Turkmenistan. Today, Russia and Iran have a privileged position, whose functional the opposition works very well to protect its own regional interests, partly due to the inaction of Baku and Ashgabat. It must be remembered that Moscow and Tehran has not yet ratified the convention, thus confirming their evasive strategy of behavior. While how the "constitution of the Caspian" has already been ratified by Kazakhstan, Azerbaijan and Turkmenistan, Russia started the process ratification only at the end of July (Decree of the Government of the Russian Federation of July 23 2019 No. 952 - “On Submission to the President of the Russian Federation for Submission for Ratification Convention on the legal status of the Caspian Sea ”), but in Iran this process has not yet started because of internal disagreements. In this situation, the unexpected support of the new actor was able would revive the idea of the Trans-Caspian gas pipeline. Although not yet publicly, several experts said that China decided to support the EU in implementing this project. So Beijing would accept an important decision related to the interest in capitalizing its guiding role gained thanks to Turkmenistan. The Chinese SINOPEC Engineering Group has officially announced that, together with several European companies, will participate in an international consortium, whose purpose is to lay pipelines along the bottom of the Caspian. This is what was discussed PRC representatives at a meeting with the Deputy Prime Minister of Turkmenistan for Oil and Gas M. Meredov and adviser to the president of the country on oil

and gas issues Y. Kakaev. In addition, Beijing also has excellent communications on the other side of the Caspian Sea, where Azerbaijan has a special role in the strategic project "Belt and Path". In terms of geopolitical balance, a likely surprise from China will be contrary to interests Moscow and Tehran, accustomed to counting Caspian region exclusive zone their interests and influence. But China, thanks to its huge resources and financial opportunities, is not the first time openly declared her interest in projects, not fully consistent with interests her partners. Beijing has enough leverage to influence the position of Moscow and Tehran, and a more serious Chinese interest in the Trans-Caspian the gas pipeline could become a substantial and important opposition to the Russian-Iranian blocking of the project. Unresolved "Caspian Constitution" plays for Moscow and Tehran, whose regarding the trans-Caspian gas pipeline only one always remains the way - to oppose him in every way launch. The convention is unequivocally an important step forward but signed the agreement quite clearly shows a superficial agreement that does not solve, or does not want to solve, many issues. As the director of the Eurasian Center monitoring ", A. Tazhibaev said, in the framework of the meeting of the Caspian expert club, held in Astrakhan on July 23, 2019, "we talk more about economic issues, until we begin to prepare a common" bread "in the Caspian space, all political moments are unfounded."

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ECONOMETRIC ANALYSIS OF THE IMPACT OF DEMOGRAPHIC PROCESSES ON HUMAN CAPITAL FORMATION

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ABSTRACT

The statistical study of demographic processes is one of the priorities of statistics. In other words, the study of natural movement of population, marriage and migration processes is necessary for the development of optimal socio-economic and demographic decisions. One of the important conditions for the socio-economic development of Azerbaijan in modern conditions is an econometric assessment of the demographic situation of the population and its development tendency. Demographic processes are extremely difficult and complex to manage. Therefore, while assessing the dynamics and development tendency of socio-demographic processes occurring in the country and its causes, it is very important to take them in close connection with objective historical processes. Such an approach allows to make objective conclusions about the principles of development of human capital. In order to achieve the development of human capital, equal opportunities must be established for a creative person who can create knowledge in accordance with the needs and interests of the individual and the state. In this case, equal opportunities mean the acceptance of equal interests and needs of women and men. One of the most discussed issues in the context of the modern paradigm of human development is the existence of gender balance in all spheres of public life. The article provides an econometric analysis of the impact of demographic processes in the country on the formation of human capital. The indicators were developed using statistical grouping, tables, graphs, regression-correlation methods and important results were obtained in the research process. The results of the analysis show that the formation of human capital as an innovative source of modernizing economy is of particular importance through the prism of gender inequality, in particular the number of women and men working in various enterprises and institutions, births, deaths, migration, educational level of those married and other socio-demographic indicators.

Keywords: *Human capital, Demographic processes, Gender, Correlation-regression, Econometric analysis*

1. INTRODUCTION

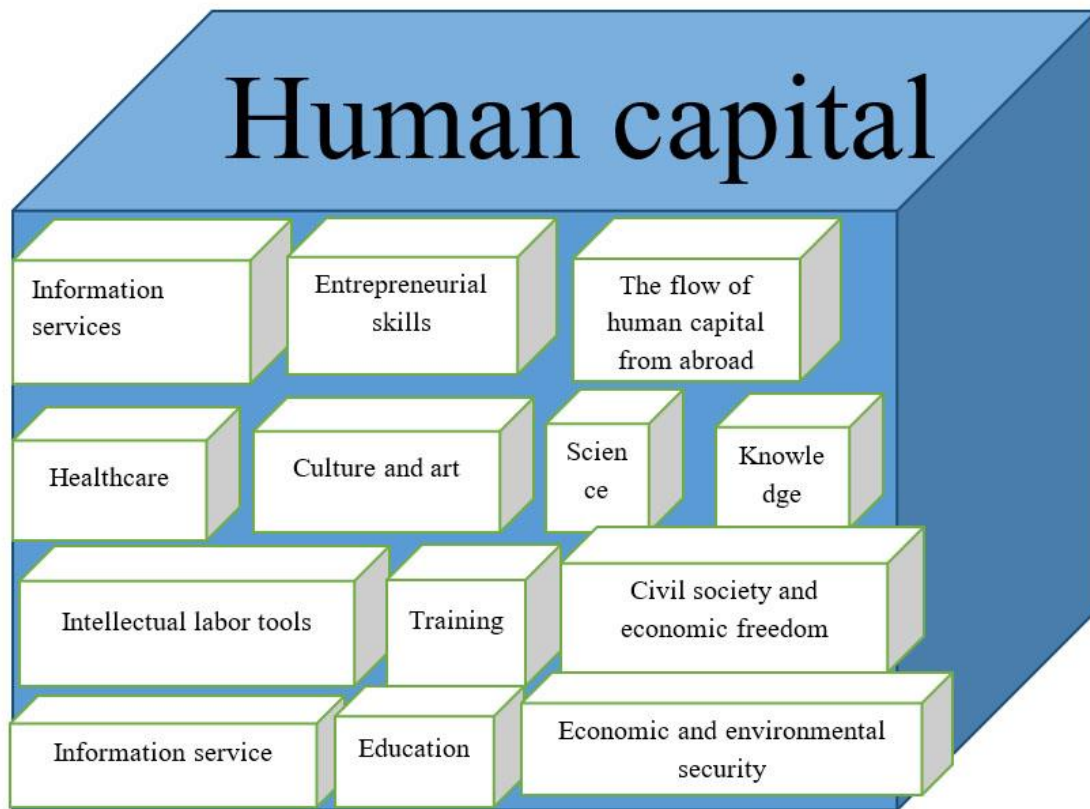
Human capital is a complex, multiform, changeable value. Researchers pay attention to this from different points of view, which conditions different approaches to the essence and composition of human capital. In modern times, human capital is viewed as a set of innate abilities, general and special education, acquired professional experience, creative potential, mental, psychological and physical health, and the activities that provide the opportunity to bring revenue. As a result, socio-economic progress is determined primarily by new knowledge acquired by scientific research staff and then acquired in the process of education, professional training and development of employees. The main area of activity that make up human capital are the scientific and educational complex, the health care system, the areas that directly shape the living conditions. However, the existing computational methods of this complex concept don't allow to fully take into consideration its multidimensional nature. The role of the casual factor in the socio-economic system of Azerbaijan is growing, the degree of various risks is increasing: economic, social, demographic, political, etc. It is impossible to take these risks into account and effectively manage them without generalizing and understanding important

information that reflects the processes of formation and development of human capital from a social point of view. Econometric methods are considered to be the most effective methods while solving these problems.

2. HUMAN CAPITAL AS AN OBJECT OF ECONOMETRIC RESEARCH

Main directions of the application of human capital are competition, investment and innovation. These factors play a decisive role in the formation and development of society and economy. Human capital means health, intellect, knowledge, quality and productive labor, quality of life. Human capital is a key factor in the formation and development of innovation, knowledge economy that reflects the high stage of development. In modern times, man, his/her education, specialization and experience are characterized as an important and not fully utilized resource. Man's creative ability, his/her intellect, mind, ability to find non-traditional solutions to complex problems play an exceptional role in the innovation process. At the same time, extensive knowledge, a systematic information system and the mutual creativity of innovators are necessary in solving economic, scientific, artistic, technical and social problems. This means that human ability acts as the capital of any enterprise. Merely as a result of creative activity, the main role of human capital emerges. Individual human capital is an economic form of talent that combines the inseparable personal qualities of a person and is acquired through his/her personal will. While discussing the essence and composition of human capital, similar concepts - human resources, human potential, labor force and human development emerge. These concepts are evaluated by the logical difference in their meaning. Thus, human resources make up the number of the population of a country or region and its demographic characteristics. Human potential expresses the maximum realization of human abilities. The workforce is represented as a set of simple labor skills which do not require special education [4, Becker G.S. P.412]. And human capital acts as an economic form of realization of human potential and resources in certain historical conditions and economic spheres. Thus, human capital represents health, knowledge, skills, and accumulated experience that are purposefully used in the production of goods and services ensuring the increase in the income of individual, enterprise and state. Under market economy conditions, the transformation of human abilities into capital takes place on the basis of the division of labor such as physical, specialized, intellectual (creative), management, and entrepreneurship. A number of indicators are used for econometric assessment of human capital. Econometric analysis can be used to measure the relationship between a number of demographic changes and the components of human capital. Just for this, let's look at the sources of human capital formation (Figure 1.)

Figure following on the next page

Figure 1: Sources of formation of national human capital

Classification of types of human capital is possible in different directions and for different purposes. Especially, practically all researchers accept the decisive role of intellectual capital. Indeed, intellectual products are recorded on tangible media (books, reports, database files), they can be formalized as intellectual property and can be included in economic transactions in the form of capital investments, sale of licenses, purchase and sale of goods and services, and accounting as intangible assets. The study of intellectual capital was further carried out and led to the methods of its effective use. This allows the results of scientific analysis of intellectual capital to be applied to the study of other types of human capital. Western researchers usually distinguish the types of human capital according to the type of investment in human capital. H. Schultz states that human abilities "... develop through certain types of activities with investment attributes" [16, Shultz T]. He attributes such investment activities to school education, on-the-job training, health promotion, and growing information resources about the economy. All these types of activities are aimed at the formation of specific groups of human skills that can be valued and applied as human capital. While discussing the essence and composition of human capital, similar concepts - human resources, human potential, labor force and human development emerge. These concepts are evaluated by the logical difference in their meaning. Thus, human resources make up the number of the population of a country or region and its demographic characteristics. Human potential expresses the maximum realization of human abilities. The workforce is represented as a set of simple labor skills which do not require special education. And human capital acts as an economic form of realization of human potential and resources in certain historical conditions and economic spheres. Thus, human capital represents health, knowledge, skills, and accumulated experience that are purposefully used in the production of goods and services ensuring the increase in the income of individual, enterprise and state.

3. ECONOMETRIC STUDY OF THE IMPACT OF DEMOGRAPHIC INDICATORS ON THE DEVELOPMENT OF HUMAN CAPITAL COMPONENTS

3.1. Statistical analysis of the current state, dynamics and structure of human capital indicators

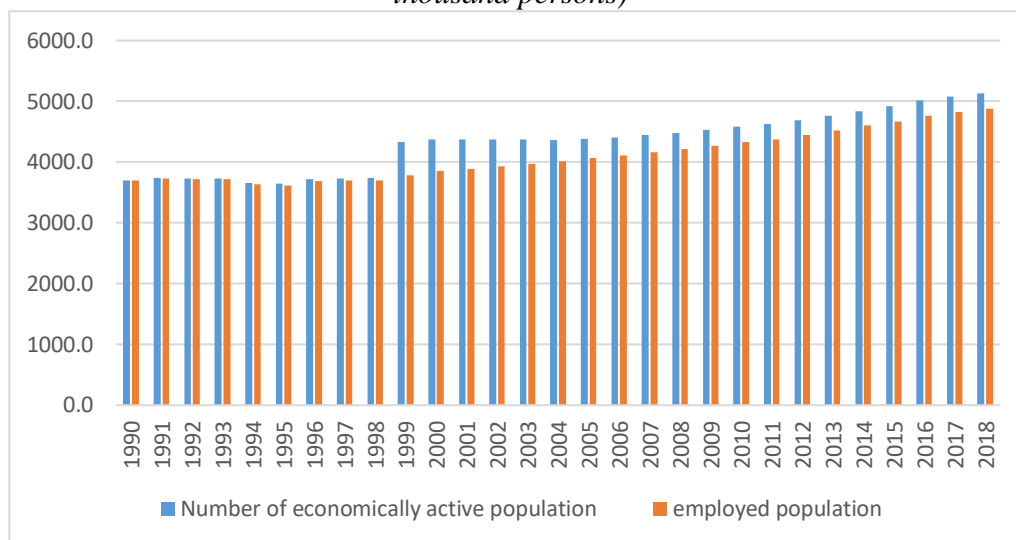
Human development is a process that brings the ideas of the realization of human potential, what people can do and who they can be, and their freedom to use real choices in their lives to the fore. However, this process does not end with the adoption of human development commitments, the determination of strategic and short-term goals and activities, and the implementation and coordination of measures. The decisive factor for achieving progress in human development is the ability to closely trace and monitor the process with quantitative and qualitative indicators. The methodology for measuring the level of human development is considered to be a useful tool for both monitoring and application and analytical purposes in terms of supporting the informed and diversified activities of the state in addressing economic, political and social inequalities that prevent people from benefiting their opportunities to the maximum extent. [16, Overview Human Development Report]. Under market economy conditions, the transformation of human abilities into capital takes place on the basis of the division of labor such physical, specialized, intellectual (creative), management, and entrepreneurship. The state of human capital is reflected in the indicators of the human capital index. Human development indices developed by international experts within the framework of the UN Development Program show that human capital merely is a tool to achieve the development of human potential. The Human Development Index shows the average level of a country's achievements based on three main dimensions of human development: longevity and health, knowledge opportunities, and a decent standard of living. The Human Development Index is the geometric mean of the normalized indices of these three dimensions.

$$I = \sqrt[3]{I_{lifelonq} * I_{education} * I_{GNI}}$$

According to the calculations of UN Development Program and the Human Development Index, in 2019, Azerbaijan ranked 87th and the value of the index was equal to 0.754 [<http://hdr.undp.org/en/countries/profiles/AZE>]. Reproduction of human capital is closely related to the number of children born per woman. According to British demographers, the general decline of the European population may begin after 2020, but the decline in the working age population can be faster [6, Coleman D.]. In our opinion, the formation and development of modern society is impossible without positive demographic development. The statistical base of the study is the official data of the country. So, first of all, let's look at some indicators of human capital.

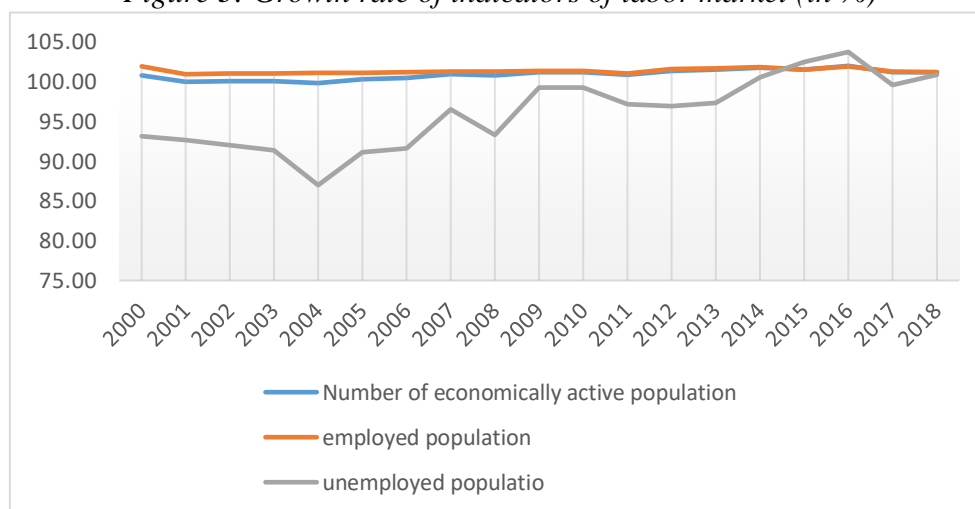
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Figure 2: Dynamics of economically active and employed population in 1990 – 2018 (in thousand persons)



As we know, the economically active population consists of the sum of two indicators - the employed and the unemployed population. It is also clear from the graph that there is an almost positive growth trend in the dynamics of both indicators. It is also possible to see the dynamics of the unemployed from the difference between the two indicators. However, let's take a closer look at the growth rates of these indicators (Figure 3).

Figure 3: Growth rate of indicators of labor market (in %)



As can be seen from the graph, we see an increase in the unemployment rate in the visual representation of growth rates in comparison with absolute quantities. This can be related to population growth. From 2000 to 2018, the economically active population increases by an average of 0.9%, the employed population by 1.32% and the unemployed population by 3.85% every year. In 2019, the number of unemployed population was 253.8 thousand people, of which the highest share (24.86%) falls on young people aged 20-24. At the same time, we would like to note that 55.15% of the unemployed at this age are women. If we look at the employed population, we can see that last year, 712.5 thousand of the 4879.3 thousand employed people, that's, 14.6% of the high share were young people at the age of 30-34. And 49.26% of them are women. The study of the unemployed population shows that in 2019, the number of unemployed women exceed 50% for all age groups. (Table 1.)

Table 1: Division of the employed and unemployed for age in 2019

Age groups	Total	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
Total employed population, thousand persons	4879,3	91,1	444,0	709,3	712,5	606,2	578,9	584,6	600,5	366,3	142,7	43,2
Women among them, thousand persons	2349,9	40,5	204,4	332,8	351,0	283,5	284,0	297,6	310,4	160,8	69,4	15,5
The share of employed women, %	48,2	44,5	46,0	46,9	49,3	46,8	49,1	50,9	51,7	43,9	48,6	35,9
Total unemployed population, thousand persons	253,8	15,1	63,1	45,6	29,9	23,5	21,1	20,5	20,1	12,7	2,2	-
Women among them, thousand persons	145,8	7,4	34,8	27,4	19,5	13,4	10,9	12,1	12,2	8,1	-	-
The share of unemployed women, %	57,5	49,0	55,2	60,1	65,2	57,0	51,7	59,0	60,7	63,8	-	-

A notable point is that in absolute terms, the highest number of employed people and employed women falls on those aged 30-34 - 712.5 and 351 thousand people, but the highest share of employed women falls on those aged 50-54 according to the age category. What could be the reason for this? Education level, professionalism or demographic factors? Econometric research is needed in order to investigate this.

3.2. Econometric analysis of factors affecting human capital indicators and checking its adequacy

To examine the factors that affect the components of human capital, let's consider the following variables:

- Y – economically active population;
- X1 – number of births;
- X2 – those visiting the country;
- X3 - those leaving the country;
- X4 - increase in migration;
- X5 - education expenses.

The data that will be used in the study covers the years 1995-2018 on a yearly basis based on the official data of the State Statistics Committee of the Republic of Azerbaijan [22, www.stat.gov.az]. Let's start our study with the results of the correlation analysis. (Table 2).

Table 2: Correlation coefficient

	Y	X1	X2	X3	X4	X5
Y	1.000	0.487	-0.672	-0.854	0.872	0.876
X1	0.487	1.000	-0.311	-0.578	0.654	0.744
X2	-0.672	-0.311	1.000	0.881	-0.762	-0.446
X3	-0.854	-0.578	0.881	1.000	-0.978	-0.752
X4	0.872	0.654	-0.762	-0.978	1.000	0.831
X5	0.876	0.744	-0.446	-0.752	0.831	1.000

The results show that although there is a weak linear relationship between the variable Y and X1, the linear relationship with the others is strong.

The statistics of the realization of the selected linear regression model using the Eviews software package are given in the table below (Table 3).

Table 3: The result of the regression equation

Dependent Variable: Y				
Method: Least Squares				
Date: 05/22/20 Time: 15:42				
Sample: 1995 2018				
Included observations: 24				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5348.439	230.0966	23.24432	0.0000
X1	-0.007886	0.001744	-4.521197	0.0003
X2	-1.563010	0.715493	-2.184522	0.0424
X3	1.508343	0.719061	2.097656	0.0503
X4	1538.972	722.6976	2.129483	0.0473
X5	0.515432	0.077223	6.674614	0.0000
R-squared	0.940340	Mean dependent var		4453.704
Adjusted R-squared	0.923768	S.D. dependent var		417.3218
S.E. of regression	115.2234	Akaike info criterion		12.54394
Sum squared resid	238975.8	Schwarz criterion		12.83845
Log likelihood	-144.5273	Hannan-Quinn criter.		12.62208
F-statistic	56.74184	Durbin-Watson stat		1.952845
Prob(F-statistic)	0.000000			

According to the statistics in Table 3, the following regression model of the dependence of the economically active population on births, those visiting the country, those leaving the country, increase in migration and education expenses is obtained:

$$Y = 5348.4 - 0.007886 \cdot X1 - 1.563010 \cdot X2 + 1.508343 \cdot X3 + 1538.972 \cdot X4 + 0.515432 \cdot X5$$

According to the economic interpretation of the regression model, the most influential factors for the economically active population are migration indicators. In the course of econometric research, Durbin Watson's correlogram method on the variable at 10% significance level was used (Table 4).

Table 4: Correlogram of time series stationary testing

Date: 05/22/20 Time: 15:43						
Sample: 1995 2018						
Included observations: 24						
Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
. *****	. *****	1	0.809	0.809	17.767	0.000
. *****	. *	2	0.626	-0.084	28.878	0.000
. ***	. *	3	0.443	-0.111	34.711	0.000
. **	. *	4	0.258	-0.133	36.790	0.000
. *	. **	5	0.197	0.224	38.061	0.000
. *	. *	6	0.151	-0.018	38.849	0.000
. *	. *	7	0.108	-0.063	39.279	0.000
. *	. *	8	0.068	-0.075	39.459	0.000
. *	. *	9	0.025	0.031	39.484	0.000
. *	. *	10	-0.020	-0.036	39.501	0.000
. *	. *	11	-0.063	-0.058	39.690	0.000
. *	. *	12	-0.106	-0.072	40.278	0.000

Based on the results, the determination coefficient was 0.940 ($R\text{-squared} = 0.940$). This suggests that 94.0% of the explanatory variables can explain the dependent variable. At the same time, the coefficients of the obtained regression equation can be considered statistically significant (all coefficients at the significance level of 10% are statistically significant).

4. CONCLUSION

The constant development of human capital is one of the main goals of the developed countries in the world. For this reason, there emerged a need to assess the factors affecting this area in the example of Azerbaijan. The research conducted by us in this area shows that migration indicators have a positive and direct impact on the number of economically active population. In the process of econometric researches conducted, a multivariate linear regression equation of dependence of the economically active population of the Republic of Azerbaijan on demographic and social factors was formulated and the model was brought to the form of a mechanism adequate to real conditions. Taking into account the satisfactory quality of the formulated econometric model, it should be noted that the model obtained to express the dependence of the economically active population is indeed adequate to the real situation and suitable for forecasting. There is a need to further improve this model for future periods, and increasing the number of explanatory indicators will provide a basis for more accurate results in forecasting.

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SMALL AND MEDIUM ENTREPRENEURSHIP: PROBLEMS AND PERSPECTIVES

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ABSTRACT

Small and medium entrepreneurship is one of the strategic directions of the economic development of any country and one of the most important indicators of competitive economy. As a result of its development, opening the new jobs, providing the market with new goods and services, in general, forming the favorable economic environment is formed. The world experience shows that the development of small and medium entrepreneurship ensures the high economic growth dynamics of countries. Modern times are observed with the globalism of the economy, which is a complex process. The globalization process simplifies the interaction of countries, ensures the economical use of various resources and at the same time stimulates the development. Azerbaijan is also seen to enter and integrate into the world economic space. In Azerbaijan during 2018 year in the economy of the country the share of the value of loaded goods, implemented works, rendered services amounted to 20.9% of small and medium entrepreneurship, but non-oil-gas sector it was 37.7%. As in many countries in Azerbaijan, support for entrepreneurship has become one of the priorities of the state economic policy. As a result of the work carried out in this direction, the legal base for the development of small and medium entrepreneurship is established, the state support schemes based on the state programs are constantly improved, and as a result of it, the measures are taken to the illegal interference and artificial obstacles. As we know, in the development direction of the national economy the strategic road map was adopted in 2016. One of the goals is to develop the favorable business environment. According to the indicators of January 1, 2019, the ready-made strategic roadmap of purchasing products in the category of small and medium entrepreneurship was fulfilled 52%, 11% was slightly fulfilled and 37% was expected to be re-implemented. It should be noted that one of the important tasks is the activation of investment activity of small and medium entrepreneurship and the expansion of opportunities to attract the financial resources to this sector. Coronavirus, which has become a nightmare, continues to have a negative impact in many countries. This disease has also influenced the small and medium entrepreneurship. The quarantine regime implemented in the country has a negative impact on the decline in labor activity and entrepreneurs operating in various sectors. In this difficult situation, the Fund to Support Fight Against Coronavirus has been established by the state. We hope that with the least losses and quickly the world will be able to get rid of this calamity.

Keywords: *The small and medium entrepreneurship, The state support, Globalization*

1. INTRODUCTION

The development of small and medium enterprises influences importantly on the formation of the competitive environment in modern times. Strengthening the competitive impact against the smaller firms and enterprises by the companies with economic and financial strength in the globalized environment in many cases influence the reduction of the potential of small and medium enterprises, the increase of the unemployment level and the rise in income inequality. The creation of favorable conditions for the small and medium businesses in the country has become one of the urgent issues. Although the implementation of the active support policy aimed at the small and medium enterprises by the state is considered an important factor, the

current level of development of this sector of the economy can not be considered satisfactory. Small and medium businesses (later - SMB) being one of the important subsystems of the market economy create the initial condition for its sustainable development. Small and medium enterprises help to create the new working places with low capital expenditure, to fill the market with goods and services, to provide tax revenues to budgets of all levels, to create the new opportunities for the population to engage, to contribute the increase of human resources, competitive markets and innovations, the level of life of the population and social stability of the society.

2. ANALYSIS OF THE SMALL AND MEDIUM ENTERPRISES ACTIVITY IN AZERBAIJAN

From the beginning of 2000 in Azerbaijan the active support policy is carried out in the field of small and medium entrepreneurship (later – SME) and the last goal of this policy is to ensure the sustainable development of this sector. In general, according to the decision adopted by the relevant executive authorities in the republic, the criteria of the entrepreneur are defined as follows:

1. The average number of employees of micro entrepreneurs is up to 10 people, with an annual income of up to 200,000 manats;
2. The average number of employees of the small entrepreneurs is from 11 to 50 people, with annual income from 200 thousand to 300 thousand manats;
3. The average number of the middle entrepreneurs is from 51 to 250 people and the average number of employees is from 3000 to 30000 thousand (Decision No. 556 of the Cabinet of Ministers of the Republic of Azerbaijan dated December 21, 2018).

For the first time using the conception “an entrepreneur” Richard Cantillon expressed it as “an entrepreneur is a person who operates in the conditions of risk”. In general, in Cantillon’s theoretical approaches the entrepreneur acted as a figure with the main role. He considered that it was the land and labor force that determined the economic value [1]. Another famous French economist Jean Baptiste Say for the first time drew attention to the need for a combination of three classical factors production (land, capital, labor) to achieve high results in entrepreneurial activity (Sei, 2000). The American economist, David Birch, in his researches shows that in fact SME-s create more working places than the big businesses. Landström his work, analyzes various definitions of the concept of entrepreneurship [2]. This problem is constantly discussed by the economists around the world and observed by the contradictory opinions. For example, in the book “Big is Beautiful: Debunking the Myth of Small Business” by Robert Atkinson & Michael Lind it is said that SME have the potential to create fewer jobs than big businesses [3] [4]. In activity entrepreneurs F.A. Brockhaus and I.A. Efron distinguished three points: enterprise, resourcefulness, executive work [5]. International experience confirms the important role of the small and medium enterprises. In any case, the current analyses show that SME-s form 60-70% of job opportunities in the countries of the Organization for Economic Cooperation and Development [6] [7]. In the Japanese industry the employees are up to hundred in the enterprises with employees-58%, in the US – 28%, in Germany-18%. In Japanese trade, 47% of the wholesale and 80% of retail stores do not have more than four employees. According to the estimates of the international republic of small and medium enterprises, approximately 18 countries have been determined that the total number of the employees in small and medium enterprises is about 30 million. 50% of the total output of these countries is produced. In addition, in the small business sector 67% of all new jobs is opened in the United States, Germany, the UK and Italy. In the industrialized countries of the market economy the small and medium companies currently reach 96-98% of the total number of the national firms. But this percentage is especially high in Japan, it reaches about 99% there [8].

In order to explain the essence of the topic fully, I would like to pay attention to some information on the activities of micro, small and medium enterprises in the Republic of Azerbaijan for 2018 year. The number of SMEs carrying out the entrepreneurial activity in the Republic amounted to 244.83 thousand units in 2018 and it is 16.1% more than in the previous year, while the number of employees increased by 31% (table 1).

Table 1: General indicators of micro, small and medium enterprises in economic activity and types of property in 2018

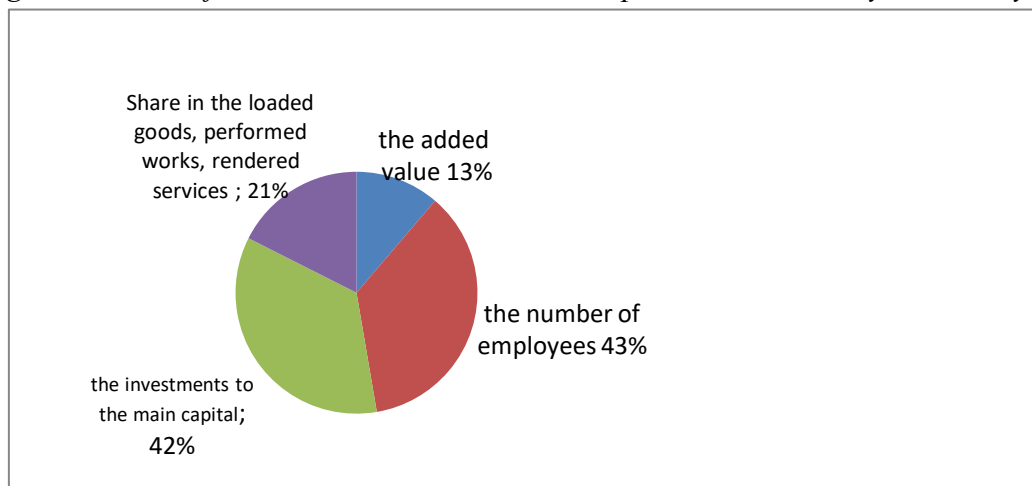
Indicators	2018								
	Micro			Small			Medium		
	Total number of economic activities	Trade; repair of vehicles	Accommodation of tourists and catering	Total number of economic activities	Trade; repair of vehicles	Accommodation of tourists and catering	Total number of economic activities	Trade; repair of vehicles	Accommodation of tourists and catering
Number of business entities	237815	74897	18044	4930	1442	198	2138	438	65
number of employees employed in entrepreneurship sectors, person	35014	6060	1361	76052	13278	4096	172366	19702	6463
number of foreigners working in entrepreneurship sectors, person	309	56	8	613	86	29	1526	116	87
number of newly created micro, small and medium enterprises	83071	13423	2648	233	67	24	42	7	1
turnover of entrepreneurship enterprises, thousand	108790,8	102326,2	223,9	601059,5	563209,5	2263,4	1220646,2	1152465,6	3392,7

Source: Based on the data of the Azerbaijan State Statistical Committee (www.stat.gov.az) designed by the author

As it is seen from the table the number of micro enterprises is higher than the number of small and medium enterprises. Thus, the enterprises with number of employees of up to 10 were 237815 in 2018. 31,5% of them was engaged in trade and 7,6% was in tourism. Here the number of hired workers is 35014 people and 0.9% of them were foreigners. In the same year, the number of newly created business districts was 83071 units. The retail trade turnover of micro entrepreneurship branches amounted to 108790,8 thousand manats. Compared to the micro entrepreneurship, the average entrepreneurial performance is lower. However according to the number of small and medium enterprises in 2018 amounted to 4930 and 2138. In the enterprises which had more than 248,000 employees 13.1% were employed in trade and 4% in the tourism sector. Of course, the development of tourism will lead to an increase in these indicators. Within the framework of the implementation of Strategic Road Maps (later - SRM) the Small and Medium Business Development Agency, the State Agency for Antimonopoly and Consumer Market Control, the portal "Licenses and permits", the Mortgage and Credit Guarantee Fund, the state register of movable property encumbrance were established. The measures such as the application of legislative impact analysis, the minimum participation share of SME-s in public procurement, the suspension of inspections until 2021 and the privileges and concessions granted to residents of the industrial clusters were implemented.

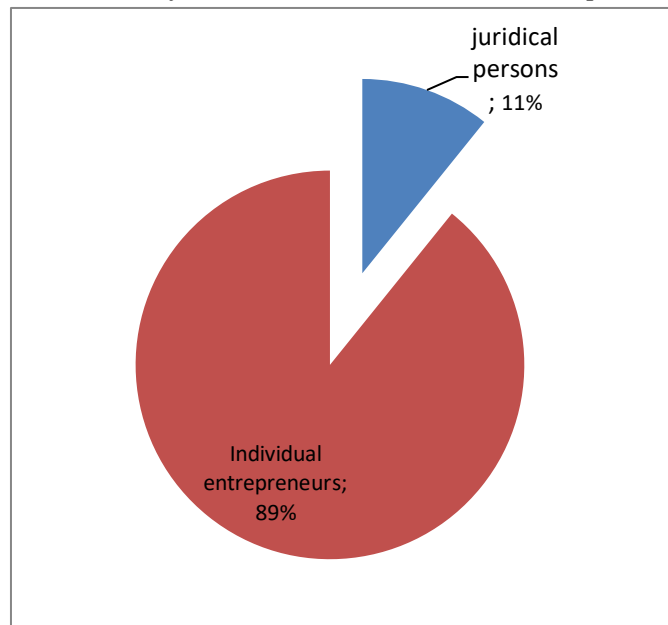
According to the latest statistics, the added value of the small and medium enterprises in 2017 amounted to 3.8 billion manats and it means the increase of 6.1 per cent compared to last year. During the period of comparison the volume of investments in small and medium enterprises amounted to 3.3 billion manats, which is 16.6% more than last year [9]. SMEs play an important role in improving the volume of the Gross Domestic Product (GDP) of the country, in the formation of the added value, in the investment in fixed assets and the number of employees (Figure 1). However, despite the fact that most of the enterprises operating in the field of SME of the country are private entrepreneurs (89 % - Figure 2 and Figure 3) and it can be seen as a positive case in terms of ensuring employment, the modern development of small and medium enterprises is not at the proper level yet. GDP of Azerbaijan of the SME sector is still characterized by low indicators: 45% of working places created in the world and 33% of GDP of the world are small and medium enterprises.

Figure 1: Share of micro, small and medium enterprises in the country's economy, %

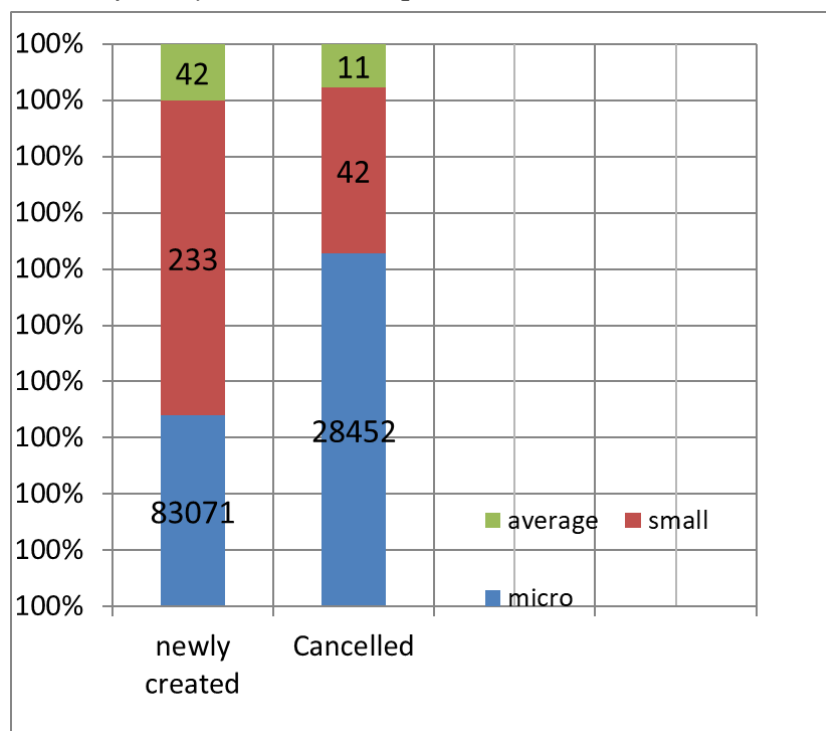


As it is seen from the Figure 1, the number of employees engaged in micro, small and medium enterprises in the country amounted to 43%, the added value created by them was 13% and the main investment was 42%. On the other hand, strengthening the issues of the state regulation and increasing state support show its influence on the development of entrepreneurship. As the reason for it one can say that micro and small business enterprises do not require a large initial investment and have a more flexible response. In general, 89% of entrepreneurs act as the individual entrepreneurs.

Figure following on the next page

Figure 2: Division of micro, small and medium enterprises for 2018

Source: www.stat.gov.az

Figure 3: Number of newly created and liquidated micro, small and medium enterprises

Source: www.stat.gov.az

As it is mentioned above, along with the fact that they have many advantages in the process of formation of SMEs, there is also a high risk of their cancellation, especially if they do not tolerate micro-competition. The number of canceled SMEs in 2018 amounted to 28505 units and 28452 or 99.8% of them are micro- entrepreneurs. As a result of the reforms carried out in the country, the achievements of 2016-2018 years such as getting the macroeconomic stability, the stability of the exchange rate of the national currency, etc. show that the foreign investors are interested in Azerbaijan and during last few years more than 270 billion US dollars have

been invested in the country and it is one of the factors that positively affected to the development of small and medium businesses [11]. The main goal of the reforms carried out in Azerbaijan is the transformation of the oil (“black gold”) into human capital. In 2016 the Strategic Road Maps were prepared to ensure the sustainable economic growth and healthy competition [12]. These maps covered the work to be done in 11 sectors of the economy. According to the official data for the 1st of January 2019 43% of the Strategic Road Maps was implemented fully and 9% partially. Accordingly, 48% are non-executive objectives. From the general results, the executive indicator on the production of the consumer goods at the level of SME was 52%, 11% was partially executed, while 37% was expected its implementation. The highest indicator is the state of the execution for the development of the financial services and that was 64%. Half of the measures aimed at the development of telecommunications and information technologies have been carried out. The executive status of logistics and trade development is 27%, but the development of the specialized tourism industry is 30%. The issues waiting for the execution in both directions are 63% and of course, it is not a small figure. It should be noted that Small and Medium Enterprises have an important role in the dissemination and application of innovations in technology. It also increases the competition in the internal trade in the country, causes enterprises to work productively and influences a positive impact on the production of quality products.

3. IMPROVEMENT OF THE BUSINESS ENVIRONMENT

The establishment of the state-business dialogue in the direction of improving the business environment, the creation of the SMBDA and the portal “Enterprise Azerbaijan” supported the development of small and medium entrepreneurs. It should be noted that in the report “Doing Business 2020” the existence of the online business registration procedures in the countries of the first twenty is mentioned. It can be noted that the serious work and good results are also carried out in this direction in Azerbaijan. So, the portals such as Azexport.az and Digital Trade Assembly platforms, online export application, “Unified internet portal of state purchase” were created and for the first time in the world m-residency and e-residency for the second time in the world were presented to non-residents in Azerbaijan. The organization and provision of electronic services, in turn, contributed to the development of entrepreneurship. Significant reform measures have been implemented in the field of protection of investors’ interests, electronic court, starting business, building permits, connection to the electricity networks, access to financial sources, registration of real property and bankruptcy. As a result, according to the report “Doing Business 2020” Azerbaijan ranked 34th place among 190 countries. Thus, according to the following indicators Azerbaijan is in: the 9th place in terms of starting business, the 59th place in terms of obtaining building permits, the 80th place in terms of connection with power supply networks, the 44th place in terms of registration of property, the 1st place in terms of obtaining loans, the 105th place in terms of protection of rights of small investors, the 40th place in terms of payment of taxes, the 83rd place in terms of trade at the border, the 28th place in the execution of contracts and the 47th place in the solution indicator of bankruptcy. Due to the report the accessibility of loans is on the first step. The year 2020 will be more memorable with the global pandemic, the spread of Coronavirus. As in all areas, the shock to the economy shows its influences. The appeared stagnation leads to the decrease in the volume of production and the increase in unemployment. In this case, the need for state support of SMEs is even greater. The measures aimed to the development of the entrepreneurial activity are carried out by the Government of Azerbaijan constantly. In this difficult situation the state showed its attention and support. According to the Action Plan of Cabinet of Ministries approved by the decision the 4th April 2020 the enterprises operating in areas affected by the pandemic will be granted tax benefits and strikes. In order to ensure the protection of economic activity in the direction of reducing negative impacts giving the tax incentives from other measures, payment

of a certain part of the wage of hired workers in the affected areas, provision of credit-guarantee support of the state to the economy and entrepreneurship, provision of state guarantees on bank loans to be granted to entrepreneurship branches (including small and medium-sized enterprises), the rent taken from the state-owned enterprises (including small and medium enterprises) that have rented out the state-owned property and suffered as a result of the pandemic is not calculated until the end of 2020 and to purchase locally produced products in public procurement to support small and medium enterprises, etc. It provides the basic support to economic growth and entrepreneurship, which accounts for 3% of GDP with a total volume of 2.5 billion manat.[13] Financial support program for the protection of workplaces for 292,000 individual (micro) entrepreneurs operating in the affected areas from small and medium enterprises; It is planned to grant tax privileges, concessions and holidays to entrepreneurs operating in the affected areas of the pandemic, as well as the simplified tax exemption for micro entrepreneurship within the appropriate period of time.

4. CONCLUSION

It can be concluded that despite the temporary difficulties that have arisen in the world, in general, the economy, including SME-s will be able to eliminate the difficulties and will try to restore its work with little loss, because the activity that requires relatively low capital costs will lead to the creation of new jobs, the increase in employment and the middle class. In order to eliminate the problems in time it is necessary to determine the main development strategy for the development of small and medium businesses, to mitigate the tax system, to eliminate the administrative obstacles, the lack of financial resources, to implement measures to remove the effectiveness of state support. The advances such as the modernization of state regulation measures involving the resolution of issues, the simplification of tax reporting for entrepreneurs, the formation of the digital platform aimed at the support of SMEs, the simplification of access to preferential financing, the rapid development of support infrastructure and services for SMEs, the modernization of support system for exporters with SMEs and increasing the share of these exporters in the total volume of non-oil exports, the establishment of the support system for farmers and the development of rural cooperation should form the small and medium-sized entrepreneurship development program in Azerbaijan.

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EDUCATION AND ECONOMIC GROWTH: THE CASE OF AZERBAIJAN

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ABSTRACT

This article examines the impact of education on GDP growth (non-oil sector), a key indicator of economic development in the case of Azerbaijan. In the study were used non-oil GDP per capita as a dependent variable, capital stock, total government expenditure, oil fund revenues, number of graduates of specialized secondary educational institutions, number of graduates of higher educational institutions, human development index as independent variables. Quarterly data covering 2003-2019 were used in the construction of the model. 9 models were built using Vector Error Correction Models. According to the results of the models education has positive significant effects on economic growth in model 1, 4, 7 in the short term, positive significant effects in model 1, 2, 8 and negative significant effects in models 6 and 9 in the long run. The best result among these models was obtained in Model 1 (independent variables are capital stock, oil fund revenues and the number of graduates of specialized secondary educational institutions). Because almost all indicators in the first model for both short-term and long-term are significant.

Keywords: Education, Economic growth, Azerbaijan economy, Vector Error Correction Model

1. INTRODUCTION

Education is one of the most important components of the knowledge economy of the modern era. Robert E. Lucas, Jr. (1988), N. Gregory Mankiw (1992), R. Barro and J. Lee (1996), E. A. Hanushek and L. Woessmann (2007, 2008) and the others note that the development of education will lead to economic growth. The main purpose of the study is to econometrically assess the impact of key education indicators on economic growth on the basis of statistical indicators collected in Azerbaijan. The study found limitations, such as insufficient statistics to assess the quality of education, and the lack of some statistics for certain periods. This article seeks to answer the question of whether education has a positive effect on economic growth in the country, and which indicators of education have the most significant impact. The research examines theories of economic growth. Most of the studies are by Solow, Mankiew et al. al. studied on the basis of theories. Research on education and economic development has shown that this effect is both positive and negative.

Researchers explain the negative impact to the low quality of education in these countries, low investment and inefficiency (Jude Eggoh et al. (2015)). The studied models used enrollments, attainments, school years, PISA and other indicators on education. In this study, we constructed Vector Error Correction models based on the Solow-based Cobb-Douglas production function using the number of graduates in specialized secondary, number of graduates of higher educational institutions, and human development index indicators on education. Each of the education indicators was used separately in the 9 models on quarterly statistics for 2003-2019. Real non-oil GDP was taken as the dependent variable in the model. As Azerbaijan is an oil country and the share of oil in GDP growth is high, the non-oil sector has been taken to see more clearly the impact of education. We used oil fund revenues indicator in model 1-3, total government expenditure indicator in model 7-9, and both indicators in model 4-6. It should be noted that the model takes into account both short-term and long-term.

2. LITERATURE REVIEW

Neoclassical theories play an important role in the study of economic growth. Well-known neoclassical scientist Robert Solow, in his study of economic growth, found that technical progress and capital are the main determinants of GDP growth per capita. This result was obtained by performing calculations based on the Cobb-Douglas production function. As is well known, the Cobb-Douglas production function is a function that depends on technical progress, capital, and labor. However, comparing the economic growth of countries with this function does not reflect the reality. Therefore, to compare the figures, Solow calculated the GDP per capita by dividing both sides by the number of employees (Robert M. Solow, 1957). However, in later years there were criticisms of this theory. Because it was claimed that there was no connection between economic growth and the level of savings. Subsequent research has shown that an increase in the collection rate leads to higher economic growth (Romer, Paul M., 1986; Robert E. Lucas, Jr., 1988; Paul Romer, 1994; Mankiw, N.G., 1995; Barro, R. and Sala-i-Martin, X., 1995). Physical and human capital play a more important role in capital, which is one of the key elements of the function. Capital investment in human resources is linked to his education, health and experience, which makes him more productive. This, in turn, leads to the emergence of new values and, consequently, the growth of economic development (Robert E. Lucas, Jr., 1988; N. Gregory Mankiw et al., 1992; R. Barro and J. Lee., 1993, 2013, Gu & Lev, 2001; Daum, 2003; Burja, C., & Burja, V., 2013; Odit et al., 2010). From this point of view, the role of education in the economy, in economic development is undeniable (E. A. Hanushek and L. Woessmann, 2007, 2008). Due to the wide scope of education, research on the impact of education on economic growth is multifaceted. A group of researchers used indicators of education levels (primary, secondary, higher, etc.). Ying Wang and Shasha Liu studied the impact of different levels of education on economic growth in 55 countries using the Solow-based Cobb-Douglas production function. The study found that the impact of education, especially higher education, as well as life expectancy on human capital on GDP per capita growth is positive. Using the panel methodology, Jude Eggoh et al. (2015) found that the relationship between investment in education and health care and economic growth was negative. It was shown that the reason for this is the presence of inefficiency and underinvestment in African countries. Muhammad Azam et al. (2019), who conducted research for 33 developing countries using the same method. They found a positive correlation between these indicators. Based on statistics covering 45 years in Tunisia Olfa Frini & Christophe Muller provided an econometric analysis of the impact of three education indicators (primary, secondary, and higher education) on GDP per capita. The model was examined both short-term and long-term through multivariate cointegration analysis. The short-term outcomes were close to the long-term outcomes, and education had a positive effect on GDP growth. In his study, Abdul Jabbar Abdullah (2013) empirically assessed the impact of each of the indicators on

human capital in Malaysia (primary school enrolment, secondary school enrolment and tertiary school enrolment) on economic growth. Malaysian Educational Statistics used data from WDI and Barro and Lee (2010) for comparison. The results from each database were similar, and the relationship between human capital and economic growth was negative. B. R. Delalibera & P. C. Ferreira (2018), who argue that early education had a significant impact on economic growth, used figures from 1961-2008. The article also notes that investing in early education is more important, although it will pay off in the long run. In "Education and economic growth in Pakistan: A cointegration and causality analysis" M. Afzal et.al (2011) analyzed the relationship between education and economic growth in 1970-2009 using Autoregressive Distributed Lag (ARDL) Model of Cointegration and the Augmented Analyzed by Granger Causality Approach given by Toda and Yamamoto (1995). The study concluded that higher education has a greater positive impact on economic growth among other educational indicators. Camelia Burja & Vasile Burja (2013) in their article Economic growth and key indicators of education (persons with lower secondary education attainment, individual's level of computer skills, individual's level of internet skills, life-long learning, early leavers from education, employment rate of persons with tertiary education (level 5 and 6), total investment on GDP ratio, growth rate of real labor productivity per hour worked and training) and built a regression model on the example of Romania and the EU. The model covered the years 1997-2011. The impact of key education indicators on GDP per capita was 53% and 57%, respectively, in the EU and Romania. E. A. Hanushek and L. Woessmann (2007, 2008), who consider the impact of quality of education on economic growth more important than quantity, have conducted research in 50 countries. In a 2016 study, Hanushek said that the impact of adding of higher schooling years on economic growth is small without cognitive skills (Hanushek (2016)). In their study, Sharmila Gamlath and Radhika Lahiri (2018) examined the effects of public and private spending on education on economic growth. According to them, the state should provide tax incentives to stimulate private education, which will indirectly lead to a reduction in parental spending. However, the high cost of private education reduces interest in this field in developing countries. Given the greater access to education in the public sector for these countries, it is important to invest in this sector and improve the quality of education. The positive impact of education spending on economic growth has been identified in studies in countries such as Turkey (1970-2012), France (1970-2012), Tunisia, and Morocco (1980-2015) (Mercan, M., Sezer, S., 2014; Ifa, A., & Guetat, I., 2018; Ozatac N., Taspinar N., El Rifai O., Eren B., 2018).

3. METHODOLOGY

In the research, we used the Cobb-Douglas production function based on the Solow model:

$$Y = AK^{\alpha}H^{\beta}$$

Where: Y is the production volume; A-constant, K, H - physical capital and human capital, respectively; α , β are the parameters of the model and $\alpha + \beta = 1$

If we logarithm both sides of the equation, we can bring the nonlinear function to a linear function:

$$\ln Y = \ln A + \alpha \cdot \ln K + \beta \cdot \ln H + \varepsilon$$

According to the studied model, as dependent variable - seasonally adjusted real non-oil GDP (2005 = 100), as explanatory variables - seasonally adjusted capital stock, total government expenditure, oil fund revenues, number of graduates of specialized secondary educational institutions, number of graduates of higher educational institutions, human development index

indicators were used on a quarterly basis. Quarterly indicators of education were calculated using the Eviews program, and quarterly calculations of the Capital Stock indicator were calculated by the formula $K_{t+1} = (1 - \eta)K_t + I_{t+1}$ (Rudolf, B., & Zurlinden, M., 2010). Here, t is time, I is quarterly investment (gross fixed capital formation), and η is depreciation rate. The model is included in different combinations to avoid multicollinearity between the indicators. As in the Solow model, each indicator is divided into labor force and considered for short-term and long-term.

$$\begin{aligned} Y/L &= AK^\alpha H^\beta / L \\ y &= ak^\alpha h^\beta \\ \ln y &= \ln a + \alpha \cdot \ln k + \beta \cdot \ln h \end{aligned}$$

We have also differentiated the model because we have considered it for the short term. Different econometric models were built on the basis of the data obtained on the example of Azerbaijan, and among them were the Vector Error Correction models that gave the best results. In detail, we can describe our model in terms of short-term and long-term, respectively:

$$\begin{aligned} d\ln y &= \text{constant} + \alpha \cdot d\ln k + \beta \cdot d\ln h + \text{erc}(-1) \\ \ln y &= \text{constant} + \alpha \cdot \ln k + \beta \cdot \ln h \end{aligned}$$

In this model, we assume that education has a significant positive impact on economic growth.

4. THE SOURCE OF THE DATA

In the model were used quarterly statistics for 2003-2019 in Azerbaijan. We used real non-oil GDP indicator from the Central Bank of Azerbaijan's (<https://www.cbar.az/page-43/external-sector-statistics>), capital stock, number of graduates of specialized secondary and higher educational institutions, human development index from World Bank's (<https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=AZ&view=chart>), UNESCO Institute for Statistics' (<http://data.uis.unesco.org/index.aspx?queryid=242>), oil fund revenues indicator from the State Oil Fund of the Republic of Azerbaijan's (<https://www.oilfund.az/en/report-and-statistics/budget-information/41>), total government expenditure indicator from the Ministry of Finance of the Republic of Azerbaijan's (<http://www.maliyye.gov.az/en/static/103/laws-and-decrees-on-state-budget>) official websites.

5. DISCUSSION

The results of the Vector Error Correction models are shown in Table 1. According to Table 1, 9 models for short-term and long-term are built in different combinations. DLOG(RNGDP_SA) for the short term and LOG(RNGDP_SA) for the long term are taken as the dependent variable. In addition ERC(-1) is also involved to the Vector Error Correction model in the short-run. In model 1 we used DLOG (SECONDARY), DLOG (OF), DLOG (C_STOCK_SA) for short-term and LOG (SECONDARY), LOG (OF), and LOG (C_STOCK_SA) for long-term as explanatory variables. As can be seen from Model 1, explanatory variables other than capital stock are statistically significant, and the impact of education on economic growth is positive. Thus, a one percent increase in education in the short term has a positive impact on economic growth of 0.14 percent, and in the long term of 0.15 percent. In model 2 we used HDI for education. In this model, all indicators are significant, except for short-term oil fund revenues, but all indicators have a positive impact in the long run. In Model 3, we used DLOG(HIGHER) for short-term and LOG(HIGHER) for long-term on education. In this model, in the short run oil fund revenues, in the long run oil fund revenues and capital stock indicators are significant.

In Model 4, 5, 6, we used each indicator of education separately, including DLOG (OF), DLOG (GOV_EXP), DLOG (C_STOCK_SA) for short-term, and LOG (OF), LOG (GOV_EXP), LOG (C_STOCK_SA) for long-term. In model 7, 8, 9 are calculated by subtracting oil fund revenues from these indicators. The impact of education on economic growth in model 4 and 7 is positively significant in the short term and in the long run it was positive but insignificant. In models 5 and 8, this effect is insignificant, although positive in both periods. In models 6 and 9 there is a negative insignificant in the short term and a significant effect in the long term. As can be seen, the ERC (-1) coefficient is negative and statistically significant in each short-run model. This also meets the requirements of the Vector Error Correction Model.

Table 1: Vector Error Correction Model results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
DLOG(SECONDARY)	0.14*	-----	-----	0.15*	-----	-----	0.15*	-----	-----
DLOG(HDI)	-----	0.50	-----	-----	0.37	-----	-----	0.32	-----
DLOG(HIGHER)	-----	-----	0.01	-----	-----	-0.04	-----	-----	-0.05
DLOG(OF)	0.08*	0.08*	0.09*	0.06**	0.07**	0.06**	-----	-----	-----
DLOG(GOV_EXP)	-----	-----	-----	0.06	0.04	0.05	0.08	0.06	0.07
DLOG(C_STOCK_SA)	0.15	0.15	0.11	0.29	0.20	0.24	0.58***	0.43	0.45
C	0.01**	0.01	0.01***	0.01	0.01	0.01	0.01	0.01	0.01
ERC(-1)	-0.12**	-0.17**	-0.12**	-0.17**	-0.18**	-0.19**	-0.20*	-0.19**	-0.22*
R ²	0.23	0.16	0.16	0.25	0.16	0.19	0.19	0.09	0.12
DW	1.89	1.96	1.99	1.88	1.97	1.94	1.84	1.89	1.89
LOG(SECONDARY)	0.15**	-----	-----	0.06	-----	-----	0.04	-----	-----
LOG(HDI)	-----	3.76*	-----	-----	2.44	-----	-----	2.72*	-----
LOG(HIGHER)	-----	-----	0.01	-----	-----	-0.27**	-----	-----	-0.31*
LOG(OF)	0.12*	0.04**	0.13*	0.04**	0.02	0.02	-----	-----	-----
LOG(GOV_EXP)	-----	-----	-----	0.22*	0.12**	0.27*	0.29*	0.14*	0.31*
LOG(C_STOCK_SA)	0.52*	0.35*	0.46*	0.39*	0.33*	0.42*	0.41*	0.35*	0.45*
C	-1.94*	-0.15	-1.76	-1.15*	-0.34	1.77	-1.03*	-0.23	2.21**
R ²	0.97	0.98	0.96	0.98	0.98	0.98	0.98	0.98	0.98
DW	0.20	0.57	0.20	0.31	0.48	0.43	0.33	0.51	0.46

*Significant at the 1% level

**Significant at the 5% level

***Significant at the 10% level

Dependent variables are respectively DLOG(RNGDP_SA) and LOG(RNGDP_SA)

As can be seen from Table 1, the number of graduates of specialized secondary education institutions has a positive impact on economic growth for both periods. However, in the short term this effect is significant in all models, but in the long run it is insignificant in models 4 and 7. The reason for the positive and significant impact of this indicator on economic growth is that more and more of these people quickly find a job that is not related to education and create new value. Although the human development index has an insignificant effect on economic growth in the short run, in the long run it has a significant impact of + 3.76 percent in model 2 and + 2.72 percent in model 8. Note that the life expectancy index, education index and income index are used in the calculation of the human development index. There the reason for this is that in the long run, people will benefit more from the economy by being more educated and experienced. Another interesting result of the model is that the number of graduates of higher educational institutions has an insignificant effect on economic growth in all models in the short term and a significant negative effect in models 6 and 9 in the long run. The reasons for such influences can be explained by the insufficient level of higher education in the country and the difficulty of graduates finding jobs in their field.

6. CONCLUSION

Theoretically, many researchers have studied the impact of education on economic growth and noted the importance of this effect in achieving economic development. This issue was also investigated in this article on the example of Azerbaijan. According to the results of the Vector Error Correction models, education has positive effects on economic growth in model 1, 4, 7 in the short term, positive significant effects in model 1, 2, 8 and negative significant effects in models 6 and 9 in the long run. As can be seen from the comparison of the models, the best results are in model 1, and in this model our hypothesis proves itself. According to Model 1, a one-percent increase in the number of graduates of specialized secondary education institutions leads to an increase in economic growth of 0.14 percent in the short term, and of 0.15 percent in the long run. The results of the model show that there are problems on higher education in Azerbaijan. To solve this problem, there is a need to strengthen university-state-industrial relations in the Azerbaijani economy and train specialists who meet the requirements of the market. Another solution is to attract educated people who have studied abroad to higher education institutions and create competition by offering high salaries to staff.

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DIRECTIONS OF IMPROVEMENT OF THE FINANCIAL MECHANISM FOR STATE SUPPORT TO AND PROMOTION OF EXPORT OF FOODS IN AZERBAIJAN

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ABSTRACT

In Azerbaijan, along with the important role of domestic development factors in the formation of a competitive market economy and its integration to the world economy, foreign trade also plays an important role. Favourable natural-climatic conditions, implementation of the state programs on socio-economic development of the regions, rich traditions in the field of food production and their export, the geographical proximity of potential foreign sales markets, and other similar factors indicate the presence of important prospects for increasing the export capacity of the food sector. From this point, the study of the problems in the development of the export capacity of the non-oil sector on the example of the food sector of Azerbaijan is of special importance. The research aims to study the processes occurring in Azerbaijan in connection with the development of the export capacity of the food sector, to analyze the existing situation and to provide proposals and recommendations in the improvement of activity of this sector. The research was fulfilled under the research methods as the logic generalization, systemic, comparative, structural-functional, economic-statistical analysis. As a result of the research, calculations were made to identify possible options to increase the efficiency of export operations in the food sector, and priority issues were studied to improve the financial mechanism of state support to and stimulation of food export. Limits of the research: requires more extensive practical information. The practical importance of the research: the suggested proposals and recommendations may play a positive role in enriching scientific and practical knowledge of the specialists working in the formation of the organizational structure of the financial mechanism of the state support to and promotion to the food export. The scientific innovation and originality of the research: The methodology for determining the efficiency of the use of domestic resources and comparative advantages in promising areas of the food production sector.

Keywords: *The export capacity of a country, Export operations, Foods, Promoting, State support*

1. INTRODUCTION

The recession and structural deformation in the early stages of economic reform, the deepening of fuel and raw material specialization in the international labour division during the implementation of the oil strategy and several other challenging issues have resulted in both weak export diversification and economic security.

The local economy in Azerbaijan is characterized with the high share of raw material exports, low competitiveness of export products and large-scale import dependence on the food and light industry sectors, which are particularly sensitive areas for the country. On the one hand, the idea of achieving a balance in the relationship between food production and consumption structures, and on the other hand, the prospect of choosing agriculture and the food sector as a priority to enrich the export commodity structure as a whole, including the main problems in the formation and realization of Azerbaijan's export potential. The urgency of studying the issues of improving the financial mechanism of state support and stimulation of food exports in Azerbaijan has become conditional. As we know, one of the areas influenced by the oil factor in the economy of Azerbaijan is the tendency of the national currency to strengthen in the long run. In this case, measures to develop export potential should be taken into account for the strengthening of the national currency of Azerbaijan. Special attention is paid to this issue in the research.

2. STUDY AND ANALYSIS OF THE SITUATION FOR THE DEVELOPMENT OF THE EXPORT POTENTIAL OF THE FOOD SECTOR IN AZERBAIJAN

At the initial stage of the transition to the market economy (1990-1995), the entire food sector was exposed to the sharp decline. Both the production of agricultural raw materials and the manufacturing industry engaged in food production. While analyzing the financial and production results of enterprises in the food sector in 2000/2018, we observe a certain improvement in the situation as a result of a combination of several factors: 1) a system of preferential taxation, preferential tariffs applied to energy carriers, creation and improvement of production and social infrastructure, the establishment of "Agroleasing" OJSC and "Agribusiness" Azerbaijan Center, as well as state policy aimed at stimulating agricultural production; 2) Establishment of the National Entrepreneurship Support Fund; 3) improvement of the legislation regulating import-export activity; 4) increase in labour productivity and increase in the level of purchasing power; 5) relative improvement of the situation in the domestic and foreign sales markets. As a result, the number of unprofitable agricultural enterprises decreased from 52.5% to 4.9% during mentioned the period. The level of profitability of financial and economic activities of agricultural enterprises increased from -19.2% to 20.1%. There have been radical changes in the production of several products. Thus, compared to 2000, in 2010 the production of sugar beet was 494%, potatoes - 95%, grapes - 118%, fruits - 112%, vegetables - 94.9%, beef production - 73%, poultry production - 348% egg production - 209%, milk production - 2 times, cocoon production - 6.7 times. However, the production of some products continues to decline: tea leaf production decreased by 20% and there was a decrease in tobacco production by 63.6% [Almas L.K, Hajiyeu N.U. (2014)]. Achieving high production results by industrial enterprises permits to highlight that this sector could successfully be transitioned to the type of intensive growth. Compared to 2000, in 2010 the production of vegetable oils increased 16 times, the production of canned fruits and vegetables increased 12 times, the production of tea increased by 511.8%, the production of wheat flour 444.3%, the production of alcoholic beverages 210%. , production of mineral waters and soft drinks increased by 776.6%. [Almas L.K, Hajiyeu N.U. (2014)]. During the period from 2000 to 2018, the food sector strengthened its "leading" position in the sectoral structure of non-oil exports and its share increased from 21.8% to 44.5%. The value of exports of agricultural and food products amounted to 56.7 million. 705.1 million US dollars. It has risen to the US dollar. However, the foreign trade balance for this sector of the economy in 2018 will be -998.4 million. The negative balance in US dollars is typical. During the period from 2000 to 2018, a positive balance in foreign trade was recorded for the following products: potatoes, fresh fruits and vegetables, margarine, fruit and vegetable juices, wine and other strong alcoholic beverages.

3. METHODOLOGY ON THE EFFICIENT USE OF DOMESTIC RESOURCES IN THE PROMISING AREAS OF THE FOOD PRODUCTION SECTOR IN AZERBAIJAN AND IDENTIFICATION OF THEIR COMPARATIVE ADVANTAGES

The following methodology will be used for calculating comparative advantages in this area. According to this methodology, the Domestic Resource Cost Ratio (DRC), developed by Eric Monke and Scott Pearson in 1989, is used to calculate the ratio of internal resource utilization and identify comparative advantages. DRC is calculated as the ratio of the value of internal resources in social values to the volume of value-added in the field with social values. If the domestic market prices formed based on theoretical calculations do not reflect the real economic value of goods and services, social prices are accepted as international parity value and act as a substitute for domestic market prices [Nazim O. Hajiyev, M.R Rasulova (2004)].

$$DRC = (L_s + K_s) / (R_s - C_{is})$$

Where, L_s is the cost of labour (in social prices); K_s - capital expenditures (in social prices); R_s - gross income (in social prices); C_{is} - the social value of the means of commercial production (raw materials, is finished agricultural products and materials that act as raw materials for the processing industry).

The methodology and consistency for calculating international (import and export) parity prices consists of the following four stages: 1. Calculation of the world price of the product (for finished products and means of commercial production); 2. Determining the exchange rate for the conversion of the world price of the product into the national currency; 3. Calculation of the physical volume of the product due to the transition from international units of measurement to local units of measurement; 4. Calculation of import (export) value at the door of the enterprise. If there is added value in the production of this or that product at social prices, the DRC coefficient has a positive sign. In this case, $DRC < 1$ indicates that this product has an international comparative advantage. The $DRC < 1$ condition shows that the added value created in the production of a product at international parity prices is greater than the value of the resources used in the production process (in social prices) and vice versa. The calculation of the DRC ratio was carried out in the context of both existing technologies and the application of new technologies, and most importantly, based on the general direction of the study, the sensitivity of individual products to the appreciation of the national currency (20% in our example) was analyzed.

Table following on the next page

Table 1: DRC coefficient for finished agricultural products of manufacturing centers in Azerbaijan

Products	DRC coefficient		Growth of DRC coefficient +/-	
	E.T.	I.T.	E.T.	I.T.
Butter (natural)		0,302		0,027
Milk (natural raw material)	0,376	0,162	0,943	0,000
Milk (milk powder)	0,065	0,060	0,015	0,014
Flour	0,076	0,115	0,019	0,010
Meat processing (sausage)		0,163		0,022
Meat cutting	1,376	0,247	0,325	0,048
Chicken	0,387	0,189	0,718	0,000
Soy butter		-0,351		-0,014
Sunflower oil		0,433		-0,203
Olive oil	0,340	0,595	0,081	0,082
Corn oil		0,707		0,066
Pasta		0,242		0,051
Tomato pasta	-0,054	0,873	-0,011	0,210
Tomato paste (unpackaged)	-0,429	-0,564	-0,062	-0,194
Wine	0,667	0,173	0,216	0,021
Cognac alcohols		-0,481		-0,057
Vodka	0,057	0,064	0,014	0,014
Beer	0,295	0,086	0,079	0,020
Apple juice (packaged)	1,085	0,145	0,230	0,006
Wine		0,773		-0,064
Tabaco		0,078		0,010
Filtered cigarettes	0,032	0,057	0,007	0,013
Tea		0,947		0,102

Note: E.T. –Existing technologies; I.T. – ideal technologies

(Source: Materials of the Agency for Assistance to the Development of the Private Sector in Agriculture of the Azerbaijan Republic)

As can be seen from table 1 with existing technologies, the greatest comparative advantages are inherent in cigarettes, milk from powder, flour, alcoholic beverages for which DRC varies in the range of 0.032-0.076. Besides, beer, olives, natural milk and poultry are relatively competitive, for which the DRC varies between 0.295-0.387. In conditions of using ideal technologies, all products gain comparative advantages, except tomato paste (not packaged), cognac alcohol and soybean oil. Favourable conditions are created for increasing the export of cigarettes, apple juice, flour, wine, and chicken. An analysis of the sensitivity to the appreciation of the manat exchange rate showed that most industries retain their comparative advantages even with existing technologies, while the largest increase in the DRC coefficient is typical for natural milk, poultry meat, meat cutting and apple juice, while vodka, milk (powder), flour, beer and olive oil are less sensitive to the appreciation of the exchange rate, where the increase in the DRC coefficient is only 0.007-0.081 points. An ideal practice, the increase in the DRC coefficient is completely insignificant. All types of products (except tea) retain their comparative advantages, white tea, olive oil, corn oil, and pasta are the most sensitive.

4. IDENTIFY POSSIBLE OPTIONS TO INCREASE THE EFFICIENCY OF EXPORT OPERATIONS IN THE FOOD SECTOR

As we know, foreign economic development in countries specializing in energy resources and raw materials has several specific features, and these features are reflected in the foreign trade operations of countries belonging to this group with countries with non-raw materials

economies. At the same time, it is of particular interest to study the characteristics of foreign trade operations between countries with commodity economies, which in principle face similar problems. In this regard, the issue of export of goods from Azerbaijan to Russia is being considered, and hypertrophic development of the oil and gas sector of the economy is observed in both countries. As we know from the economic literature, one of the main problems in countries rich in natural resources is the impact of foreign exchange earnings from the export of resources on the appreciation of the national currency. The appreciation of the national currency leads to an increase in export prices in dollar terms and a decrease in the competitiveness of non-oil products in both domestic and foreign markets. Rising inflation in the economy also leads to an increase in the cost of exports and an increase in the real exchange rate of the national currency. When examining the degree of impact of the above theoretical considerations on our example, it should be taken in account that the appreciation of the exchange rate and rising inflation are problems that are also characteristic of the Russian economy. We conclude that different results can be obtained depending on the dynamics of exchange rates and inflation rates in the countries being compared. Given the extent to which these theoretical considerations are widespread in the case of exports from Azerbaijan to Russia, it should be noted that the Russian economy is also characterized by the problem of exchange rate appreciation and rising inflation. Let's model the considerations listed above. First of all, it should be noted that this model is a general case of the process of modelling the efficiency of foreign trade operations, taking into account changes in exchange rates and inflation rates between the participating countries. In our example, Azerbaijan is expressed with the term "exporter" and Russia with the term "importer". First of all, let's enter the following parameters: K_{e0} is the exchange rate of the US dollar to the exporter's national currency during the base period; K_{i0} is the exchange rate of the US dollar against the national currency of the importer during the base period; P_{e0} - contract selling price per unit of product (in CIF terms), the price is expressed in US dollars; P_{i0} - unit selling price (in national currency) set for retailers by wholesalers in the importer's market during the base period; C_{e0} - unit cost of production and export under CIF conditions (in national currency); M_{e0} - exporter's profit per unit of output in the base period (in US dollars); M_{i0} - the profit of the importer (wholesaler) per unit of output in the base period (in US dollars); Note that the exporter's profit per unit of output during the base period is calculated by the following formula:

$$M_{e0} = P_{e0} - \frac{C_{e0}}{K_{e0}}$$

The importer's profit per unit of output during the base period is calculated by the following formula:

$$M_{i0} = \frac{P_{i0}}{K_{i0}} - P_{e0}$$

If we convert M_{e0} and M_{i0} into the national currencies of the exporter and importer, we get N_{e0} and N_{i0} , respectively. The formulas for calculating N_{e0} and N_{i0} are as follows:

$$N_{e0} = K_{e0} \cdot P_{e0} - C_{e0}$$

$$N_{i0} = P_{i0} - K_{i0} \cdot P_{e0}$$

Now let's determine the formulas for calculating the profits of exporters and importers in the reporting period, taking into account changes in exchange rates and inflation rates in comparable countries. For this purpose, let's include the relevant parameters that reflect the changes that occurred during the reporting period: π_e and π_i is the consumer price index in the countries compared during the reporting period; ΔK_{e0} , ΔK_{i0} , ΔP_{i0} , ΔC_{e0} - is the corresponding increase in the parameters K_{e0} , K_{i0} , P_{i0} and C_{e0} during the reporting period; In our example, the export price P_{e0} remains unchanged during the reporting period, $\Delta P_{e0} = 0$. In this case, the real profit of the parties during the reporting period is calculated by the following formulas:

$$M_{e1} = P_{e0} - \frac{\pi_e \cdot C_{e0}}{K_{e0} + \Delta K_{e0}}$$

$$M_{i1} = \frac{P_{i0} \cdot \pi_i}{K_{i0} + \Delta K_{i0}} - P_{e0}$$

where M_{e1} and M_{i1} are the real profits of the exporter and importer (in US dollars) per unit of output during the reporting period, respectively.

Respectively, the real profits (and) of exporters and importers in national currencies during the reporting period are calculated by the following formulas:

$$N_{e1} = \frac{P_{e0} \cdot (K_{e0} + \Delta K_{e0})}{\pi_e} - C_{e0}$$

$$N_{i1} = P_{i0} - P_{e0} \cdot \frac{K_{i0} + \Delta K_{i0}}{\pi_i}$$

If we look at these formulas as an example, we should note that the lower the rate of strengthening the exchange rate of the manat against the US dollar and the lower the rate of inflation in the country, the higher the profit from exports. Conversely, the higher the growth rate of the Russian ruble against the US dollar and the lower the inflation rate in Russia, the greater the profit from imports. Based on the purpose of the study, the most important issue for us is the study of possible options for changes in Azerbaijan's export earnings depending on the dynamics of exchange rates and inflation rates in Azerbaijan and Russia. Let's look at three possible options.

$$1) N_{e1} \leq 0, \quad P_{e0}(K_{e0} + \Delta K_{e0}) - \pi_e \cdot C_{e0} \leq 0$$

In this case, the implementation of export operations is inefficient.

$$2) N_{e1} \geq N_{e0}, \text{ i.e. } (K_{e0} + \Delta K_{e0}) \geq \pi_e \cdot K_{e0}, \text{ in other words } \Delta K_{e0} \geq (\pi_e - 1) \cdot K_{e0}.$$

This option is considered suitable for the development of export activities. In this option, a favourable combination of the exchange rate and inflation is obtained. Here, the change in the exchange rate of the US dollar against the manat in percentage terms ($\frac{\Delta K_{e0}}{K_{e0}} \cdot 100$) exceeds the inflation rate (in per cent) ($(\pi_e - 1) \cdot 100\%$).

This condition indicates that inflation should not exceed the change in the exchange rate as a percentage. In other words, the rate of strengthening of the US dollar should exceed the level of inflation.

3) $N_{e1} \leq N_{e0}$. Neither the first nor the second condition is met here, ie the inflation rate exceeds the rate of devaluation of the national currency. This is observed in the Azerbaijani economy - the manat is not devalued, but strengthened.

Let's look at the alternatives to this option.

3.1.) $(N_{e0} - N_{e1}) \geq (N_{i1} - N_{i0})$. In this case, the losses of the Azerbaijani side exceed the additional income of the Russian side. In the case of adjustments to export prices (in the direction of their increase), the importer must agree with the reduction of profits, which is practically impossible.

3.2.) $(N_{e0} - N_{e1}) \leq (N_{i1} - N_{i0})$. If the loss of the Azerbaijani side is less than the additional gain of the Russian side, then the export price can be reconsidered. Examining all the above options, we concluded that the lower the rate of strengthening of the ruble against the dollar, the lower the exchange rate of the dollar against the manat and the lower the inflation rate in Azerbaijan, the higher it's export earnings. On the contrary, the lower the growth rate of the dollar and the lower the inflation rate in Russia, the higher its profit from imports.

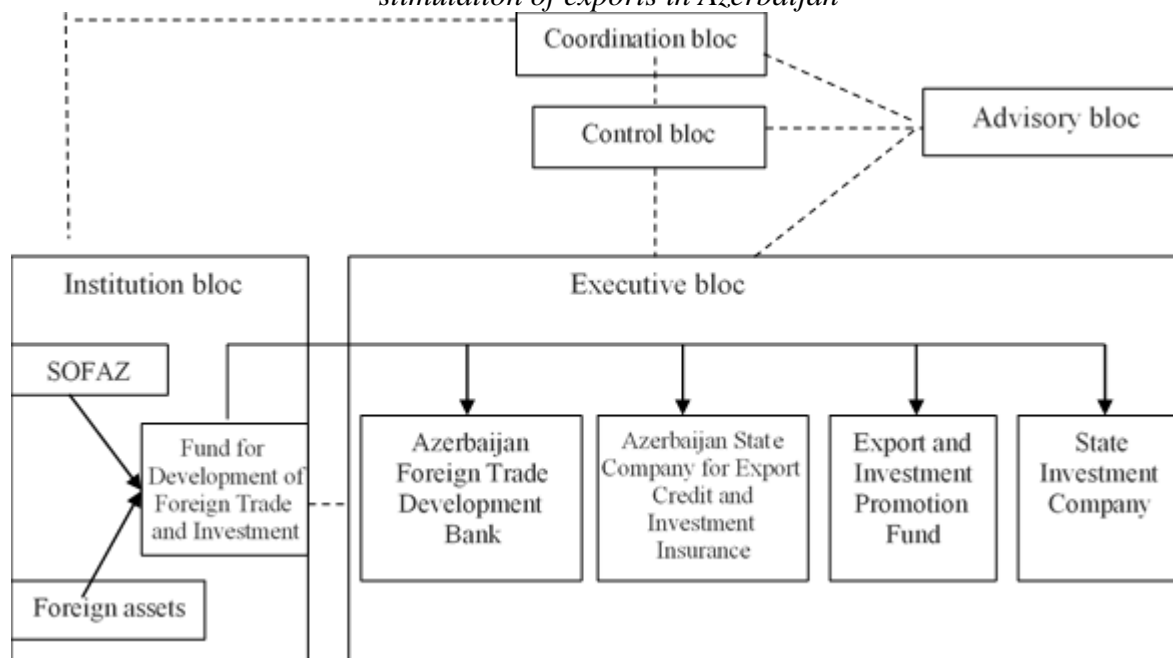
5. FORMATION OF THE ORGANIZATIONAL STRUCTURE OF THE FINANCIAL MECHANISM OF STATE SUPPORT AND STIMULATION OF FOOD EXPORTS IN AZERBAIJAN

Recognizing that the process of Azerbaijan's accession to the WTO is necessary and inevitable, one of the main tasks of the state should be the implementation of targeted measures to effectively use the timeframe for separating our country from membership in the WTO. It should be noted that WTO membership significantly limits the state's ability to regulate foreign trade. These restrictions apply both to the implementation of the "import substitution" policy, which is the initial phase of an export-oriented development strategy, and to hidden subsidies, tax incentives, etc. such measures will be reflected in the stimulation of exporters. With this in mind, all instruments of the state's economic policy should soon be involved in the process of creating a strong resource and institutional base for the formation and development of a competitive and diversified economy that will increase the country's export potential shortly. In our opinion, one of the important issues in this direction is to stimulate exports by the requirements of increasing the export of products of Azerbaijan's manufacturing industries and the creation of an effective system that provides state support in this area. It is known from the world economic literature that the system of state support and incentives for exports consists of tools consisting of measures related to various economic effects, as well as organizational and information support for exports. These measures include: - measures related to state regulation at the macroeconomic level; - measures related to foreign trade policy (protection of certain areas by protectionist methods and methods of international regional integration); - state participation in export and export lending; - participation of the state in insurance of export operations; - Measures related to organizational and information support for export development. It is known that the exchange rate is one of the main macroeconomic instruments of export development. In principle, the mechanism of currency regulation through devaluation is one of the important tools for macroeconomic support of export operations. However, the devaluation of the national currency increases inflationary pressures in the economy.

It is known that the negative effect of inflation on the economy is greater than the negative effect of expensive currency. Reducing inflation will increase the price competitiveness of export-oriented industries. In our opinion, the practice of attracting exporters to preferential taxes should be used as an important measure in the field of macroeconomic impact on exports. In Finland, for example, government incentives such as export subsidies are widespread. Measures to export subsidies include a system of identification of prices for raw materials for the food industry; allocation of subsidies to local agricultural producers; reduction of transport tariffs; unification of freight rates; allocation of regional transport subsidies for cargo transportation from the ports of Northern Finland and the Saimen Canal; state subsidies aimed at the development of exports to new markets; support for marketing and sales of export goods (Ministry of Trade and Industry); subsidizing export companies (Ministry of Trade and Industry); collection and dissemination of information (Foreign Trade Union and Chambers of Commerce); training of personnel for the organization of export operations (Export Training Fund), as well as tax and customs benefits in the field of foreign trade operations of economic entities. In Poland, the system of state support for exports provides direct support, as well as the following tax and customs benefits: - Exemption of exporters from direct and indirect tax payments; - reduction of taxes for companies establishing foreign branches; - tax exemption for research costs related to the establishment of sales branches abroad; - tax exemption of components used in the production of export goods; - creation of non-taxable monetary funds for export development; - reduction and refund of customs duties. One of the important directions of the system of state support and incentives for exports is the participation of the state in lending for export operations and export-oriented production to comprehensively improve the system of export financing. The study examined the world experience of the establishment and operation of export financing institutions, in particular, the models of state export support for Sweden, Finland, France, Spain, Switzerland, the Czech Republic, Poland and Kazakhstan. At the same time, due to the lack of specialized state export-import banks in Switzerland and Poland, settlements and lending on foreign trade operations are carried out through commercial banks. It should be noted that the main approach in the implementation of export support programs is comprehensive. According to this approach, export support should cover not only the sale of goods and services but also export-oriented production. This direction is widely used in the export support models of Spain and France. In Spain, the financing of export-oriented production is carried out by the following institutions: "Banko Exterior de Spain" - export-import bank; "State Credit Institute" - organizes state funds for export loans, regulates and supervises the activities of state credit institutions; "National Institute for Foreign Trade" - the development of programs aimed at expanding exports and the organization of specific events, coordination of export operations of state enterprises, support for export activities of private firms, etc. At present, export crediting in France is carried out mainly by private banks from their resources. The government's influence in this direction is the refinancing of these loans on favourable terms, which in turn leads to a reduction and stabilization of interest rates. These operations are carried out by the Bank of France and the Bank for Foreign Trade. The bank opens loans, which are widespread in Western practice, and also provides for the reduction of interest rates on export bonds of commercial banks through refinancing. This system allows a French exporter to use loans to finance both export-oriented production and the export itself. Short-term loans are provided for the sale of semi-finished and consumer goods, and medium-term and long-term loans are offered for the sale of equipment. World experience shows that along with the development of the export lending system, a specialized export credit insurance institution is being established to ensure export lending services and insure investments abroad, and its main task is to ensure exporters and importers, as well as the banks serving them, against political and economic risks. One of the important directions of state support for exports is a set of information-consulting and organizational-legal

measures of export support. It should be noted that the Export and Investment Promotion Fund (EIPF), established in 2003, gives a big impetus to the process of information and organizational and legal support of Azerbaijani exporters in the non-oil sector. EIPF is engaged in attracting foreign direct investment to the Azerbaijani economy and promoting the growth of exports of goods in the non-oil sector. With the support of the United Nations Development Program, the Azerbaijan Export Information Center (AEIC) was established under the EIPF. The main purpose of the center should be to identify existing exporters, provide them with information and technical support, and assist prospective exporters in addressing the following issues: - providing their successful competitive products (supporting the promotion of these products to end sellers (buyers)); - assessment of their needs for future development and provision of necessary resources such as information, etc. It should be noted that EIPF and its center provide significant assistance to local exporters. However, it should be mentioned that such institutions are one of the structural elements of the whole system, and it is very difficult to consider high results in the field of export support in the absence of a working mechanism for financing exports and export-oriented production. Based on the experience of the above-mentioned countries in the field of export financing, we have developed the organizational structure and financial mechanism of export stimulation and state support in Azerbaijan, and its schematic description is given below. The main coordinating body in the proposed model is the Government Commission on Export and Investment Support established under the Cabinet of Ministers of the Republic of Azerbaijan. The responsibilities of this body include the regulation of many processes: the accumulation of financial resources in the Foreign Trade and Investment Development Fund and their distribution among the structural units of the Executive Block, as well as the coordination of advisory and control units. In this model, the Foreign Trade and Investment Development Fund (FTIF) acts as the main state fund for the implementation of the complex objectives of stimulating exports and investments and support.

Scheme 1: Organizational structure and financial mechanism of the state support and stimulation of exports in Azerbaijan



As we can see from the diagram, along with several key financial institutions (Central Bank and commercial banks), the Executive Block already has some structural units in Azerbaijan, such as the FTIF and the State Investment Company of the Republic of Azerbaijan (SOCAR).

The content, goals and main directions of FTIF's activity have already been mentioned in this article. The main activity of the State Investment Company of the Republic of Azerbaijan in the implementation of public investments in various industries in the non-oil sector of the Azerbaijani economy. In the proposed model, when analyzing the prospects of the State Investment Company of the Republic of Azerbaijan, the following additional directions of its activity can be indicated: - active participation in the authorized capital of priority export-oriented enterprises; - active participation in the process of internationalization of the activities of Azerbaijani producers of goods and services, in particular, the joint participation of Azerbaijani producers in capital investments abroad. Based on the task of developing a working mechanism for export financing, we consider it expedient to establish a specialized state "Azerbaijan Foreign Trade Development Bank" (AFTDB). The authorized capital of the Azerbaijan Foreign Trade Development Bank is formed at the expense of the Foreign Trade and Investment Development Fund. The main activities of the Azerbaijan Foreign Trade Development Bank are as follows: - issuance of short-term, medium-term and long-term export loans; - refinancing of export loans on concessional terms to reduce and stabilize interest rates during the lending period; - providing loans to entrepreneurs for the production of export products. As the experience of establishing a system of lending for exports and export-oriented production increases, it is expedient for commercial banks to join this process. In this case, the Azerbaijan Foreign Trade Development Bank has the following responsibilities:

- reduction of interest rates on export bonds of commercial banks due to refinancing;
- Subsidizing interest rates on export loans issued by commercial banks to foreign importers through the Azerbaijan Foreign Trade Development Bank.

It should be noted that the Central Bank carries out coordination control over the process of transfer of financial resources from the Fund to the EBRD and commercial banks and their further use. Finally, one of the important institutional issues in the proposed model is the establishment of the Azerbaijan State Company for Export Credits and Investment Insurance (AIKISDS). The company's activities are aimed at stimulating the export of non-raw materials, services and direct investment abroad by insuring against possible losses in the event of commercial and political risks. The insurance period can be divided into three categories: short-term agreements (up to one year), medium-term agreements (one to five years) and long-term agreements (more than five years). As in foreign countries, it is possible to ensure 90% of political risks and 80% of commercial risks under export insurance programs. The amount of insurance premium paid by the exporter is determined depending on the political and economic stability in the importing country, the conjuncture of world commodity and currency markets. In world practice, the range of insurance interest rates for export credit insurance varies from 0.3 to 3%. The Advisory Bloc is an important structural element of the export stimulation and state support system. Its main tasks are: -preparation of legal, organizational and administrative decisions aimed at the development of exports; -monitoring the implementation of export and investment lending and insurance programs; -examination of decisions on the allocation of funds for campaign activities; -advice and suggestions for potential exporters and investors. The "Advisory Bloc" is formed from the following bodies: The Export Support Council under the Ministry of Economy; Center for Economic Reforms under the Ministry of Economy; Economic Research Center; Expert groups of ministries and agencies; Expert group of the National Confederation of Entrepreneurs; expert groups of non-governmental organizations; research institutes in various sectors of the economy; international experts. The "Control Bloc", consisting of state and public commissions, carries out strategic and current control over the activities of various structural units responsible for the implementation of export stimulation and state support policy. The Ministry of Economy is a part of the State Commission; Ministry of Finance; Ministry of Taxes; Central bank; Ministry of Justice; Ministry of Foreign Affairs;

Ministry of Industry and Energy; Ministry of Agriculture; The Ministry of Labor and Social Protection; The Chamber of Accounts; Includes Chamber of Auditors. The public commission includes the National Confederation of Entrepreneurs and independent experts. The system of export stimulation and state support cannot function without a certain set of normative acts. Existing laws and regulations in the field of foreign trade regulation in Azerbaijan reflect the normative standards necessary for the application of the export support system, but provide a more accurate and improved legal framework for the state export support system, especially for lending and insurance of exports and export-oriented production. It is considered expedient to develop a "Law on Export Stimulation and State Support" given that Azerbaijan is actively negotiating to join the World Trade Organization, it is important that the law provides for export subsidies.

6. CONCLUSION

To identify the efficiency and comparative advantages of the use of domestic resources in the promising areas of export-oriented development of the food production sector in Azerbaijan, the DRC indicator was used. As a result of the calculations, it was determined that all the products studied, except for soybean oil, tomato paste, cognac and tea, can be considered as promising areas for increasing export potential, taking into account the difference between existing and ideal technologies and the results of the analysis of currency sensitivity. Based on the experience of several countries in the field of export financing, we have developed an organizational structure and financial mechanism to stimulate food exports in Azerbaijan and state support. According to the proposed model, the solution of the following institutional and legal issues is considered expedient: - Creation of the specialized state "Azerbaijan Bank for Foreign Trade Development" (ABFTD); - Creation in Azerbaijan of the State Corporation for Insurance of Export Credit and Investments (ASCIEDI); - improving the regulatory framework and, in particular, the adoption of the Law on State Support and Export Promotion.

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ASSESSING THE DISTINCTIVE IMPACT OF COVID-19 ON SUSTAINABLE DEVELOPMENT GOALS

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ABSTRACT

The concept of sustainable development is considered as a key concept and a solution in creating a far and bright future for all of humanity. The real social and economic impact of the pandemic Covid-19, a main global problem in 2020, will affect to the achievement of sustainable development goals (SDG) which was adopted by the UN in 2015. the global economy decline, the process of self-isolation, the decline in demand for a number of goods and services, localization of production, the sharp increase in demand for advanced technologies, the changing in the balance of political and economic forces will have various directions that will affect the posed SDGs. The purpose of the article is identifying a number of positive resulting facts that contribute to the achievement and inhibition of the tasks. Based on empirical, statistical and comparative analysis, a study was conducted on the possible direct and indirect, as well as short-term and long-term positive effects of the pandemic. For example, it was found that calculation of apparent GDP losses should take into account its indirect increase. Thus, the strengthening of international health organizations care will affect the increased implementation of public safety measures. At task 3.6 of third SDG is to halve the number of road traffic deaths and injuries by 2020. WHO has estimated that road traffic accidents cost global GDP 3%, the economic damage from a coronavirus pandemic will be less by just as much as the number of serious accidents caused by death and injury of a person under quarantine will decrease. In view of this and other facts, it is necessary to conduct research on the real effect of the pandemic towards achieving the goals of a sustainable future, taking measures and tasks of favorable conditions, can help maintain the same pace even after the quarantine ends.

Keywords: Covid-19, Distinctive impact, Positive affects, Statistical and comparative analysis, Sustainable development goals

1. INTRODUCTION

There was the first official announcement of a new disease appeared on December 31,2019, which spread a few months later around the world. Announced like pandemic, over the past 5 months COVID-19 has affected all areas of human activity. The new epidemic has also caused enormous negative socio-economic consequences in achieving the targets of the 17 Sustainable Development Goals (SDGs) adopted by the UN in 2015. The concept of sustainable development is considered as a key concept and a solution in creating a far and bright future for all of humanity. The global economy decline, the process of self-isolation, the decline in demand for a number of goods and services, localization of production, the sharp increase in demand for advanced technologies, the changing in the balance of political and economic forces will have various directions that will affect the posed SDGs. In the article, the authors tried to identify and show up some goals and targets that, to a large extent, tend to improve indicators

during a pandemic. Identification of these targets will help to calculate the real socio-economic losses from COVID-19 and its consequences. And also to identify the favorable conditions that creates COVID-19 for their achievement.

2. REVIEW OF THE SDGS AND THEIR TARGETS TO BE ACHIEVED BY COVID-19

2.1. Ensure heathy lives and well-being (Goal 3)

Among the SDG's initial goals, first it is envisaged to improve the indicators of goal 3.5 of goal 3: “Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol”. The reason for this is the cessation of drug supplies due to the closure of many drug trafficking routes, as well as the closure of their trade and use facilities. Approximately 271 million people, i.e. 5.5 percent of the world's population aged 15-64, used drugs in 2017 (United Nations Office on Drugs and Crime (UNODC), 2018). Drug addiction causes huge economic damage as lost GDP, etc. Huge amounts of money, hospital care, social expenses, expenses for law enforcement, prevention, research, etc. Addiction is the cause of industrial injuries, accidents, downtime, disability and skills. Thus, part of the possible socio-economic damage from drug trafficking during the pandemic will be prevented. Another urgent targets for this goal is target 3.6 “By 2020, halve the number of global deaths and injuries from road traffic accidents”. With the imposition of self-isolation and quarantine, about 4 billion people on the planet stayed at home (Sandford, 2020). The number of deaths and injuries caused by road accidents will be reduced short-term due to the reduction the number of road accidents, and in some countries it will even lead to the achievement of the target. For example, according to a report from the Road Ecology Center of University of California, the call for self-isolation issued on March 20 led to a reduction in traffic accidents, as well as accidents involving injuries and fatalities was halved in the state of California, the state with the largest number of registered vehicles on the road and one of the states with the highest number of fatal accidents per year (Bain, 2020). Considering WHO, that accidents at cost 3% of the global GDP (Jadaan *et al.*, 2018), the economic damage from a coronavirus pandemic will be less by just as much as the number of serious accidents caused by death and injury of a person under quarantine will decrease. Comparing COVID-19 with road accidents and ways to prevent them, the obvious fact is that relying on individual responsibility does not save all of humanity from the possible outcomes of these events. As with the imposition of quarantine, it is necessary to take mandatory, toughened measures against traffic violators. Just as non-compliance with the quarantine of several people extends its term for all citizens, so exceeding the speed of one traffic participant increases the risk of an accident for the other participants. The strict requirement to maintain a distance between the traffic participants (as in quarantine regime), the installation of mechanisms to ensure compliance with the rules in electronic format, can also reduce the occurrence of road traffic accidents after the end of the quarantine. Another target of this goal that needs to be addressed is target 3.c, which states the need to increase the health financing. Strengthening measures in health care financing to defeat COVID-19 (Sarah Thomson, 2020), as well as finding responsible for the shortcomings in the spread of COVID-19 (İnternational, 2020) in the short term, will lead to development of medicine within countries and an increase in international organizations involved in health care, as well as additional financing of existing ones in the long-term. About 46 countries and organizations allocated a total of \$ 624.5 million to the World Health Organization to overcome the economic consequences of the spread of coronavirus, as well as strengthen health systems by May 15, 2020 (WHO, 2020). Indirectly, guarding against a new infectious disease by strengthening medical potential and the quality of medical services in underdeveloped countries within the funds allocated, we can expect an effect on seasonal transmission of influenza and see lower influenza rates this year.

2.2. Safe water and sanitation for all (goal 6)

The next problems that the new epidemic will have an exceptionally positive effect on will be the problems described in tasks 6.1 and 6.2. These targets include the tasks of ensuring universal and equitable access to safe drinking water for all and the goal of ensuring for all access to hygiene and sanitation services, respectively. With the onset of a pandemic, the media has promoted hygiene and has warned that handwashing is an essential component in stopping the spread of the virus. COVID-19 is a painful reminder that inclusive water and sanitation are important in the fight against disease. Investigation in the UK found that “only 32% of men and 64% of women wash their hands after using a public toilet”. In contrast, data from a recent survey conducted in March 2020 show that “83% of respondents now wash their hands more regularly” (Ketchell, 2020). However, for 3 billion people around the world who don’t have a home to wash their hands with soap and water, this small infection prevention remains beyond the reach (SDG, 2018). In early April of this year, the World Bank Group approved 25 projects to help countries respond to coronavirus and reduce recovery time. Among them was a project aimed at ensuring access to water, sanitation and hygiene of medical personnel and their patients in medical institutions in some countries of Africa. Evidence for some of them show that at least half of the medical facilities in these countries did not have basic water or sanitation (Anon., 2020). In addition, members and partners of the “UN Water” have joined to the SDG 6 Global Acceleration Framework, which aims to bring the international community together to achieve quick and effective results as a part of the Decade of Action (Communications, 2020). Providing medical facilities with a reliable and safe water supply and hygiene allows medical workers to fully provide assistance and to protect their own health from other diseases during the outbreak of a new infectious disease.

2.3. Industrialization, innovation and infrastructure (Goal 9)

Regarding this goal, attention should be paid to target 9.c., the deadline for which also ends this year 2020. This target seeks to “significantly increase access to information and communication technology and strive to provide universal and affordable access to the Internet in the least developed countries by 2020”. IT and telecommunications is one of the growing areas (consumer telecoms) by May 2020. Demand for this area is justified by the need to provide home with computers and peripherals for work and study distantly, as well as online shopping in self-isolation mode.

2.4. Reducing inequality (Goal 10)

About this goal, development in implementation takes place for task 10.6 “Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions”. The distinctive “route” COVID-19, which strengthened the influence of the political and economic forces of the East and worsened the influence of the West, will contribute to reducing inequality between the countries, despite the aggravate of social inequality within countries due to large losses at small and medium-sized enterprises. The direct change of world leaders is related to how quickly and effectively these countries cope with the pandemic. McKinsey&Company employees assessed the consequences of coronavirus as the most severe for the Eurozone economy, which supposedly reduced its GDP by 4.7%. And the forecast for its restoration indicated the beginning of the second quarter of 2021 (Company, 2020). In addition, the spread of a new coronavirus began in countries whose influence is most affected on world decisions, thereby harming the reputation due to the untimely adoption of the necessary measures. On the contrary, diseases of MERS, SARS, Ebola, etc. tended to spread in underdeveloped countries.

In contrast, MERS, SARS, Ebola, etc. diseases tended to spread in the underdeveloped countries of the world. (Qiu *et al.*, 2018). Thus, an inevitable increase in the share of members of international organizations among developing countries in the long term.

2.5 Sustainable consumption and production patterns (Goal 12)

The problem with the supply of goods, as a result of trade restrictions was good start to fulfilling target 12.1 of the 12th SDG about sustainable consumption and production patterns with the participation of all countries. Current problems with the logistics system have led to large financial losses in a business. This will lead to a new stage in the global economy, as a result of which supply chain reductions will be envisaged in the long term. Reducing supply chains can be achieved by moving production closer to customers and supplying stocks with excess inventory. Together with the development of technologies (for example, 3D printers), these problems will lead to the localization of production. Thus, it helps to strengthen the production system in the long run, despite lower income in the short run. Thus, it helps to strengthen the production system in the long term, despite lower income in the short term. The close proximity of production sites to the consumer is characterized by reduction of emissions, which will indirectly affect positively other targets of this goal. Today, 33% of global trade-related emissions because of international shipments (SDG, 2018). In addition, an increase in production and supply networks means in the medium term attracting new investments and independence from currency fluctuations.

2.6. Peace, Justice (Goal 16)

To build a peaceful and inclusive society in the interests of sustainable development directly depends on the take measures to eliminate conflicts around natural resources, lands, etc. Conflicts, without bringing to justice, as we know, are sources of violence for vulnerable segments of the population, the reduction of which is aimed at 16.1. Covid-19 has a tendency to unite countries, to show cohesion and solidarity since disease emerged. The UN Secretary-General has called for an immediate global ceasefire around the world and a united effort to combat the global pandemic. According to the materials of the International Crisis Group, there is new evidence of humanitarian gestures between rivals - support by the United Arab Emirates of Iran, the United States - the Democratic People's Republic of Korea and the cross-border relations between Venezuela and Colombia (Group, 2020).

3. CONCLUSION

The global goals of sustainable development are important mechanisms for overcoming the development problems of the 21st century. The SDGs adopted in 2015 are the most modernized for our generation. The 2020 pandemic will make a huge “contribution” to the results of their achievement. In this article, we tried to identify the goals and targets that the pandemic will positively affect. These goals are 3, 6, 9, 10, 12, 16 SDGs. It is necessary to take into account the reverse effect of damage on these goals, identifying them from COVID-19. Favorable conditions for this were closure of borders, strict regulation of people movement, active informing of the population about WHO recommendations, remote job and distance education, the decline of logistics, the unpredictable “route” of the new virus spreading.

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EFFICIENCY-BASED DEVELOPMENT VERSUS DEMAND-LED AND SUPPLY LED GROWTH

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ABSTRACT

The paper argues that the possibility of demand-led and supply-led growth models to ensure economic growth is limited and states the feasibility of shifting toward an efficiency-based development model. In particular, monetary policy should aim at increasing efficiency in the real sector. For this, monetary policy should ensure that interest rates are set at the level of profitability in the real sector as both a low and high interest rate adversely affects firms' efficiency. The paper also argues that a financial system based on equity financing and trade credit is more conducive to efficiency compared to debt-based model. The paper also argues that an effective way to contribute to efficiency in the real sector is a wealth tax which induces the productive use of assets that will cause an increase in efficiency in the real sector

Keywords: demand-led growth, efficiency-based growth, supply-led growth, trade credit, wealth tax

1. INTRODUCTION

Are there limits to economic growth? How effective are the demand-led and supply-led growth models in ensuring economic growth? The idea of secular stagnation has a long history. In particular, Adam Smith (1776) wrote of countries that have achieved their “full complement of riches”. The idea of secular stagnation is in tune with Keynes's statement that an increase in income of the population leads to the decrease in growth rate of consumption. The secular stagnation thesis has become urgent again since 1990 by the revival of the concept of the liquidity trap, when despite a significant increase in the monetary base and near zero interest rate policy, economic growth in Japan remain low. The USA and European countries have also faced a similar situation since 2008. The paper argues that the possibility of demand-led and supply-led growth models to ensure economic growth is limited. This is mainly due to the following. Firstly, as the welfare of the population increases and actual consumption approaches the desired level, the propensity to consume decreases. Secondly, measures to encourage economic growth by lowering interest rates have a negative impact on efficiency in the real sector, which causes a decrease in economic growth. The paper states the feasibility of shifting toward efficiency-based development. In this regard, we argue that monetary policy should aim at increasing efficiency in the real sector. For this, monetary policy should ensure that interest rates are set at the level of profitability in the real sector. Paper also argues that 1) a banking system based on trade credit is more conducive to increasing efficiency than debt-based model and 2) the strongest positive impact on efficiency is provided by equity financing.

It is also argued that an effective way to contribute to efficiency in the real sector is a wealth tax which induces the productive use of assets that will cause an increase in efficiency in the real sector.

2. DEMAND-LED AND SUPPLY-LED GROWTH MODELS AND ECONOMIC GROWTH

There are several economic policy models: 1) demand-led growth model 2) supply-led growth model, and 3) resource-efficiency growth model. In real-world, economic growth occurs due to both the expansion of demand, stimulation of supply, and increase in efficiency at the same time, complementing each other. The boundaries between them are relative, so we can only talk about the predominant importance of one or the other. If we consider the demand-led growth model, then its ability to ensure economic growth is limited, owing to the following:

- individuals and firms tend to keep a certain part of their income in liquid form, that is, in cash or on a current account. This is due to three motives for the preference for liquidity: the motive to hold cash 1) for current transactions, 2) for protection against unforeseen contingencies like sickness, unemployment and etc. and 3) in order to take advantage of changes in the price of goods, securities, in foreign exchange rates or interest rates. The higher the demand for liquidity, the lower the demand (i.e. consumption and investment) and economic growth. Demand for liquidity usually rises in times of crisis, but it is also determined by the mentality of people. So, pessimists are more likely to maintain liquidity than optimists.
- the propensity to consume depends on the difference between the current and the desired level of consumption, that is, the degree of satisfaction of the needs of the individuals. In the case when the current level of consumption is significantly lower than the desired level, the share of consumption in income is high, and increase in income is mainly directed to consumption. As the current level of consumption approaches the desired level, the propensity to consume decreases, and the effect of income growth on consumption decreases. This means that as the difference between the current and desired levels of consumption decreases, the possibilities of the demand model to stimulate consumption and economic growth decrease.
- measures to encourage demand and economic growth have a negative impact on efficiency in the real sector, which causes a decrease in economic growth.
 - a) As is known one of the tools of economic stimulation is lowering interest rates. However a decrease in the interest rate on loans below the level of profitability in the real sector increases profit after interest; and in accordance with the law of diminishing marginal utility (the economic law, according to which an increase in the amount of any good leads to a decline in the marginal utility of a good) a rise in the money stock reduces the value of each additional unit of money. This reduces the motivation of firms to increase profitability, which has a negative impact on efficiency. Consider this in the following example. For example, suppose that a firm's profitability is 10%. If an interest rate on loans is 7%, profit rate after interest is 3% ($10\% - 7\%$), while lowering the interest rate to 4%, profit rate after interest will increase to 6%; and increase in profit in accordance with the law of diminishing marginal utility will reduce the incentives of firms to increase profitability (and, consequently, efficiency). Borio and Hoffmann (2017) also point to the negative impact of the interest rate on firms productivity, who argue that low interest rates reduce the pressure on zombie firms (firms whose profits are insufficient to service debt) to restructure or exit.
 - b) Demand-led and supply-led growth models suggest sales promotion.

However when sales increase, firms' incentives to increase production efficiency decrease: the emphasis on increasing supply diverts resources from investment in innovation, which also has a negative impact on firms' efficiency.

- production capacities are limited, and when they reach their limit values, a further increase in demand causes only inflation.
- the demand expansion model stimulates wasteful consumer behavior, which, in turn, increases the burden on the environment and causes deterioration in the human environment.

A supply-led growth model assumes that the basis of economic growth is the production of goods and services. However a decrease in the propensity to consume also limits the supply-led model: the lower the propensity to consume, the weaker firms' incentives to increase supply. Thus, the ability of demand-led and supply-led growth models to ensure economic growth is limited.

3. SECULAR STAGNATION HYPOTHESIS

The idea of the limits to economic growth has a long history. Adam Smith (1776), in particular, wrote of countries that have achieved their "full complement of riches". This idea was shared by many economists who linked secular stagnation to the limited natural resources. In particular, Malthus and Ricardo (see Backhouse and Boianovsky, 2016) noted that the limits to growth are due to the limited fertile land. Karl Marx, pointing out that the appropriation by the capitalist of the surplus-value created by the worker's causes a drop in consumption, stated about the collapse of capitalism and the inevitability of building a communist society. The idea of a downturn in economic growth is in tune with Keynes's statement, according to which an increase in income of the population leads to the decrease in growth rate of consumption. Hansen discussed the negative impact of capital-saving innovations on investment demand and the capital-output ratio, and the increase of corporations' savings (see Higgins, 1948). Steindl (Steindl, 1952) the downturn in economic growth explained by the growth of oligopoly as this is accompanied by increase in profit margins and fall in demand. The secular stagnation thesis has become urgent again since 1990 by the revival of the concept of the liquidity trap, when despite a significant increase in the monetary base and a decrease in the Central Bank interest rate to zero, aggregate demand and economic growth in Japan remain low. The USA and European countries have also faced a similar situation since 2008; and due to the fact that the interest rate cannot be reduced below zero, the Central Banks are unable to further encourage economic growth by lowering the interest rate. In order to encourage lending, the Central Banks of some countries introduced negative interest rates on bank deposits with the Central Bank. However, in conditions of low demand for loans, this measure only increases the costs of banks. A liquidity trap and prolonged recession in Japan, the USA and Europe can be explained as follows.

- Unfavorable expectations encourage individuals and firms to increase demand for liquidity, and despite the increase in the monetary base and the reduction of the interest rate to zero, aggregate demand and economic growth remain low.
- Richard Koo (2011) explains the liquidity trap and recession in Japan, the USA and Europe as a balance sheet recession. When asset prices collapse while liabilities remain, companies' balance sheets worsen and default risks rise. In order to regain financial health, households and firms are forced to minimize their debt and increase savings. The fall in demand for loans disrupts the transformation of savings into investments. As a result, the savings attracted by banks are not directed to the real sector that negatively affects economic growth.

- A balance sheets recession, raising the default risks, causes an increase in demand for liquidity that further exacerbates the liquidity trap and recession. First, debtors increase liquidity as protection against default. Secondly, in order to pay off debts, firms sell assets and reduce investments that also cause an increase in cash hoarding. Thirdly, an increase in demand for money leads to a recession which in turn, increasing uncertainty and unfavorable expectations, further increases the demand for money.

When there is a liquidity trap, the liquidity support to banks aimed at increasing lending to the economy is ineffective: due to a fall in demand for loans, liquidity support to banks does not cause an increase in loans to the real sector and leads only to asset bubbles. One of the modern economists that studied the problem of secular stagnation is Summers. Mainstream macroeconomics argues that employment and output fluctuate around their equilibrium levels, and the goal of macroeconomic policy is to reduce volatility. However Summers (2014a), pointing to Japanese experience since the 1990s and the weak economic growth in the United States and Europe after 2008, argues that due to the negative natural interest rate (caused by a decrease in the capital intensity of some key industries (particularly in information technology sectors (Summers, 2014b; Summers, 2015; Summers, 2016), a decrease in population growth, an increase in savings due to rising income and welfare inequality, and a fall in relative prices of capital goods), market forces are insufficient to bring the economy to its full-employment growth path. With respect to whether secular stagnation is caused by low aggregate demand or weak supply capacity, there are different opinions on this. If, according to Bernanke¹ (2015), the secular stagnation hypothesis is about inadequate aggregate demand, not aggregate supply, then other economists focus on stagnation of potential GDP. So, Gordon (2015) notes that economic growth in the US in 2010-2014 was not accompanied by a corresponding decrease in unemployment (in 2010-2014, the average annual economic growth in the US was 2.4%, while the unemployment rate fell from 10% to 6%), which means that during this period the potential GDP grew significantly less than the actual GDP.

4. TRANSITION TO AN EFFICIENCY-BASED DEVELOPMENT MODEL

Based on the foregoing, in our opinion, it is advisable to shift towards an efficiency-based development model. Note that in the developed economies in recent decades there has been a decrease in the growth rate of efficiency (figure 1), which has a negative impact on the economy. In this regard, we believe that the main goal of monetary policy should not be price stability or full employment, but efficiency growth. At the same time, we note that the increase in efficiency, reducing production costs, will contribute to lower prices. As for employment, in order to prevent the negative impact of the introduction of labor-saving technologies on employment, with increasing efficiency, it is advisable to reduce working time of employees. It should be noted that in developed economies there is a decrease in working time as efficiency increases (figure 2), which is an objective process and is associated with the fact that the growth of labor productivity of workers, causing an increase in household incomes, contributes to an increase in demand for leisure time.

Figure following on the next page

¹ Bernanke, however, rejects secular stagnation

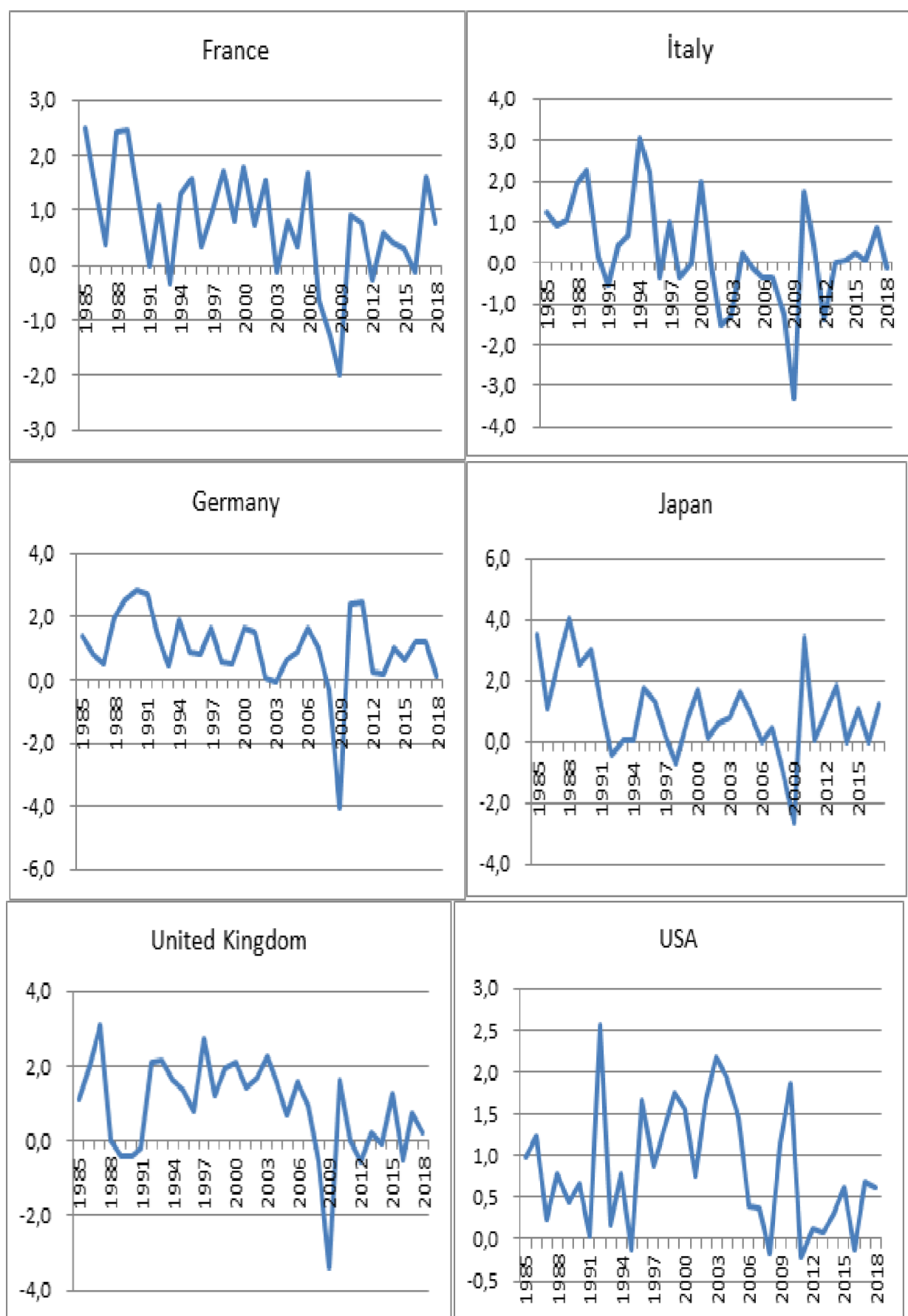
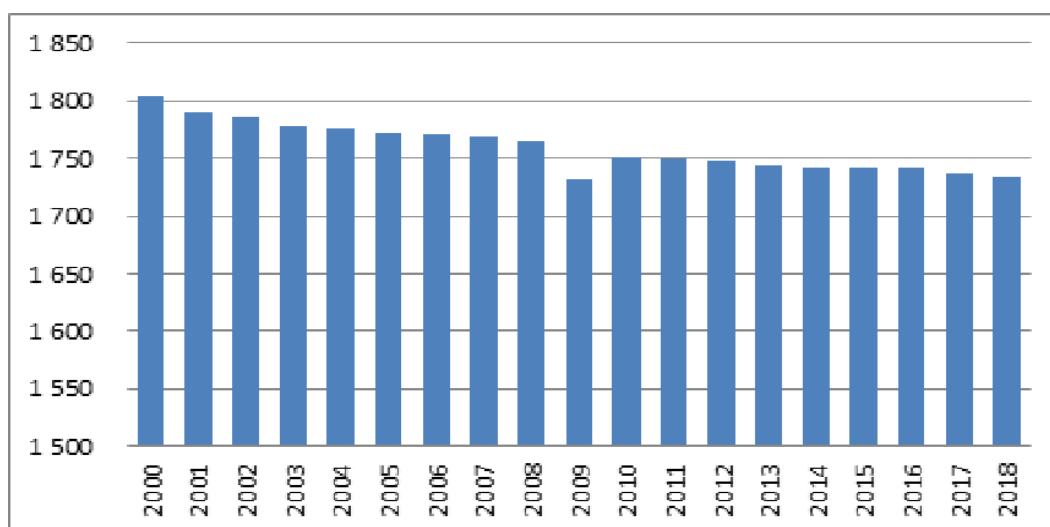


Figure 1: Total factor productivity growth rate
(Source: OECD)



*Figure 2: Average annual hours actually worked per worker
(Source: OECD)*

Efficiency-based monetary policy involves the setting of interest rates at the level of profitability in the real sector. It was noted above that low interest rates compared with profitability have a negative impact on efficiency. Excess of interest rates over profitability in the real sector also negatively affects efficiency, as it causes moving resources from the real sector to banks, which reduces the firms' resources available for investment in innovation. Thus, both high and low interest rates in comparison with profitability have a negative impact on the efficiency in the real sector, and in order to increase the efficiency in the real sector, monetary policy should ensure that an interest rate is set at the level of profitability in the real sector, which, 1) will increase firms' incentives to increase profitability, which will cause the increase in efficiency, and, 2) will facilitate the transfer of resources from less efficient firms to more efficient ones, which will also lead to the increase in the efficiency in the real sector. The increase in the efficiency in the real sector will also be facilitated by the development of equity financing and the transition from a debt-based banking system to a banking system based on trade credit. To justify this idea, let us conduct a comparative analysis of the impact of various financing models on the efficiency in the real sector: 1) debt financing, 2) banking system based on trade credit and 3) equity financing.

5. DEBT FINANCING AND FIRMS' EFFICIENCY

Debt financing has a controversial effect on firms' efficiency. On the one hand, debt positively affects firms' efficiency:

- The need for debt service motivates firms to work efficiently.
- Debt creates a default risk, which forces firms to work more efficiently (Jensen, 1986).

There is also a negative impact of debt on firms' performance:

- An increase in debt, increasing the defaults risk, forces debtors to keep more cash as a buffer against debt defaults. However, the increase in cash holdings causes a reduction in investment, which contributes to a decrease in efficiency. It would be noted that some authors argue that the increase in debt causes cash holdings to decrease (Ferreir and Vilela, 2004). This is explained by the fact that the high indebtedness of firms could indicate easy access of firm to bank loans that allows the firm to hold less cash for precautionary reasons. In our opinion, this is true for the period of soft monetary policy, when the policy of cheap money allows firms to hold cash in volumes that do not correspond to the risk of default.

However, this situation is unstable, because when monetary policy tightens and loans become less accessible, cash holdings quickly increases to the level corresponding to the risk of default.

- The ability of firms to refinance debt servicing also negatively affects firms' efficiency: if firms have the opportunity to refinance debts, many firms will service debts not through an increase in efficiency, but by an easier way - through new debt.
- Also note that banks do not have an incentive to lend to more efficient firms, as a result of which loans are often allocated to less efficient firms, which causes an inefficient allocation of resources and a decrease in the efficiency in the real sector. Consider this in the following example. Suppose a bank provides loans at 5% per annum, and two companies apply for a loan, while the profitability of one company is 6% and the other is 8%. However, due to the fact that the bank's interest income in any case is 5%, i.e., does not depend on firms' profitability, the bank has no incentive to lend to a more profitable company. As a result, loans are often provided to less efficient firms. Moreover, the bank's decision to lend is determined not only by the profitability of firms, but also by the quality of the collateral. Therefore, often banks lend to not more efficient firms, but to companies providing more collateral, which also contributes to a decrease in efficiency.

6. BANKING SYSTEM BASED ON TRADE CREDIT AND FIRMS' EFFICIENCY

This financing model is common in Islamic banking. As is known, interest on debt is prohibited in Islamic finance, and therefore banks provide trade credits rather than loans. In particular, banks, at the request of a client, purchase goods from the seller company and resell it to the client in installments at an agreed mark-up. One of the distinguishing features of trade finance is that in this case, firms may not refinance credit. This means that in a banking system based on a trade credit, firms are more motivated to increase efficiency in order to service their obligations to the bank than in the debt-based banking system. However, it is worth noting that the disadvantages inherent in debt-based banking system are also inherent in trade credit. In particular, purchase in installments, like debt, is also firms' obligation and therefore forces firms to hold cash as a buffer against defaults. Banks also don't have an incentive to lend to more efficient firms and prefer to provide credit to firms providing more collateral. Therefore, despite the fact that in a banking system based on trade credit, firms are more motivated to increase efficiency compared to the debt model, in general, a financial system based on banks has a contradictory effect on firms' efficiency.

7. EQUITY FINANCING AND FIRMS' EFFICIENCY

The largest positive impact on firms' efficiency is provided by equity financing:

- According to Nucci et al. (2005), this is due to the fact that equity financing strengthens economic activity.
- The positive relationship between equity financing and firm performance is also due to the fact that as shareholder yield depends on the profitability of firms, investors have an incentive to finance more efficient firms.
- As in the case of equity financing, the investor's yield is determined by the firms' profitability, firms competing for investment are forced to increase efficiency. Thus, both investors have more incentives to finance more efficient firms, and firms are more interested in increasing efficiency to attract investment.
- Equity financing does not create default risk; therefore, firms are not forced to hold cash as a buffer against default that positively affects efficiency.

One of the factors affecting the share of shares in the financing of firms is the interest rate. At a low interest rate compared to profitability in the real sector, firms are more interested in

attracting loans and credit rather than equity financing. At a high interest rate compared with the profitability in the real sector, the attractiveness of deposits increases compared with stocks, which also negatively affects equity financing. Therefore, in order to increase equity financing, monetary policy should ensure that an interest rate is set at the level of profitability in the real sector.

8. WEALTH TAX AND ITS IMPACT ON EFFICIENCY IN THE REAL SECTOR

An effective way to contribute to efficiency is a wealth tax which induces the productive use of assets since, in order to offset a wealth tax, the rational taxpayer will invest in high-yield assets that will cause an increase in efficiency in the real sector. A wealth tax is applied in only a few countries. Among European countries a wealth tax is applied in Norway, Spain, Switzerland (Wealth taxes were applied in numerous European countries, but many countries have abolished it in recent years). However, even in countries where a wealth tax is applied, this tax is levied only on large wealth (in Spain a tax is levied on wealth above €700,000, in Norway a tax is imposed on wealth above 1.48 million krone, or \$174,000 (Zeballos-Roig, 2019) that makes this tax is inefficient in increasing efficiency in the real sector. In most countries a tax on income from savings and investments is applied. However in contrast to a wealth tax, a capital income tax distorts investment decisions because it induces people to invest in assets which increase in value rather than in assets which have a current return in order to avoid the income tax (Shakow, 2016). Thus, replacing a capital income tax with a wealth tax would contribute to efficiency in the real sector.

9. CONCLUSION

The possibility of demand-led and supply-led growth models to ensure economic growth is limited. This is mainly due to the following. Firstly, as the welfare of the population increases and actual consumption approaches the desired level, the propensity to consume decreases. Secondly, measures to encourage economic growth by lowering interest rates have a negative impact on efficiency in the real sector, which causes a decrease in economic growth. The paper states the feasibility of shifting toward efficiency-based development. In this regard, we argue that monetary policy should aim at increasing efficiency in the real sector. For this, monetary policy should ensure that interest rates are set at the level of profitability in the real sector. Paper also argues that 1) a banking system based on trade credit is more conducive to increasing efficiency than debt-based model and 2) the strongest positive impact on efficiency is provided by equity financing. The paper also argues that an effective way to contribute to efficiency in the real sector is a wealth tax which induces the productive use of assets that will cause an increase in efficiency in the real sector.

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RENEWABLE ENERGY SOURCES IN CONDITIONS OF GLOBAL WARMING

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ABSTRACT

The average temperature of our planet is gradually increasing along with the concentration of greenhouse gases in the atmosphere and energy sector accounts for 60 percent of it. Regardless of which scenario the climate will change, forecasts until the middle of the 21st century differ little from each other - indicators begin to diverge from this period. Global investments in renewable energy from 2010 to 2019, reached the level of 2.6 trillion US dollars and capacities increased from 414 GW to 1650 GW. There are two ways to implement strategies to combat the threat of global warming: market and administrative. A market strategy may include a carbon tax, administrative - the prohibition of particularly "dirty" and to use "green" solutions. These instruments may be the introduction of a greenhouse gas tax, emission reduction subsidies. In addition, in order to improve low-carbon technologies and reduce costs associated with their use, it will be necessary to invest additional funds in research and related professional training. The only way to make progress is to solve the problems associated with climate change as a development task. It will be possible to solve the problem of mitigating the effects of climate change through the adoption of various measures: from the spread of existing low-emission technologies and development of innovative technologies. Obviously, much will depend on world socio-economic development and on the path that humanity will choose: to preserve the environment or strive for economic growth, to act jointly or separately

Keywords: *Global climate change, Investments, Renewable energy, Method*

1. INTRODUCTION

The problem of global climate change appeared on the international agenda in the late 1980s. The temperature fluctuations, as well as the strength and frequency of adverse natural phenomena became especially pronounced. If hydrocarbon resources remain the main source of electricity production, huge climatic changes await the planet. In this case, the world energy system will emit 400 gigatonnes (Gt) of carbon into the atmosphere by 2050 and increase its content from 750 to 1000 Gt. As of today, greenhouse gases of anthropogenic origin - CO₂, prevail in creating the greenhouse effect. Therefore, climate sensitivity is defined as a change in temperature caused by an increase in the amount of carbon dioxide in the atmosphere. Due to the burning of fossil fuels, the concentration of carbon dioxide in the atmosphere increased by 35% compared with the pre-industrial era [7]. Even with the most effective measures, global warming will not stop immediately. An increase in the concentration of CO₂ and an increase in the temperature of the atmosphere on the surface was going through over a long period of time. Therefore, to begin with, it is necessary to reduce damage and not to let the situation go out of control. Nowadays, many scientists are exploring the problem of climate change. Many researches show that the rapid population growth, the extinction of rare species of plants and animals, excessive exploitation of energy resources and global warming - all these lead to a large-scale crisis, the consequences of which will be irreversible. There are many initiatives to combat global warming. However, their implementation comes up against a number of political barriers. Many suggestions are of an economic nature; some of the proposals focus exclusively on the executive mechanisms of the UN, while in some cases a fragmented, regional or sectoral approach is required.

There are proposals to mitigate stringent requirements, which is incompatible with adaptation to abrupt climate change [3]. In the modern world, energy is the basis for the development of industries. In all developed industrial countries, the growth rate of energy industry exceeds the growth rate of other industries. At the same time, energy is one of the sources of negative impact on the environment and people. It pollutes the atmosphere (oxygen consumption, gas emissions, moisture and solids), hydrosphere (water use, creation of artificial reservoirs, discharge of polluted water and liquid waste), and lithosphere (use of fossil fuels, landscape change, toxic emissions). At the same time, the exploitation of the Earth and the burning of fuels are having an increasingly negative impact on the ecology. The use of environmentally friendly, renewable alternative energy sources is becoming increasingly important for mankind. The introduction of above-mentioned energy sources into the world economy reduces the use of fossil fuels and improves environmental condition [2]. The environmental friendliness of this type of renewable energy sources creates the basis for their wider use in the future. For this reason, the use of renewable energy is considered to be one of the main trends in the world energy field. Considering continuous population growth and increased energy consumption, this trend can help humanity to address global energy problems and promote environmental protection. The rapid entry of renewable energy sources into the energy market proves that it will have an increasingly large share and shows the urgency of research in this field.

2. CLIMATE POLICY AND RENEWABLE ENERGY

The problem of depletion of oil, gas and coal, which are non-renewable energy sources, must be solved. As the world's population grows and the world economy develops, these resources are used more intensively. As a result, the price of non-renewable energy sources is rising. Calculations show that if the current rate of exploitation of existing resources remains, coal will deplete in 400 years, and oil & gas - in 100 years. In recent years, the use of non-traditional energy sources such as wind, solar, wave, tidal, hydrological energy of small rivers has become more actually. Global warming requires global efforts to combat it - first of all, finding out the causes, consequences, combating and adapting to sharp climate change. In 1995, the UN recognized global warming as a "scientific fact". Countries that are dependent on the import of traditional energy resources (European Union countries, Japan, etc.) are the ones who are interested in this area. From 2016–2018 investments in fossil fuel totaled in 1.9 trillion dollars. Further, in 2017 subsidies in global fossil fuel market increased to up to 300 billion dollars. According to calculations, subsidizing fossil fuels, negative environmental and social consequences of its extraction, production and use accounts for more than \$ 5.2 trillion. This is almost two fold of the spending to support renewable energy. The share of renewable energy accounts for the two thirds in the total volume of investments in the electric power industry. Last year, the introduction of new electricity generating capacities was approximately the same. It means, fossil fuels usage volume saw exactly same reduction. The global usage of coal will reach its peak in 2026 and will amount to 10,356 TWh [6]. It should also be noted, that although in all regions the use of coal for energy generation is declining, Asia remains the exception (Figure 1).

Figure following on the next page

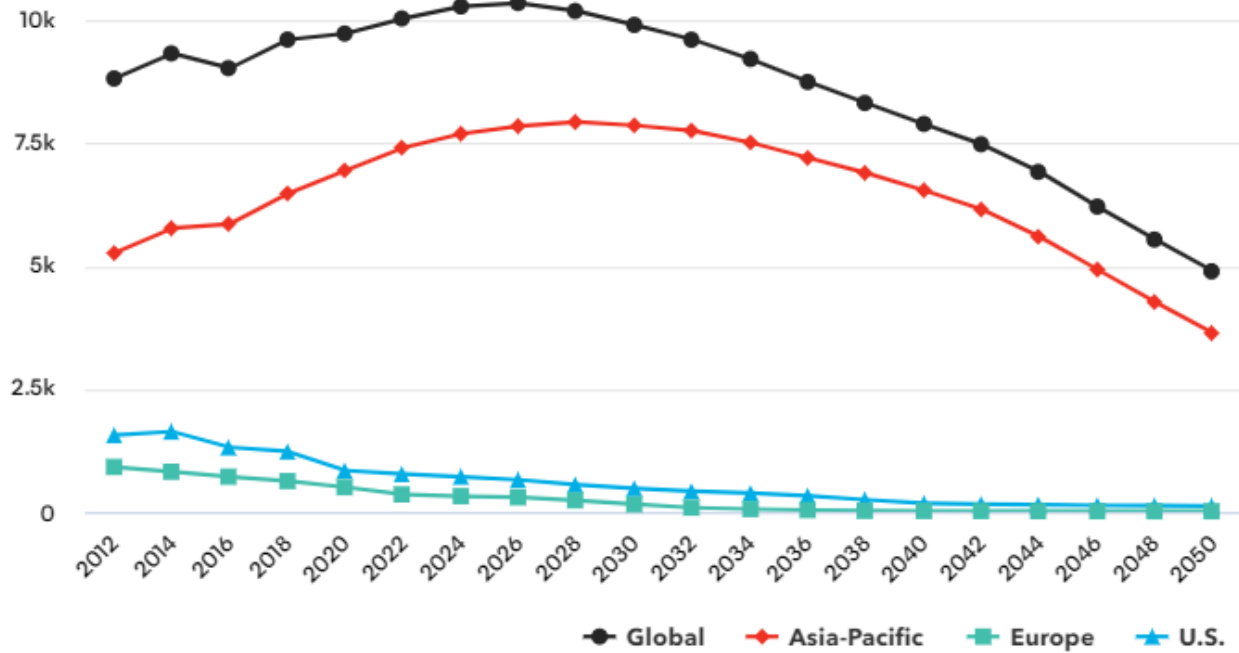


Figure 1: Electricity generation by region (TWh) [6]
(Source: BloombergNEF)

However, a consistent regulatory policy and long-term plans have turned the use of renewable energy to one of the main directions in the energy sector in many countries of the world. For many years hydroelectricity holds the biggest share of all renewable energy sources. However, the growth of renewable energy power came primarily from solar (PV) and wind energy. For instance, in 2018, 100 GW of solar photovoltaic capacities were installed. Energy sources such as concentrated solar thermal energy (CSP), geothermal, and bioenergy show the least growth in renewable energy share (Table 1).

Name	Units	2017	2018
New investment (annual) in renewable power and fuels	billion USD	326	289
Renewable power capacity (including hydropower)	GW	2,197	2,378
Renewable power capacity (not including hydropower)	GW	1,081	1,246
Hydropower capacity	GW	1,112	1,132
Wind power capacity	GW	540	591
Solar PV capacity	GW	405	505
Bio-power capacity	GW	121	130
Geothermal power capacity	GW	12.8	13.3
Concentrating solar thermal power (CSP) capacity	GW	4.9	5.5
Ocean power capacity	GW	0.5	0.5
Bioelectricity generation (annual)	TWh	532	581

Table 1: Renewable energy indicators, Investment and Power [9, 10]
(Source: Renewables 2018 GSR; Renewables 2019 GSR)

Renewable energy sources include: biomass energy (biogas); wind energy; Solar energy; hydroelectric power; geothermal energy; wave energy; energy from nuclear fission; thermonuclear fusion energy; hydrogen energy; marine energy (surge energy, thermal energy of the world ocean, etc.). Wind and solar energy are the cheapest renewable energy sources in more than two thirds of all countries in the world. Since 2010, the cost of technological solutions in this sphere has decreased by 49% and by 85% accordingly. Let's take a closer look at these technologies. The power of solar radiation emitted from the atmosphere and the Earth's surface is 10^5 TW. The current global energy consumption is 10 TW. Therefore, it is considered the most promising type of non-traditional energy. It is the most promising source of energy after wind. Solar energy can be used for thermal - engineering, photoelectric, biological and chemical purposes. The development of solar power related technologies has reduced the cost of this energy to \$ 1 per 1 W. The creation of a new production capacity will make it possible to increase the production of photovoltaic elements by many laboratories. The main methods of conversion of solar energy are the methods of direct use of solar energy - photoelectric conversion and thermodynamic cycle, as well as bioconversion. Hybrid stations consisting of photovoltaic devices and diesel generators are already widely used. This type of station is especially needed for power supply in places where there are no electricity distribution networks. For example, this type of system provides electricity to the residents of the Cocos Islands in the Torres Strait. Solar energy has certain advantages compared to traditional fuels. This is due to the impact on the environment. Solar energy is available all over the planet. But the intensity of this energy varies during the day and depends on the season. Solar energy does not affect the environment and does not pose any biological hazards during use [4]. There are huge wind energy resources on Earth. Humans have used the wind for centuries. Water delivery systems, windmills, various machines are among such devices. Modern wind energy technologies began to emerge in the 1980s. The use of wind energy technologies doubled in the 1990s. According to the Danish Energy Association, 43.6% of the total energy used in Denmark in Europe in 2017 comes from wind, and by 2020 it should reach 50% [9]. In Germany, this figure is 19%. China and the United States are the leading countries in terms of annual electricity generation capacity. In some parts of the world, wind energy is cheaper than conventional fuels. The development of wind turbine construction technology has led to a sharp reduction in the cost of wind energy: from 32 cents to 4 cents per 1 kWh. Impact of wind energy usage on the environment: requires a large area, engines make a lot of noise, disrupts the natural way of life of animals, has a direct impact on the flight direction of migratory birds. In some countries, turbines are not placed near settlements due to its specific impact on the environment. For example, in the UK, it is installed outside the agricultural areas at the request of the population. Currently, wind turbines are being designed for offshore deployment. However, these projects are implemented in developed countries due to their high cost. Sweden, for instance, exploits a 200 kW wind farm, which is located 250 meters away from the coast. Since the beginning of the 21st century, technical and economic indicators of various technologies have been improved to convert renewable energy sources into useful energy for humans. Renewable energy-based electricity production has increased 10 times (with the exception of hydropower). Renewable energy currently accounts for more than 1/3 of the power industry and 26% of world production. This data suggest that the development of this industry will not rely on only a few countries. Given the growing demand for electricity, renewable energy production must be increased (Figure 2).

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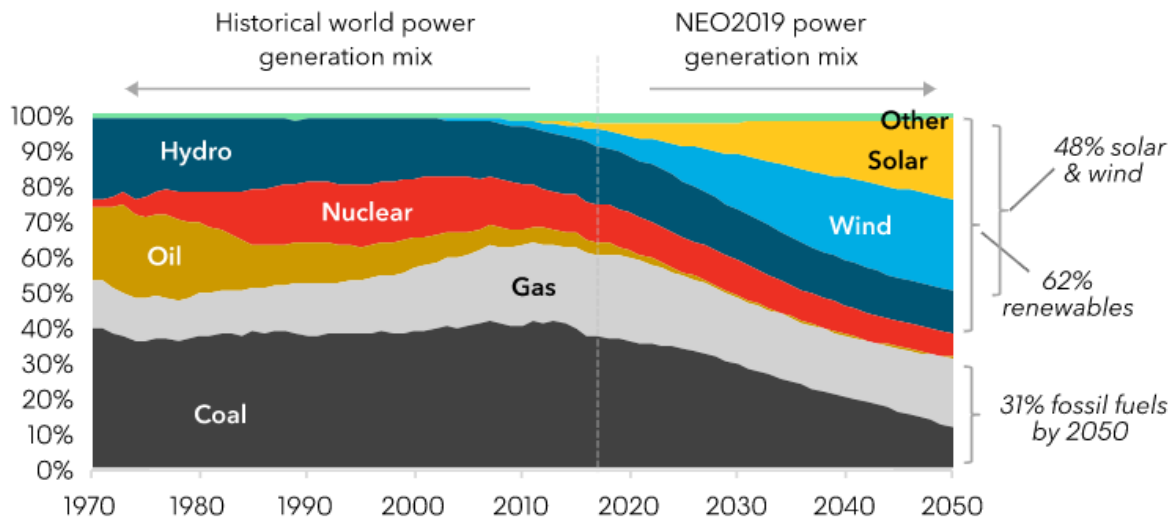


Figure 2: Global power generation mix [6]
(Source: BloombergNEF)

Despite the accelerated development of renewable energy, the world is facing a climate crisis. Energy-related carbon dioxide emissions contribute to radical changes in the planet's climate. Countries' efforts to decarbonize the energy sector have a positive impact. However, these measures are not enough. This is noted in the reports of the Intergovernmental Panel on Climate Change (IPCC). The International Energy Agency seeks to halve CO₂ emissions by 2050 compared to 2005. For this, the Agency describes 2 ways to develop global energy industry:

- 1) Development in the absence of action by governments and other regulatory institutions of countries.
- 2) Development with the active application of managerial measures to producers and consumers of energy.

The second way involves the active participation of governments for this purpose. First of all, participation in the processes of development and implementation of low-carbon energy technologies. Climate conservation requires not only development of renewable energy, but also the reduction of the widespread use of fossil fuels. Renewable energy development and its efficiency should be accelerated. Note that renewable energy is still not competing on equal terms with traditional. Therefore, immediate political measures to support it must be complemented by effective prices imposed on carbon output. These support measures include the termination of financial support for the production and use of fossil fuels. For example, more than 1,000 organizations responsible for managing financial assets in the amount of \$ 8 trillion dollars have taken such obligations. It is also necessary to abandon the use and global subsidization of fossil fuels. Coal and oil& gas companies spend hundreds of millions of dollars to control or block policies to tackle climate change. However, the growing competitiveness of the renewable energy sector has led to increased investment by these companies in innovative areas. They participate in renewable energy projects and strive to achieve better climate performance. Among the measures to improve the area of application of environmentally sound technologies, it is suggested to impose a significant price for the CO₂ output. By 2018, private sector increased investments in renewable energy. So, in 2018, they signed agreements to provide 13 GW of renewable power, which is 2 times higher than the level for 2017. This is due to the fact that, with the development of technologies, the commercial efficiency of using alternative energy is growing and looks like a promising investment. 44 governments, 21 states, and 7 cities have implemented this type of carbon pricing policy. However, this covered only 13% of global carbon emissions (Table 2).

Name	2017	2018
Countries with national/state/provincial renewable energy targets	179	169
Countries with 100% renewable energy in primary or final energy targets	1	1
Countries with 100% renewable heating and cooling targets	1	1
Countries with 100% renewable transport targets	1	1
Countries with 100% renewable electricity targets	57	65
States/provinces/countries with heat obligations/mandates	19	18
States/provinces/countries with biofuel mandates	70	70
States/provinces/countries with feed-in policies	112	111
States/provinces/countries with RPS/quota policies	33	33
Countries with tendering (held in 2018)	29	48
Countries with tendering (cumulative)	84	98

*Table 2: Renewable energy indicators, country policies [10]
(Source: Renewables 2019 GSR)*

It should be noted that more and more entities are taking measures to maintain the energy transition. Governments can benefit from these actions and engage other actors through a range of measures. For example, Ireland has committed to withdraw funds from its state sovereign development fund from the coal and oil& gas sectors. Costa Rica already produces nearly 100% of its electricity using renewable sources. This country has announced a plan to ban fossil fuels completely. If we take the subnational level, then cities play a leading role in the promotion of renewable energy. Cities are also making new commitments and actions to develop this industry. The emergence of new technologies for the replacement of renewable energy in the future in the energy sector also justifies the investment in this area. Global investment in innovative energy sources (excluding large hydropower plants) reached \$ 282.2 billion in 2019. Global investment in renewable energy has more than doubled compared to conventional energy sources. This growth trend has been going on for the last 5 years. Investments have grown in many regions of the world, including European countries. The task of reducing greenhouse gas emissions requires huge technological and financial resources. The sustainable future requires immediate and more decisive political actions. Governments can no longer delay action to tackle climate change and achieve sustainable development goals. Leading countries in terms of investing in innovative energy sources are China, the United States, Japan, the United Kingdom and Germany. It is important to support research and development in the field of technological developments to stimulate innovative energy sources. New policies are needed to stimulate innovation in order to increase the number of new producers and consumers. These includes: using the potential of digitalization to promote integrated planning and policy development at the city and district levels, new business models, and ways to support investment in developing countries. Support for innovation also includes the expansion of technological knowledge in various fields, gaining experience for the creation of know-how and generation facilities, etc. The introduction of renewable energy is the foundation of the global energy transition.

3. THE POSSIBILITIES OF RENEWABLE ENERGY TECHNOLOGIES IN AZERBAIJAN

As a result of the intensive development of new technologies, the cost of energy produced by photovoltaic converters, wind turbines, solar thermal, geothermal and bioenergy facilities has been reduced several times. At present, the total production potential of alternative and renewable energy sources in Azerbaijan is more than 12,000 MW (MegaWatts). Of these, solar energy is 5,000 MW, as the number of sunny days in Azerbaijan is more than 250. Works are being carried out to create hybrid stations and a low-power, 3 MW, solar power plant. A factory for the production of solar panels with a production capacity of 200,000 panels has been put into operation in the country. Special climatic conditions on the territory of Azerbaijan, especially on the shores of the Caspian Sea allows the development of wind energy [12]. Azerbaijan's geographical location and conditions make it suitable for the production of wind energy. First of all, the coastal zone of the Absheron Peninsula and the islands are considered to be priority sites for wind energy. Wind energy systems operating and being installed in the Absheron area are highly cost-effective, since the average wind speed in this region is 5.5-7.0 m/s. Sharur, Julfa, Ganja-Gazakh regions are also considered to be potential zones of development of wind power systems. The average wind speed in these areas is 3-5 m/s. Therefore, it is considered to install and operate medium power wind power systems. Azerbaijan's wind energy resources are estimated at 800 MW per year. In order to get this amount of electricity, 1 mln tons of conventional fuel should be used (burned). It means the release of 3,700 tons of carbon dioxide into the atmosphere. Thus, the use of wind energy sources can hugely prevent the negative impact on the environment. Thermal waters are one of the main sources of renewable energy in Azerbaijan. In the country, thermal water can be used for hot water supply, greenhouses, and for medical purposes. There is great potential for this energy source in Absheron, Ganja, Shirvan, Mugan, Nakhchivan Autonomous Republic, southern and northern regions. In recent years, about \$ 1 billion has been invested in renewable energy sources in Azerbaijan [8]. The country is implementing the State Strategy for the Use of Alternative and Renewable Energy Sources for 2012-2020 (Table 3).

Period, years	Solar energy, MW	Biomass energy, MW	Wind energy, MW	Small hydropower plants, MW
2013-2016	790	100	150	15
2017-2018	685	200	150	20
2019-2020	730	215	212,5	25
Total	2065	515	512,5	60

*Table 3: Development of innovative energy technologies in the Republic of Azerbaijan [5, 11]
(Source: Report of the State Agency for Alternative and Renewable Energy Sources; State Statistics Committee of the Republic of Azerbaijan)*

The use of "innovative" energy depends on a number of factors. These factors include the nature of the region, geographical location, the capacity of the energy source. On the other hand, Norway, which is also in Northern Europe, uses small-capacity hydropower plants. Solar panels are mostly used in the southern regions of the world. The optimal condition for the wind power plants is that they operate more efficiently specifically on the plains. Renewable energy resources in Azerbaijan [1]:

- Number of sunny days - 250 days. In many regions, the annual solar radiation is 4.7 kWh / day. High insolation is observed in the Absheron Peninsula and Nakhchivan. Energy reserves up to 2500 billion kWh.
- Wind energy reserves allow to produce up to 4 million kWh of electricity.
- Hydropower potential, including small hydropower potential, reaches 16 billion kWh.
- Biomass potential covers 14,400 km² of the country's territory.

Azerbaijan pursues a policy of energy saving and efficient use by relevant government agencies. The use of new renewable resources is expected to create more than 25,000 new jobs and further improve the socio-economic conditions of the population. At the same time, conditions are created to reduce the amount of harmful substances released into the environment by 20-25%.

4. CONCLUSION

The problem of global warming has been one of the factors stimulating the development of renewable energy. At the same time, these types of innovative energy technologies are important for environmental protection. The use of new energy sources depends on two main conditions:

- 1) Having ability to be renewable;
- 2) Availability and quantity in the area.

There are two possible solutions to reduce and reconcile the ever-increasing negative effects of energy consumption:

- 1) Energy saving. The use of energy-saving and resource-saving technologies has led to a significant reduction in fuel and material consumption in developed countries.
- 2) Development of more environmentally friendly forms of energy production. However, the solution and implementation methods in this direction are still not fully clear. Renewable energy sources still account for 20% of global energy consumption. The main contribution to this 20% is made by the use of biomass and hydropower.

Facilities used for energy production have different effects on the environment. The resolution of ecological and environmental problems is becoming one of the priorities for development of many countries around the world, including the Republic of Azerbaijan. The development of renewable energy in leading countries is carried out with the political, legislative and direct financial support of the states. Technological developments in energy equipment - reduce the costs and increase productivity. Innovations - allow you to produce more energy from the same source (example: large wind turbines). Other innovations - new solar photovoltaic cells - allow for greater productivity. One of the most important innovations is the installation of floating turbines with high power of wind energy and the potential to expand economically attractive areas. Unfortunately, alternative energy is still heavily dependent on public investment and provision of special conditions. However, private investment in new energy technologies shows rapid growth. The private sector is increasing corporate investments in renewable energy production. Many types of alternative energy sources allow you to choose the best options for various climatic conditions. The goals and comprehensive politic measures allow renewable energy to realize its full potential, which is being a response to the extreme climate situation.

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IMPROVEMENT OF THE FISCAL MECHANISM OF INNOVATIVE ECONOMIC DEVELOPMENT

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ABSTRACT

The ability of the mass media to process and store information, which is one of the most fundamental concepts that the IV Industrial Revolution has made, as well as the modern information society, has the advantage of enhancing globalization and the spread of human relations globally. Globalization accelerates innovation or renewal impacts on every environment through big data that connects to social systems such as inter-country cooperation, economy, culture, education. Today, the most exciting period of the digital age is seen, and in the global world, digitalisation of production is based on the production of specific products. The information centers are exploring new areas of service that enable users to create products through digital media. The article states that financial education will improve public spending in the country as a result of studying science and training in this field. High technology of networking, cyber-attacks, online financial monitoring, strengthening the mechanism for directing public expenditure by local governments, investment analysis, risk management, robo-tips, trading algorithms access to opportunities such as trade, preventing the shadow economy, and increasing efficiency in public administration. In our modern economy, digital data, artificial intelligence, and data science and the Internet are all inclined to support the new industrial revolution. The ever-increasing proportion of large databases make digitalization, machine learning, and digitalization of people seriously essential. In this regard, our country has a significant advantage in terms of the age composition of the population in comparison with the European countries and the countries of the region. If the population growth in our country is triangular (that is, the number of younger population groups is higher than that of the older population), the increase in neighboring countries is rhombic. This means that in the near future there will be a large number of young people and high-tech people in our country, the growth of computer technologies and the expansion of internet and softening opportunities. Everything we do in the world we live in is increasingly turning the information flow into data. Data is not perceived as a new discovery in a globalized world. The development of new digital technologies connected to the Internet of Things, along with breakthroughs in the field of artificial intelligence and automation, will allow for a new production innovation. Creating smart factories, industrial equipment communicating with users and other machines, supporting automated processes and dynamic adaptation, as well as utilizing mechanisms that facilitate real-time communication between the industry and the market to increase efficiency, are key to the new challenges of the IV Industrial Revolution. Smart factories can benefit from increased efficiency in the manufacturing process, product quality, durability and safety, and cost reduction.

Keywords: *Industrial Revolution, Financial Data Science, Internet of things, Digital Economy*

1. INTRODUCTION

The creation, development and application of innovations under capitalism requires the development of effective financial mechanisms. The study of the experience of different countries provides an opportunity to identify and implement positive trends in various fiscal mechanisms to promote innovation. At a time when new economic challenges are being established, our country attaches special importance to the innovative direction of economic development.

The state programs adopted in recent years, institutional reforms, structural reforms in the public administration, the annual improvement of e-government, the reconstruction of the public service sector at the level of modern requirements are clear evidence of this. The study and solution of our country's problems in the field of ensuring innovative development in order to successfully develop its economy as a competitive state, including in global economic relations, requires, first of all, the establishment of mechanisms to improve the financial provision of innovations. Examination of innovation projects, assessment of existing risks, determination of its financing directions should become one of the main directions of development of fiscal mechanisms of the state. At the same time, the creation and development of quality human capital must always be in the center of attention as a key factor in the formation and development of the knowledge economy.

2. THE MAIN DIRECTIONS OF INNOVATIVE DEVELOPMENT

Human capital is a key factor in increasing labor productivity, sustainable economic growth, increasing the competitiveness of production and services, and the country's access to global markets. The development of labor productivity and human capital is an important factor for two reasons. On the one hand, in the labor-intensive development model, increasing labor productivity acts as a key driver of economic growth by creating direct added value to the country's economy. On the other hand, an unimpeded transition to a development model that requires more intensive knowledge is achieved only by increasing labor productivity. All this creates the competitiveness of local products in global markets, while accelerating investment in human capital. Over the past 15 years, our country has developed rapidly and labor productivity has more than tripled. The growth of labor productivity in Azerbaijan in 2000-2008 was on average 13.6 percent per year. Although labor productivity has continued to grow since 2008, the growth rate has declined by an average of 2 percent per year. In addition, investment provision is important in setting key priorities such as improving the quality of education at all levels, improving the material and technical base, and developing ICT skills, which are a key factor in innovation. In order to adapt the training of qualified personnel to the requirements of the labor market, to stimulate investment in research and development of companies, to use existing human capital effectively, the main directions of fiscal expenditures should be identified and expenditures should be directed more efficiently. For this reason, based on the identification of new fiscal mechanisms for innovative development in the country, it should be considered in three directions:

- 1) Expenditures on science from the state budget
- 2) Expenditures on technology from the state budget
- 3) Expenditures from the state budget for the maintenance and improvement of e-government

Annual expenditures in these areas measure the impact of innovation on economic growth. Defining all three cost directions, both at the macro and micro levels, and specifying its components plays an important role in creating an innovative country and an innovative business environment. The science expenditures, which we have mentioned as one of the directions of innovation expenditures in the country, are aimed at increasing the scientific potential, increasing the investment attractiveness in the field of education and training, and creating new clusters. Let's pay attention to the structure of expenditures on science from the state budget to study the effective use of expenditures and the impact of innovative development. Thus, investments in human capital, improving the quality of education in the medium and long term, the creation of a flexible investment mechanism of the "science-education-production" triangle serve to improve the innovation environment. In addition to stimulating research and development, the creation of university clusters includes the application of scientific results to production, the development of science, improving the quality

of scientific research, the application of research results to production. In order to develop science, it is important to ensure investment not only from the state budget, but also from the private sector in research and development. The innovative business environment also plays a favorable role in this direction. Improving the business environment can increase the share of the private sector in science funding by encouraging companies to invest in research and development. At present, the share of research and development expenditures in GDP in Azerbaijan (0.2 percent) is lower than the world average [Strategic roadmaps for the national economy, Azerbaijan Republic B 2016]. The efficient use of technology expenditures from the state budget and the improvement of the structure of these expenditures can lead to the improvement of the country's innovative development indicators in international rankings. The strategic roadmap for the national economy states that the improvement of infrastructure in the field of education and science, transport, ICT, buildings and structures, laboratories, devices and equipment, testing centers, foundations, innovation enterprises, consulting and engineering services to ensure effective operation. , investments are made in centers for studying global and local markets, electronic libraries. At the same time, investments are made in Internet access and information provision of schools, scientific organizations, production enterprises. ICT knowledge enables people, as well as the economy, to create new jobs with the potential to bring high value. In addition, digital literacy is a key element for the future of Azerbaijan and the development of human capital. ICT knowledge is one of the decisive factors in the formation and use of human capital. The establishment of modern schools and universities, research and development, production and service enterprises are to some extent related to ICT technologies. Investments are being made in the implementation of the e-school system, the development of the Education Information System, the acquisition of digital skills by graduates of all levels of education necessary for economic and social development, as well as the skillful use of ICT opportunities in teaching and learning. In order to promote digital learning, it is important to improve digital learning materials at all levels of education (eg, e-books, e-seminars, open learning materials, web-based exams, etc.) and appropriate methods. Investments are also needed to ensure systematic access to digital teaching materials for scientific staff on a variety of digital devices. Taking advantage of the experience of countries where innovations and e-soft technologies are widely used in the global world, and in order to create new trends in the IV industrial revolution in our country in a wider format, information science, machine learning, cognitive science, data (big data), opportunities for the application of electronic financial information technologies are new mechanisms for effective management of financial costs of innovation. Innovative orientation of the national economy New economic reforms, especially technological development, e-Government (electronic or digital government, RH), virtualization of the classic real government, RH technology improvement of public services to everyone is important for the effective formation of efficient financial institutions. Along with government, digitalization also determines the effectiveness of innovative spending, encompassing specific strategies and concepts such as transparency and democracy in public administration, environmental cleanliness, speed, efficiency and convenience, cost savings, removal of physical barriers, public scrutiny and approval. Experience shows that at the current stage of development, the most common types and forms of application of organizational and economic mechanisms in this direction are:

- development of venture mechanisms in achieving innovation;
- Attracting private investment in the field of "A-I" and the creation of favorable conditions for the application of new technologies;
- development of innovation potential of regions and other territories as a result of intensification of scientific and technical resources;
- to use the opportunities of technological transfers both at the national and international levels.

3. VENTURE FINANCING AS A KEY FACTOR IN INNOVATIVE DEVELOPMENT

Now let's take a closer look at each of these activities. From the middle of the last century, venture capital began to be used as a more progressive source of financing. Venture business is a direct investment in small and medium-sized firms engaged in the production of knowledge-based products and services based on high technology. In this case, the money to finance the new firm is provided by the individual capitalist, not from the state budget. The purpose of venture financing is to bring profit to commercial entities by combining the financial resources of one entrepreneur and the intellectual capabilities of another entrepreneur in a particular sector of the economy. It should be noted that so far there is no specific idea about the concept of "venture business". Venture business is a risky business carried out mainly on the principles of venture financing in high-tech industries with knowledge capacity [Skoblyakova IV Innovative systems and venture financing. M.: Mashinostroenie-1, 2006, 210p., p. 24]. In this process, two entrepreneurs - one with financial resources, the other with ideas and energy - interact to implement technical progress and make a profit. Venture financing is a long-term risky investment in the share capital of newly established small, medium and high-tech firms focused on the development and production of knowledge-intensive products. Venture capital is provided by a foreign investor as a risky capital used directly for the implementation of special financial resources to finance a new, growing commercial entity operating in the field of knowledge-intensive high-tech production. The venture mechanism plays an important role in the formation and development of key sectors of the economy, engaged in the search, testing and application of innovative scientific and technical achievements in modern conditions. For example, microprocessor technology, personal computers, genetic engineering, etc. Areas such as However, in the US practice, despite the rapid growth in the development of this financial mechanism at the beginning of the millennium, in recent years it is about 10 times less than government spending on research and development and the costs of some large companies. The main source of high efficiency of venture investments is due to the optimal development of a certain course aimed at the implementation of new innovative projects. This optimization is based on the interaction and harmonic effect of the following processes:

- availability of successfully tested innovation management methods that minimize associated financial risks;
- Scientists, inventors, investors, managers, etc., who are the main actors of this activity. by forming appropriate incentives for the purpose of implementation by.

The following are considered as sources of formation and development of the venture mechanism in modern times:

- financial resources of various joint-stock companies (pension funds, large individual investors, etc.);
- open venture capital funds established in the form of partnership;
- Establishment of venture capital funds by concerns by creating their own investment associations, for example, cooperatives created by monopolistic companies in the western practice add value to their companies by financing research through a venture mechanism.

The participation of private investors in venture financing has both advantages and disadvantages. The advantage is that the loans provided in this system are relatively inexpensive, as they have no additional costs, unlike professional investors; Unlike banks, they do not require collateral from entrepreneurs for borrowed funds. The disadvantage is that they do not have the funds for secondary financing; they operate anonymously (without advertising), which makes it very difficult to get services from them. World experience shows that the successful formation and development of venture business requires special tax incentives to protect and encourage high-risk medium and long-term investments.

The need for financial support for scientific and applied innovations is of equal importance for all economic entities. Also, due to the limited budget resources and the existence of various socio-economic problems, states and governments must always choose one or another direction of development. Therefore, from the point of view of direct public funding, the highest priority is given to the types and forms of innovative activities that are not supported by the commercial sector due to high risks, as well as commercial uncertainty. At the same time, large-scale scientific and technical projects that require labor costs are funded by the state. The state traditionally participates in the process of direct financing of AI in areas where high-tech products or services are required, such as the development of military equipment or in areas where international competition poses a real threat to national producers. World experience shows that the most effective venture programs to provide financial support to the company in the early stages of development are:

- direct public investment;
- discounts provided to investors in small and medium firms at the initial stage of development;
- ensuring the share capital of venture funds investing in these firms;
- to support a number of funds' expenses (expertise expenses or current expenses) at the initial stage and thus increase the return on portfolio investment.

Public direct investment - direct investment in equity by public financial institutions is generally accepted as a method of "injecting" venture capital. The state can develop long-term financing programs for small technology enterprises. These programs are often the only source of funding for small firms. Many countries offer tax incentives to venture investors as a means of stimulating certain types of financing. Most countries in the Organization for Economic Co-operation and Development offer secured bonds to small firms. Some of the bonds provided by public financial institutions under these programs are guaranteed. The purpose of these programs is to promote financial institutions, especially commercial banks. A number of complex measures have been taken in Azerbaijan to build an innovation-based economic system and strengthen the country's competitiveness. The State Program on Small and Medium Business Development in the Republic of Azerbaijan for 2002-2005 provides assistance in financing innovative projects of small and medium-sized businesses to accelerate the development of the private sector in the national economy, stimulate investment in this area, form a mechanism for using the Venture Fund, Baku Specific instructions were given to government agencies and ministries to create favorable conditions for the development of innovative entrepreneurship in order to create a technological business incubator in the city. The "Development Program of Nanotechnology in the Republic of Azerbaijan" adopted in 2007 is divided into 3 stages (Phase I - the period up to 2010, Phase II - 2010-2012, Phase III - 2012-2015). aims to prepare the foundations of scientific, educational and technological base, to create and improve scientific research, innovation infrastructure for the development of work in the field of nanotechnology. In the "State Program on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan for 2008-2015" approved by the Decree of the President of the Republic of Azerbaijan No. 3043 dated September 15, 2008, the Ministry of Energy, the Ministry of Economy and the Azerbaijan National Academy of Sciences "Stimulation of application of innovative technologies in existing and future industrial enterprises" was instructed in its development. The application of modern technologies in various spheres of everyday life, the enrichment of Internet resources in the Azerbaijani language, the expansion of Internet radio and Internet television programs, electronic newspapers and magazines, the widespread use of social networks and the conversion of the majority of the population to Internet users have been impetus.

The most successful moments of recent years are:

- The average annual growth rate in the sector was 20-25% and expanded 6.7 times;
- More than \$ 3.0 billion has been invested in the sector;
- The share of the private sector increased from 67.4% to 80%;
- All settlements are provided with telephone network and fully digitized;
- the number of mobile subscribers increased 7 times, the number of internet users 14 times, the number of fixed network subscribers 1.6 times;
- 99% of the country's population is covered by digital broadcasting [Telecommunications and Post in Azerbaijan 2018, stat.gov.az];
- “e-government” portal and e-signature infrastructure have been created; - The application of nanotechnologies has begun.

Starting from 2014, the State Fund for Information Technology Development identifies innovative projects through grants and soft loans. Work continued on the organization of the High Technology Park, and the PiCampus Business Incubation Center was established by the park as a pilot project. At present, the country's fixed telephone network is fully digitalized, about 40% of the network has been reconstructed with NGN technology, and the most modern Internet access has been created. 75% of the country's population is Internet users, and 65% are broadband Internet users, which is almost twice the world average. In accordance with the increase in the number of subscribers in Baku, an Internet platform has been set up to provide the population with quality Internet services, allowing them to connect to the international network at a speed of 200 Gbit / s. Azerbaijan exceeds the world average by 22.7% in the number of fixed telephone subscribers per 100 people. As a result of the growing demand for Internet services in the country and the technical capacity created, the total capacity of international Internet channels was increased by 80 Gb / s to 330 Gbit / s in the reporting year. Due to the increase in the capacity of international Internet channels in recent years, Internet traffic to Georgia, Iran, Iraq and Central Asia is transmitted through Azerbaijan. Mobile communication has a leading position in the information sector both in terms of revenue share and growth rate. Mobile communication services fully cover the populated areas of the republic. At present, the number of mobile users per 100 people in the country exceeds the world average by 17%. 46 government agencies and 398 services have been integrated into the e-government portal, e-signature certificates have been submitted, including the ASAN signature, and work is underway in this area. In order to support the development of innovative entrepreneurship, the "High Technology Park" and the State Fund for Information Technology Development were established. By the decision of the Cabinet of Ministers of the Republic of Azerbaijan dated December 3, 2014, the “National Nuclear Research Center” Closed Joint-Stock Company was established. The main purpose of the society is to implement systematic measures in the field of nuclear science, nuclear technology and nuclear energy, as well as to ensure the peaceful development and use of nuclear technology in accordance with modern requirements and national interests. The creation of numerous information resources and services in the country, the expansion of their use and the expansion of the integration of information systems into the global information space have made it necessary to establish a Data Center in our country. The Data Center includes the following services:

- 1) Organization of international communication channels, establishment of interconnections and number portability service;
- 2) use of resources;
- 3) backup and recovery of data;
- 4) Management of IT systems;
- 5) application of cloud technologies.

The Trans-Eurasian Super Information Highway (TASIM) project was initiated by Azerbaijan, taking into account the low quality of Internet access in the Eurasian region at affordable rates and the low level of international connections in the region. The project will cover about 30 countries located on this highway, connecting two large ICT regions with high development - Western Europe and East Asia in the Pacific. Providing state support for the development of knowledge-based and innovative entrepreneurship is one of the main strategic directions applied in the sector. Today, the country's IT industry is developing, the level of professionalism of local companies is increasing, the country's ICT companies are implementing projects in the South Caucasus and Central Asia, along with local projects, and the export of Azerbaijani products to regional markets is growing year by year. As noted, the establishment of the State Fund for Information Technology Development was of great importance. The main purpose of establishing this institution is to support projects related to the development and financial support of entrepreneurship in the ICT sector in the country, attracting national and foreign investment, integration of modern technologies into the national economy, research and expansion of innovation. As a result of the rapid development of the ICT sector and close state support for the development of the sector, Azerbaijan has further strengthened its position in the annual reports of international organizations. According to the UN e-Government Survey 2018, Azerbaijan ranked 70th among 193 countries in the e-Government Development Index and was included in the group of countries with the High e-Government Development Index. According to the WFP's Global Competitiveness Report 2017-2018, Azerbaijan ranked 35th out of 144 countries and ranked first in the CIS on this index. Modernization of ICT infrastructure, improvement of quality of services provided in various fields, creation of competitive and export-oriented ICT industry, application of ICT to achieve the goals envisaged in the "National Strategy for Development of Information Society in the Republic of Azerbaijan for 2014-2020" Tasks have been identified to increase efficiency in public administration, preserve the cultural heritage of the people in the information society, train highly qualified specialists, ensure safe use of information, and accelerate integration into the global information space.

4. CONCLUSION

It is very important to eliminate the problems that hinder the development of the system of venture financing of innovative enterprises in the country. The venture mechanism is of special importance in the formation of an innovative economy. The incompleteness of the venture mechanism is due, on the one hand, to the small number of new, low- and medium-speed technological enterprises that can act as attractive objects for venture financing in the country's science and technology sector, and on the other hand to high-tech enterprises. due to the lack of economic incentives to attract direct investment. As a result, the number of sources of venture capital in the country is small. In this regard, it is necessary to create the necessary market mechanisms to ensure risky capital investment activities. The establishment of an innovative economy, the formation of effective university-industry relations, the promotion of "private-public cooperation" in innovation activities should be identified as medium-term goals in the innovation policy of the state. The combination of the laboratories of many higher education institutions with industrial enterprises and industrial parks should be considered as a key factor in optimizing budget expenditures, as well as creating conditions for the emergence of an innovative individual, enterprise.

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PROBLEMS ENCOUNTERED BY SMES IN EXPORT ACTIVITIES

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ABSTRACT

Nowadays, one of the main focuses of the countries targeting economic development is the internationalization of small and medium-sized enterprises (SMEs). Since the active role of SMEs in exports not only has a positive effect on economic growth figures, it will also enable them to produce higher quality products, to adopt new technologies for production and to improve social welfare by increased competition in domestic markets. In this context, most countries implement various subsidies and incentive policies. However, these policies do not always eliminate the export problems of SMEs. One of the main reasons for these policies to fail is to include generally accepted practices. In order to achieve success, the export problems that SMEs face must be analyzed deeply and the focus of the policies to be developed should be exactly these problems. Within this scope, the article aims to analyze the challenges faced by SMEs operating in different countries using secondary data and collects these problems into two main categories.

Keywords: *export problems, foreign trade, small and medium enterprises*

1. INTRODUCTION

Small and Medium Enterprises (SMEs) have recently become economic actors that countries attach importance to in order to achieve economic growth. Namely, until recently, only large companies were thought to have more shares, whether in GDP or in total exports. But statistics show that SMEs also contribute significantly to national economies in this context. According to the official results of the World Bank, SMEs contribute up to 60% of total employment and 40% of GDP in developing economies, and it is stated that these statistics are significantly higher considering informal SMEs (Ndiaye, Razak, Nagayev, & NG, 2018). When we also look at OECD statistics, according to the last (2017) published data, SMEs in countries such as Belgium, Czech Republic, Denmark, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain, Bulgaria, Croatia, Cyprus, Estonia, Lithuania, Lithuania, Slovenia realized more than 50% of total exports (Table 1.). Although indicated rate is below 50% in other countries, the contribution of SMEs to exports is also very important in these countries.

Table following on the next page

	Total (mln \$)	Businesses with 250 and more employees (mln \$)	Businesses with 0-249 employees (SME) (mln \$)	Share of businesses with 250 or more employees in total export (%)	Share of SME's in total export (%)
Austria	167632	84453.8	83178.2	50.38048	49.61952
Belgium	430145	130775	299370	30.40254	69.59746
Canada	372419	252812	119607	67.88375	32.11625
Czech Republic	181691	83040.4	98650.6	45.70419	54.29581
Denmark	102133	46370.5	55762.5	45.40207	54.59793
Finland	67883	42118.2	25764.8	62.04528	37.95472
France	533832	357993	175839	67.06099	32.93901
Germany	1444610	965438	479172	66.83036	33.16964
Greece	32527.6	15632.8	16894.8	48.06011	51.93989
Hungary	113577	57845	55732	50.93021	49.06979
Ireland	137209	93512.3	43696.7	68.15318	31.84682
Italy	506123	226310	279813	44.71443	55.28557
Luxembourg	15743.9	4381.59	11362.31	27.8304	72.1696
Netherlands	650316	146818	503498	22.57641	77.42359
Poland	233642	121197	112445	51.87295	48.12705
Portugal	61999.3	27673.4	34325.9	44.63502	55.36498
Slovak Republic	84208.5	52212.2	31996.3	62.00348	37.99652
Spain	319017	141140	177877	44.24216	55.75784
Sweden	152608	86518.6	66089.4	56.69336	43.30664
United Kingdom	439628	239891	199737	54.56682	45.43318
Bulgaria	31304.9	15592.4	15712.5	49.80818	50.19182
Croatia	16007.1	5611.1	10396	35.05382	64.94618
Cyprus	3272.97	386.69	2886.28	11.81465	88.18535
Estonia	14507.1	3153.92	11353.18	21.74053	78.25947
Latvia	13941.1	2708.37	11232.73	19.42723	80.57277
Lithuania	29761.8	9292.4	20469.4	31.22257	68.77743
Romania	70572	42076.8	28495.2	59.62251	40.37749
Slovenia	38322.4	14469.3	23853.1	37.75677	62.24323
Israel	60959.1	31096.2	29862.9	51.01158	48.98842
Iceland	4857.69	2624.15	2233.54	54.02053	45.97947
Switzerland	298923	160372	138551	53.64994	46.35006

Table 1: Export by Business Sizes

(Source: OECD (2020), *OECD Quarterly International Trade Statistics, Volume 2019 Issue 3*, OECD Publishing, Paris, <https://doi.org/10.1787/g2g9fb36-en>)

In addition to their contribution to exports, SMEs have features such as providing product types with little investment, promoting personal savings, and ensuring balanced development among regions. Due to these features, SMEs have an important function within the economic and social structure especially for developing countries. Siam & Rahahleh (2010) stated that SMEs have a large capacity such as creating employment opportunities, employing the workforce, maximizing economic surplus, increasing the added value of national income, and limiting unemployment impediments. Moreover, social stability can be shown as the main target for SMEs in the context of their contribution to regional development (Little, Mazumdar, Page, & Mundial, 2017).

Despite their important position within the country's economies, SMEs face many challenges while maintaining their commercial activities due to their structural features and external environmental factors. Increasing competition, ability to adapt to rapidly changing market demand, technological change and capacity constraints related to information, innovation and creativity can be cited as the sources of difficulties of SMEs. One of the important challenges that SMEs face is export obstacles. Poor country and firm image, competitors and the severity of competition, legal and bureaucratic obstacles, lack of technology and R&D, government practices, legal structures and quotas, decision-making process and management structure, language and trained staff, financial difficulties, lack of knowledge can be listed as the challenges encountered by SMEs. The purpose of this study is to systematically address and evaluate the most common problems, based on studies conducted in different countries for export problems of SMEs, using secondary data.

2. RESEARCH METHOD

In the research, secondary data are used to reveal the impediments faced by SMEs. The previous researches related to the subject have been examined in detail and the main barriers have been classified and stated in the literature.

3. SMES' EXPORT BARRIERS

The globalization stage brought along various problems as well as providing opportunities to SMEs. Especially factors such as providing competition, increasing employment and developing entrepreneurs have made it compulsory for countries to encourage SMEs to export. The problems experienced by enterprises in opening to foreign markets include various administrative, functional or structural restrictions, both internally and externally, preventing businesses from entering foreign markets and expanding their existing market capacities. While the internal problems of the enterprises include the challenges that arise from their own managerial functions or their behaviors in the foreign markets, the external obstacles include being affected by the environment in which the enterprises are located. While addressing these impediments, Leonidou (1995) expresses internal problems as challenges that are specific to businesses and arise from their organizations or their attitudes towards export marketing, while explaining external problems as stemming from the environmental conditions of the business. In the study of SMEs in Pakistan, Khattak, Arslan, & Umair (2011), divide these challenges into two internally and externally according to the challenges arising from the origin country and the country of export. In the research, functional barriers, marketing barriers, energy crises and environmental barriers are internal challenges, while competitive, procedural and environmental barriers are external challenges. Among the challenges faced by SMEs, they state that internal problems predominate. Paul, Parthasarathy, & Gupta (2017), in a comprehensive study of SMEs on export barriers, generally examined these barriers in the context of different dimensions such as macro and micro, external and internal, human resource challenges, export marketing challenges and inadequate social and capital resources. In their study, Abor & Quartey (2010) highlight the problems faced by the SMEs in their export processes, such as lack of access to appropriate technology, limited access to international markets, lack of management skills and training, laws that prevent the development of the industry, weak institutional capacity, regulations and rules, and most importantly financial problems. Çelik & Akgemci (1998), examined the export challenges of SMEs in two different groups as the obstacles faced by SMEs at national and business level. Canitez (2004), on the other hand, classifies the problems faced by SMEs in the export process under three headings: 1) Challenges encountered at the enterprise level; 2) Challenges arising from national external environmental factors; 3) Challenges arising from international external environmental factors.

In general, it is possible to classify the export problems of SMEs under two main headings while evaluating the researches carried out so far: 1) Barriers arising from internal factors; 2) Barriers arising from external factors (Figure 1.). The important point that we would like to draw attention here is that the basic question we investigated while doing this study is “What are the unique export impediments for SMEs?” The impediments we have listed by taking into consideration are the main impediments faced by enterprises especially during export. In summary, the difficulties of non-exporting enterprises are ignored here.

Barriers arising from internal factors	Barriers arising from external factors
1. Lack of managerial knowledge and skills 2. Unqualified human resources 3. Financial difficulties 4. Product quality 5. Lack of planning and organization 6. Inadequate R&D activities 7. Inadequate export marketing activities	1. Legislation and bureaucratic obstacles 2. Origin country's economic situation 3. Economic situation of the exporting country 4. Barriers to accessing necessary information 5. Unfair competition in foreign markets 6. Logistics 7. Banking and insurance services 8. Ineffective government incentives

Figure 1: SMEs' export barriers

3.1. Barriers arising from internal factors

SMEs that want to increase their export performance should focus on eliminating internal challenges at first. One of the most important factors in terms of sustainable exports is the knowledge and skills that managers have. Because in order to continue the current export agreements, it is important for the managers to keep the relations with their business partners in the foreign market at a good level and to obtain information about these markets continuously. Also, since the export procedure is a stressful, time-consuming process, this situation can be directly reflected on their export performance when managers do not have effective time management skills and do not motivate their employees sufficiently. Stamatović & Nebojša (2010) state that managers' knowledge and skills play an important role in evaluating the export performance of SMEs. Researchers think that the deficiency in this context is an obstacle to exports and emphasizes that SMEs with trained managers are more likely to grow. Moreover, experienced and skilled business employees will always keep SMEs one step ahead of their competitors. Because employees who have a good command of the foreign market and have sufficient knowledge of export regulations have the potential to take more adverse measures to any external impediments that may arise. Ganotakis & Love (2012) states that managerial skills and the phenomenon of human capital in general give privileges to SMEs when opening to new export markets. Although the right managers and the right employees are required for successful export, if the right organization and planning are not in place, the efforts of these managers and employees will be in vain. In this context, everybody in the business should know the correct job definition, the correct sharing of responsibilities and the existence of viable short-term strategies adapted to long-term strategies will provide advantage to SMEs in terms of operating in foreign markets. Leonidou (2004) states that as a result of the studies on export impediments, which it has systematically examined, consistent results have been obtained regarding the functions related to marketing and human resources, which pose important impediments in terms of SMEs. The financial status of SMEs is another important reason that will give them an advantage in exports. In this respect, the wider the financial instruments the companies have, the greater the chances of their success in exports. In the study of Dahi (2012) examining the impediments faced by SMEs in 3 Arab countries (Egypt, Qatar

and Mauritania) and the role of SMEs in the regional development of Arab countries, it is concluded that financial, technological and human capital deficiencies negatively affected the growth of SMEs and bank loans and financial supports increase SMEs' performance. El-Said, Al-Said and Zaki (2015), in the study on SMEs operating in Egypt, emphasize the disadvantages of financial impediments in terms of exports and pay attention to the importance of government-funded public and partnership initiatives that can provide exports and specializations to promote exports. they attract. One of the dangers in the scope of exports for SMEs with sufficient financial resources is insufficient export marketing. If the target country, competitors and sales techniques are not determined correctly, they will waste and subtract the financial resources of these companies. Styles ve Ambler (2000), examined empirically the export performance and their commitment to trust and relationship, and stated that most of the factors affecting the export performance of firms are factors related to the marketing strategy and market environment. The quality of the product produced is another important phenomenon that led SMEs to succeed in exports. In particular, the products' failure to comply with the foreign market quality standards may result in their withdrawal from this market. SMEs should pay attention to R&D activities both in terms of improving product quality and producing innovative products. Especially in our rapidly developing world, companies' inability to keep up with these developments will keep them away from the foreign market in the future.

3.2. Barriers arising from external factors

Although the situations caused by the external factors that SMEs are faced with provide an advantage for them in some cases, in some cases they may encounter them as obstacles in export processes. The most important point that is emphasized while talking about exports is the legislation and bureaucratic obstacles. Because, even if an enterprise does not encounter any export impediments within the enterprise, for example, the export quota brought by the laws on their products will prevent the activities of these companies. The point we draw attention here is the legislation and bureaucratic procedures of both the country of origin and the country of export. The importance of exporting in the origin countries of SMEs and trying to facilitate the export transactions of the companies will cause them to gain an advantage over competing foreign companies. At this point, we think it is useful to emphasize effective government incentives. Because, in certain cases, although states announce that they are implementing incentive policies to increase exports, it can be seen that SMEs are unaware of this situation or that incentive policies are ineffective in facilitating exports. From this perspective, it is beneficial to apply incentive policies that directly target export impediments. Akgemci (2001) draws attention to this situation and notes that factors such as political and bureaucratic obstacles, insufficient incentives, difficulty in finding loans, the state's inadequacy in positioning and promotion actions towards international markets, and the lack of information about the foreign market prevent SMEs from having a planned strategy for export. In addition, the economic situation of the origin country also prevents the export of SMEs, but it can also provide an advantage for them. Here, we focused on the economic situation in general rather than focusing on the exchange rate, inflation, GDP increase. Because if there is a positive economic environment in a country, this will most likely cause the SMEs operating in that country to gain an advantage over their foreign competitors. Along with the economic situation of Origin country, the economic situation of the exporting country is also important. Because the economic recession in the exporting country or any economic or financial crisis decreases the demand for the products of SMEs, it is likely to put the companies in cash trouble. Another important factor in terms of export is accurate and reliable information about the foreign market. Some countries have trade offices abroad, which play an important role in providing local firms with information about the foreign market. However, in some countries, the lack of these commercial representations and the impossibility of accessing reliable resources in these

countries puts the SMEs into uncertainty. This poses a great danger in the context of future export agreements. Besides, bribery situations that exist in some countries can push the SMEs into unfair competition. Generally, the political situation of the countries exported is one of the cases that SMEs should carefully examine before starting their export activities (Canitez, 2004). In addition to these factors, the fact that both origin and export countries have poor logistics infrastructure may cause excessive time and financial losses for SMEs. Furthermore, deficiencies in both banking and insurance activities on both sides will lead to waste of resources and will be an obstacle to the export activities of SMEs.

4. CONCLUSION

Today, SMEs have one of the most important elements of the economy and social development by having the largest share of enterprises worldwide. From this point of view, the first condition of economic development is to help the development of SMEs that lead entrepreneurship. Particularly, SMEs' taking an active role in international trade will positively affect the growth of the economy by providing foreign currency input for countries and increasing domestic competition by creating new employment opportunities. In this respect, it is important to establish support policies for SMEs. When establishing these policies, firstly, it is necessary for SMEs to consider the problems they face and to find solutions to these problems. In this study, in order to contribute to the incentive programs to be created, the problems faced by the SMEs in export were examined. The problems we have examined based on the secondary data are given in Figure 1. In this classification that we have created by addressing the basic impediments, there are problems arising from 7 internal factors and 8 external factors. One of the most striking obstacles arising from internal factors is financial problems, which is emphasized in most of the studies we have examined. Managers' knowledge and skills, skilled human resources, lack of planning and organization, product quality and marketing activities are the other problems that need to be resolved. In order to survive in foreign markets, SMEs should also eliminate R&D challenges. When we examine the problems arising from external factors, the legislation and bureaucratic procedures of both origin and exported countries are the primary factors that allow export. Namely, any obstacle that arises in this context can directly affect exports and cause SMEs to terminate their export activities. In addition, the troubles that arise because of the economic situation of the countries are the other obstacles that the SMEs face when exporting. States that want to increase exports and ensure the development of SMEs should pay particular attention to improving their logistics infrastructures, increasing their foreign trade representative offices, providing information flow related to foreign markets, developing banking and insurance sectors, and implementing effective incentive policies, and awareness raising activities regarding these policies.

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THE RELATIONSHIP BETWEEN TRADE OPENNESS RATIO AND ECONOMIC GROWTH RATE OF TURKEY: A COINTEGRATION ANALYSIS WITH STRUCTURAL BREAKS

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ABSTRACT

This study addresses Turkey's attempt to determine the relationship between openness and economic growth over a long period using structural break cointegration. First, the Zivot-Andrews and the Lee and Strazivich unit root tests, which allow structural breaks, were examined individually, and it was determined that the relationship was not stationary, even when the breaks were taken into account. In addition to the traditional cointegration tests, cointegration tests that allow structural breaks can help to determine the external breaks that occur in the relationship. In this context, the breaks that were externally determined by the Hatemi-J test are included in the model as dummy variables and are estimated and compared using the OLS and FMOLS. In the case of breaks with the CUSUM-SQ graph, the stability of the model parameters is empirically visualized, and the model is economically interpreted.

Keywords: *cointegration analysis, economic growth, trade openness, Turkey*

1. INTRODUCTION

Although the phenomenon of globalization significantly improves international economic relations, there are some disadvantages in terms of national economies. One of the most important problems among these disadvantages is the trade openness problem. On the one hand, institutions such as the WTO (World Trade Organization) and UNCTAD (United Nations Conference on Trade and Development), which were established to liberalize trade between countries, aim to increase the openness of countries to world trade by reducing quotas and tariffs. On the other hand, countries restrict foreign trade by increasing invisible barriers in line with their own interests. To increase openness, all kinds of barriers, such as customs duties, quotas, and visible and invisible barriers, which restrict foreign trade, must be removed. Increasing openness will lead to the liberalization of foreign trade, and in many economic studies, findings have been obtained that show that this phenomenon will contribute to a country's economy. As we mentioned above, different economic opinions believe that increasing trade openness positively affects the economic growth of a country. The hypothesis that underlies the positive relationship in theory is based on A. Smith's (1776) Theory of Absolute Advantage and D. Ricardo's (1817) Theory of Comparative Advantage. According to Ricardo, trade can benefit both parties directly if the countries specialize in producing goods in which they have a comparative advantage. This can directly increase the per capita incomes of the economies, and it can also indirectly promote development through other channels such as technology transfers, product diversity, economies of scale, and the efficient allocation and distribution of resources. The Factor Endowment theory of Heckscher-Ohlin-Samuelson also strengthened the theory of Ricardo, and hypotheses were put forward within the scope of the theory. The Heckscher-Ohlin Samuelson model analyses the welfare gains in two countries.

In the model, international trade advocates that the resources will be redistributed between sectors, that each country will export the product that uses the relatively cheaper and abundant production factor, and that the factor used in its production will be imported if it is expensive. Within the scope of the internal growth theories, Romer's (1986) and Lucas's (1988) views that foreign trade will have a positive effect on economic growth have again been brought to the forefront of the agenda. Along with trade openness, financial openness is also known as one of the factors that positively affects a national economy. Namely, foreign competition, which arises from financial openness, reduces the capital costs of domestic firms, ensures growth with higher investment and improves the development of the domestic financial sector. Competition increases the efficiency of the domestic banking sector, enabling countries to benefit from the leading financial technologies and increasing production (Galindo et al., 2002). In addition, with the financial development that emerges from financial openness, an increased number of institutions and markets providing financial services is observed first, and this helps to increase the efficiency in the financial sector and to decrease costs (Calderon and Liu, 2003). As mentioned above, the effects of both financial and trade openness on economic growth have been the subject of extensive research in the literature. However, in this study, only the direction and magnitude of the relationship between trade expansion and economic growth for Turkey is tested using time series analysis.

2. LITERATURE REVIEW

When the related literature is analysed, it is seen that empirical studies examining the effects of trade openness on economic growth have evolved since the second half of the 1980s and have gained intensity since the 1990s in parallel with the evolution of economic growth theories. Studies have been conducted using time series, cross-sectional and panel data analyses on various countries and country groups to examine the effects of different quality variables used to represent the effect of trade openness on economic growth. In these empirical studies, it is seen that the variables representing the degree of trade openness that are generally used are the ratio of total exports and imports (foreign trade volume) or the ratio of imports to Gross Domestic Product (GDP). In this context, the studies that empirically investigate the effects of these variables on economic growth, which represent the degree of trade openness, are classified below. Since the 1970s, the effect of trade on production has been analysed by using regression analysis based on production function analysis that includes trade openness or exports as an explanatory variable (Anwer and Sampath, 1997). In the study conducted by Voivadas (1973) based on the production function, the findings that were obtained show that trade openness positively affects economic growth. In the study conducted by Arnold, Javorcik and Mattoo (2006), it was concluded that trade openness indirectly affects growth by increasing technological efficiency. Since the mid-1980s, models implementing relatively new co-integration and error-corrected causality analyses based on time series data for the foreign trade-economic growth relationship have been used and different results have been obtained for the trade openness-growth relationship (Darrat, 1987). In the study conducted by Utkulu and Özdemir (2004), it was concluded that there is a causal relationship from trade openness to growth. In the literature, studies have also tested the relationship between trade openness and economic growth for Turkey. Türedi and Berber (2010) analysed the relationship between financial development, trade openness and economic growth for the period from 1970-2007 with causality tests based on the Johansen cointegration and VAR model. The findings obtained in the study show that there is a two-way causality relationship between trade openness and economic growth, and a one-way causality relationship from financial development to economic growth was detected. Çelikoğlu (Çelikoğlu et al., 2017) tested the long-term relationship between trade openness and economic growth for the Turkish economy with the Johansen cointegration test and the vector error correction model.

The analytical findings show the existence of a long-term positive relationship between trade openness and economic growth for the economy and a one-way short-term causality relationship from trade openness to economic growth was determined. Ilter and Dogan (2018) study the relations of trade and financial openness with the level of economic growth in Turkey for the period from 1998: Q1 - 2016: Q4 using Granger causality tests and it was determined that commercial openness has a unidirectional causal relationship with economic growth. When the relationship between commercial openness and economic growth is examined in the literature, it is seen that internal growth theories generally confirm the view that openness will have a positive effect on economic growth. In addition, evidence of causal relationships between the two variables was found in the conducted studies. It is seen that the studies in the literature are generally studies that do not take into account structural breaks, and this study is expected to fill an important gap in the literature on this point. In this context, in this study, the direction of the relationship between trade openness and economic growth for Turkey and to what extent trade openness affects economic growth have been tested using cointegration analysis with the structural break method using time series data from 1987 – 2017.

3. METHODOLOGY

3.1. Lee and Strazicich (2003) Unit Root Test

The LM unit root test has a number of advantages. Since the break points are initially determined to be endogenous, the test is not subject to false rejections in case of breaks and the presence of the unit root. The most important thing is that there are no false rejections if the alternative hypothesis is true (Lee, Strazicich, 2004: 2). The rejection of the null hypothesis in the LM test necessarily refers to the rejection of the unit root without breaks rather than the unit root (Lee, Chang, 2008: 316). Unlike conventional ADF based structural break unit root tests, the LM unit root test also allows breaks under the null hypothesis. It models structural breaks based on Perron (1989) and is explained by the following data creation process (1):

$$y_t = \delta' Z_t + X_t \alpha \quad X_t = \beta X_{t-1} + \varepsilon_t$$

The model (Model A) that allows two levels of breaks takes the form of $Z_t [1, t, D_{1,t}, D_{2,t}]$. $D_{j,t}$ is the shadow variable that allows breaks at the level of the series. T_{Bj} is the date of two breaks (when $j=1,2$).

$$D_{j,t} = \begin{cases} t \geq T_{Bj} + 1 & \text{if } 1 \\ t < T_{Bj} + 1 & \text{if } 0 \end{cases}$$

The model (Model C) that allows two breaks at the level and slope of the series takes the form of $Z_t [1, t, D_{1,t}, D_{2,t}, DT_{1,t}, DT_{2,t}]$. Here, $D_{j,t}$ and $DT_{j,t}$ are shadow variables representing structural breaks at the level and slope of the series, respectively, where $j=1,2$.

$$D_{j,t} = \begin{cases} t \geq T_{Bj} + 1 & \text{if } 1 \\ t < T_{Bj} + 1 & \text{if } 0 \end{cases} \quad \text{ve} \quad DT_{j,t} = \begin{cases} t \geq T_{Bj} + 1 & \text{if } t - T_{Bj} \\ t < T_{Bj} + 1 & \text{if } 0 \end{cases}$$

The data creation process includes breaks under the null hypothesis ($\beta = 1$) and alternative hypothesis ($\beta < 1$).

3.2. Hatemi-J Cointegration Test

The cointegration test proposed by Hatemi-J (2008) is an expanded form of the cointegration test that allows an internal break between the series examined and reviewed by Gregory and

Hansen (1996). Hatemi-J (2008) tried to explain the effect of 2 structural breaks on both the cutting and slope by considering the following model:

$$y_t = \alpha_0 + \sum_{i=1}^2 (\alpha_i D_{it} + \beta_i' D_{it} X_t) + \beta_0' X_t + u_t$$

where α_0 represents the constant term before structural changes, α_1 indicates the change in the constant term due to the first structural break and α_2 indicates the change in the constant term due to the second structural change. Meanwhile, β_0 represents the slope parameter before the structural changes, β_1 represents the slope parameter after the first structural change and β_2 represents the slope parameter after the second structural change.

Furthermore, $\tau_1 \in (0,1)$ and $\tau_2 \in (0,1)$ are unknown parameters representing the timing of the respective regime change points, and the shadow variables that include the effects of structural breaks are defined as follows:

$$D_{1t} = \begin{cases} 1 & \text{when } t > [n\tau_1], \\ 0 & t \leq [n\tau_1] \end{cases}$$

$$D_{2t} = \begin{cases} 1 & \text{when } t > [n\tau_2], \\ 0 & t \leq [n\tau_2] \end{cases}$$

The ADF *, Z_α and Z_t test statistics are used to test the basic hypothesis that there is no cointegration relationship between variables. The ADF * statistics are obtained by applying the ADF unit root test statistics to the residuals obtained from Model 2, and the Z_α test statistics are calculated as follows:

$$Z_\alpha = n(p^* - 1)$$

4. DATA AND EMPIRICAL FINDINGS

This study covers the period from 1987 - 2017 on an annual basis. The variables used are for Turkey, and economic growth (GDP) and trade openness (openness) are the chosen variables. The variables used in the models to be tested and their sources are explained in Table 1.

Table 1: Defining the Variables Used in the Models

Analysis Period (1987-2017)		
Abbreviations of Variables	Definitions of Variables	Data Sources of Variables
logGDP	Economic Growth	WB-World Bank (World Development Indicators)
logDAO	Openness Rate	WB-World Bank (World Development Indicators)

A non-stationary variable in the time series indicates that the unit root exists. If the variable is not stationary, the impact of any shock or policy change on the variable is permanent. In this study, the Augmented Dickey-Fuller (ADF) and Phillips and Perron (PP) tests were used to test the unit root and stationarity of the series. If there are breaks in the series, the results of the ADF, PP, KPSS and Ng-Perron unit root tests will show the direction towards the hypothesis established by the series unit root (Perron, 1989: 1361).

Perron (1989) developed a model that can be used if the date of a break is known. However, Zivot and Andrews (1992) criticized this model and developed a refractive model in which the date of a break was internally determined. Lumsdaine and Papell (1997) have argued that if the series discussed in the study cover the long term, single breaks can give erroneous results. Zivot and Andrews (1992) developed a fracture unit root test taking into account a break in the series. The models of Zivot and Andrews (1992) and Lumsdaine and Papell (1997) assume that there is no structural break in the null hypothesis, and the critical values are based on this assumption. To solve this problem, Lee and Strazicich (2003, 2004) developed the minimum Lagrange multiplier (LM) unit root test and introduced it into the literature. In this model, they introduced one and two refractive tests, which included structural fractures in the null hypothesis and alternative hypotheses, into the literature. In this study, the ADF and PP unit root tests, which are traditional unit root tests, and the Zivot and Andrews (1992) and Lee and Strazicich (2003, 2004) tests, which allow structural breaks, were used to test the unit root and stationarity of the series.

Table 2: ADF and PP Unit Root Tests

Variable	ADF		PP	
	Fixed	Fixed and Trended	Fixed	Fixed and Trended
logGDP	0.678	-2.08	2.063	-2.081
Δ logGDP	-5.672***	-5.815***	-5.69***	-8.149***
logDAO	-2.438	-0.363	-2.527	-0.363
Δ logDAO	-4.902***	-3.316***	-4.968***	-6.096***
Lag length Lag = 3 was chosen and the delay length was determined according to the AIC criterion.				

*** 1% significance level

** 5% significance level

* 10% significance level

According to the results in Table 2 obtained by the ADF and PP unit root tests at the logGDP and logDAO series levels, there is a unit root at the 5% significance level in both the fixed and fixed and trended models. In addition to this, when the first difference of both series is taken - I (1), the Δ logGDP and Δ logDAO series become stationary and fixed at the 5% significance level in the fixed and trended model according to the ADF and PP unit root test results. In addition to traditional unit-root tests, the ZA structural break unit-root test, which takes into account a break, and the Lee and Strazicich structural break unit-root test, which takes into account two breaks, were performed, and the results are shown in Table 3 and Table 4, respectively.

Table 3: ZA Single Break Unit-Root Test

Variable	Model	Breaking Dates	ZA Test Statistic	Critical values		
				%1	%5	%10
logGDP	A	1999	-3.584	-5.34	-4.80	-4.58
	C	2001	-4.240	-5.57	-5.08	-4.82
logDAO	A	1995	-2.314	-5.34	-4.80	-4.58
	C	2003	-3.707	-5.57	-5.08	-4.82
Lag length Lag = 3 was chosen and the delay length was determined according to the AIC criterion.						

Table 3 gives the results of the Zivot and Andrews unit root test. In the obtained findings, when the stationary conditions of the logGDP and logDAO series are analysed by taking into account the structural breaks, the ZA test statistics obtained from both Model A (constant breaks) and Model C (constant and trend breaks) are larger than the critical values.

Therefore, even if the break periods are taken into consideration for these series, the unit root status of the series continues.

Table 4: Lee and Strazicich Two Break Unit Root Test

Variable	Model	Breaking Dates		Test Statistics	Critical Value		
					%1	%5	%10
logGDP	A	1993	2010	-1.728	-4.073	-3.563	-3.296
	C	1993	1999	-5.759	-6.750	-6.108	-5.779
logDAO	A	1992	1999	-1.893	-4.073	-3.563	-3.296
	C	1995	2007	-3.940	-7.004	-6.185	-5.828
Lag length Lag = 3 was chosen and the delay length was determined according to the AIC criterion.							
The trimming parameter is set as 0.15.							

Table 4 gives the Lee and Strazicich two break unit root test results. The obtained results show that when the stationary states of the logGDP and logDAO series are analysed considering the structural breaks, the LM test statistics obtained from both Model A (constant breaks) and Model C (constant and trend breaks) are larger than the critical values. Therefore, even the basic hypothesis “H0: It contains serial unit root with structural breaks” cannot be rejected at the 1% significance level. In other words, even if the break periods are taken into consideration for these series, they continue to be rooted in the series. According to the results presented in Table 3 and Table 4, it was determined that there was a significant individual break in both series. The Hatemi-J test was used in this research to test the cointegration relationship by taking into account 2 breaks due to the number of observations to determine the structural cointegration relationship between economic growth per capita and the openness ratio.

Table 5: Two break Hatemi-J cointegration test

Model	ADF	Zt	Za
C	-6.075**	-17.461***	-68.410*
1.Break Date	2006	2006	1992
2.Break Date	2007	2007	2005
C/T	-5.752*	-17.428***	-64.784*
1.Break Date	2006	2006	1999
2.Break Date	2007	2007	2005
C/S	-7.934***	-19.784***	-69.203*
1.Break Date	1999	2000	1992
2.Break Date	2000	2001	2005
Lag length Lag = 3 was chosen and the delay length was determined according to the AIC criterion.			

*** 1% significance level

** 5% significance level

* 10% significance level

The critical values are taken from Hatemi-J (2008).

Since the minimum ADF, Zt and Za statistics calculated for all models are smaller than the critical values on at least the 10% significance level, the basic hypothesis showing that there is no cointegration between the series is rejected. Therefore, according to the results of the Hatemi-J test, we can state that there is a cointegration relationship between economic growth

and the openness ratio. The ADF and Za test statistics show that there are break periods in 2006 and 2007 in the Fixed (C) and Fixed / Trended (C / T) models in which we consider breaks, and these break periods are significant, even at the 1% significance level, according to the Za statistics. Since the breaks emerging close to each other will add to the problem of multiple linear connections when added to the model as a dummy variable, only the break period of 2006 will be included in the model and will be multiplied by the deterministic trend to represent the break in the C / T model. To determine the long-term relationship between per capita economic growth and the openness ratio, the C / T model has been estimated using the OLS and FMOLS when the break is taken into account and not taken.

Table 6: Estimation of the long-term relationship using the OLS and FMOLS

Coefficient	OLS (no break)	OLS (break)	FMOLS
Constant	9.808***	9.254***	9.084***
logDAO	0.670	0.304*	0.209**
D2006	-	-0.652***	-0.600***
trend	-	0.006	0.011***
D2006*trend	-	0.036***	0.032***
Adjusted R2	0.698	0.975	0.976
F.stat	66.932***	262.195***	268.195***
SSR	0.624	0.052	0.050
AiC / SCH	-0.938 / -0.846	-3.270 / -3.039	-3.412 / -3.055

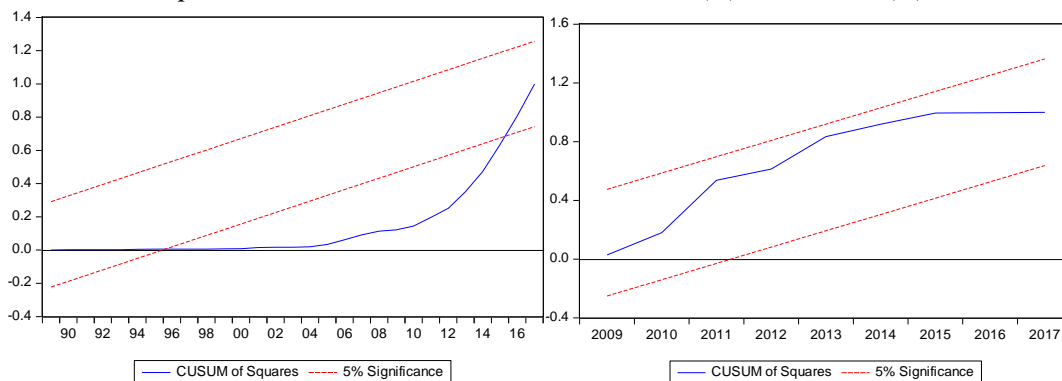
*** 1% significance level

** 5% significance level

* 10% significance level

According to the results presented in Table 6, the FMOLS estimator is preferred to OLS estimator because it has a high R2 and low AIC and SCH values. The F statistics show that the model is generally significant and that the parameters of the model are statistically significant at the 5% significance level according to the t.stat values. Until 2006, the fixed parameter of the model was equal to 9.084, while a 1% increase in the openness rate increased economic growth per capita by 0.209%. In addition, economic growth increases by 0.011% compared to the trend every year. The fixed parameter of the model, which has undergone a structural break after 2006, is equal to 8.484 (9.084-0.600); and after 2006, the openness rate increases by 0.209%, but since there is a break in the trend, it increases economic growth by 0.043% (0.011 + 0.032) each year. In general, it is possible to see the average of the series after 2006 and that the trend has a break.

Graph 1: CUSUM-Squared graph of the relationship between economic growth and the openness ratio, whether there is no break (a) or a break (b)



The CUSUM-SQ graph of the relationship between economic growth per capita and the openness ratio was drawn to visualize that the structural break disappears when the structural break and meaningful break periods are added to the model as a dummy variable. The CUSUM-SQ plot in Graph 1a shows that the parameter stability is impaired and exceeds the 5% significance lines. However, in the model where d2006, the trend dummy variable and the d2006*trend variable are added (Graph 1b), it is seen that the parameter stability is independent of time and the structural break disappears.

5. CONCLUSION

This study attempted to determine the relationship between economic growth and trade openness in the context of the Turkish economy. The series were first subjected to the traditional unit-root test and it was decided that the ADF was not stationary at the level compared to the PP tests, but it was stationary when the first differences were taken. Therefore, a long-term cointegration relationship between the openness ratio and economic growth is possible (Table 2). According to the Zivot-Andrews and the Lee and Strazicich tests, which allow one and two breaks, respectively, in Tables 3 and 4, the series appear to have structural breaks in different years. The Hatemi-J cointegration test (Table 5), which helps to catch two breaks in the relationship, showed that in the fixed and fixed plus trend break models, there were breaks in 2006 and 2007, and when the breaks were taken into account, the no cointegration relation hypothesis was rejected. 2006, which is a significant break in the long-term relationship model, was included in the model using a dummy variable to represent the fixed and trend break model and was estimated using the OLS and FMOLS. Table 6, which shows that the FMOLS estimator gives better results for the cointegration relationship, was supported by the CUSUM-SQ graph, where the structural break in 2006 was taken into account, and the model parameters represented better performance and stability. In 2006 and subsequent periods, the increases observed in Turkey's foreign trade figures - in some periods, this increase exceeded 20% - represent economic gains in terms of breaks in the relationship. It is also observed that the share of the trade volume with respect to gross domestic product entered a downward trend in 2006 that continued after 2006.

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WAYS OF ANALYSIS AND IMPROVEMENT OF AGRICULTURAL ECONOMY IN THE MODERN REPUBLIC OF AZERBAIJAN

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ABSTRACT

The government programs adopted in the Republic of Azerbaijan in 2016 reflect the current wave of economic reforms in a market economy. These reforms have covered many areas, among which the agricultural economy is of particular importance. Thus, the existing potential resource base in this area creates ample opportunities to support the export-oriented economy. For this reason, the development of the non-oil sector in the country's economy has made the assessment of the effectiveness of investments in agriculture, the study of problems in this area and the implementation of diversification strategies in this area a topical issue. The total value of products produced in different sectors of agriculture was compared with the Gross Domestic Product and the volume of investment in this area. The purpose of the research is to study the comprehensive relationship of financing and management for the production of agricultural products. In this regard, the scientific article summarizes the field of study through the method of comparative analysis, shows the dynamics of development of individual structural areas, gives specific predictions on practical issues with the help of the regression method. It should be noted that one of the main tasks of the study is to identify the negative effects on the formation of the agrarian economy. The specificity of these problems is reflected in the interaction of very complex factor systems. The relationship between them, as a result of a system of factors, causes qualitative changes in the overall context of agrarian relations as a result of activity. The proposals put forward as a result of the analysis of the study are aimed at the production of export-oriented agricultural products. Limited research, the lack of information on the productivity of agricultural workers in certain areas is one of the factors hindering the comprehensive analysis of the research. As a result of the study, it can be concluded that the funds allocated for agricultural products did not justify themselves. The reasons for the incomplete use of preferential funds allocated for government support in the field of financing of entities engaged in the production of agricultural products were indicated.

Keywords: *Agricultural entities, agrarian economy, economic activity, business environment, lending*

1. INTRODUCTION

Republic of Azerbaijan is mainly considered as an agro-industrial country and most of its non-oil sector is dependent on agriculture. Following the economic and technological development processes, it is now able to produce better quality agricultural products and expand export products. Therefore, improvement of agricultural production relations is one of the most important sectors of the national economy is of special attention of the country. Experience shows that the volatility of economic processes, the situation in the financial system in the early days had a negative impact on the interests of agricultural producers and reduced the development of productivity in this area. One of the main reasons for this process is the unallocated investment resources of agricultural producers in economic activities which weakens investment in this sector. It is a common case, that the economic development of agriculture requires investment to flow from various financial sources. However, there are factors that hinder the development of this area.

These include accurate measurement of environmental risk factors, the severity of collateral for loans, the lack of qualified specialists, barriers to market access for products, etc. can be attributed. The existence of these problems has limited the activities of agricultural enterprises, as a result of which individual small businesses or households in the country have a high share in the gross output of the agricultural sector.

2. FINANCING OF AGRICULTURAL ECONOMY

Sources of funding in agriculture determine the degree of improvement in this area. The development of agriculture is considered important both as a source of income for the poor and to meet the demand for food. It is also aimed at increasing the income of people living near the poverty line as one of the savings of an open agrarian economy (C. Perrings, 1987, p.6). It should be noted that the changes in the farms are directly related to the financial results of their activities. Interest in agriculture is changing as incomes are not enough to carry out large-scale reproduction on farms and fully meet the needs of the family. Government support in this area is also very important. Agro-financial support should be directed not only to the field of production, but also to price management to stimulate interest in increasing productivity, lowering the cost of raw materials, and special support programs to strengthen the infrastructure of producers with export potential (I.Abassov, 2013, p.373). The government's financial support to agriculture can be divided into two groups, direct and indirect. Direct support includes allocations from the state budget for direct financing, which cover central and regional socio-economic programs, investment projects. It also affects the price factor in the areas that are expected to operate at a loss. Indirect effects include the central bank's refinancing rate, preferential agreements on the supply of agricultural products to the state order, exchange rates, customs duties, tax rates, tariffs for public services. (I.Ibrahimov, 2010, p.59) The allocation is mainly directed in the following directions:

- organization, processing, warehousing and sale of effective production of agricultural products;
- application of new technologies in agriculture;
- expansion of new sectoral infrastructure in order to sustain the competitiveness of agricultural products and reduce costs;
- production of quality and organic products according to demand;
- improving the living conditions of those working in this field.

2.1. The state of lending to agricultural fields

In the last century, the lack of necessary investments by small businesses in the agricultural sector in the application of "Green Revolution" technologies has created certain difficulties (B. Klein, R. Meyer, A. Hannig, J. Burnett and M. Fiebig, 1999, p. 3). At the same time, the state needed to use stimulants to support small agriculture subjects. Among the factors to stimulate the production of agricultural products, lending is of particular importance. Agricultural lending is based on the interaction of government regulatory tools and agro-credit market self-regulation. In modern times, instead of providing direct financial support to agriculture, the government should try to play the role of organizer of a full-fledged credit system based on the principles of interaction between the banking sector and agriculture. To this end, the main task of the government should be to create a unified national system of financing agriculture, objectively acting as a guarantor of the protection and support of the rights of both parties. At the same time, the development of credit products that best meet the needs of agricultural borrowers for loans for current and future activities should monitor the specific features of agricultural production, the parameters of industrial or intra-industry factors.

The conceptual basis for the development of credit relations between the banking sector and agriculture in modern times should be:

- Specialization of direct lending in banks as a separate segment due to the specific industry and intra-industry characteristics of agriculture;
- Inclusion of agriculture financing as a signatory group in the relevant segment of the bank to the business entities that initially applied with the gradual refusal of indirect bank lending;
- Application of “customer-oriented approach” in direct bank lending in order to determine the credit needs of agriculture manufacturers and develop relevant loan products.

It is clear that concessional lending to agriculture producers plays a special role in meeting the need for capital. The following are the conditions that determine the sectoral characteristics of production when lending to manufacturers of agriculture products in the Republic of Azerbaijan:

- high capital capacity and relatively low profitability;
- adequacy of material and technical resources does not coincide with the periods of income generation;
- long duration of production cycle of agriculture product and seasonality of production;
- long-term turnover of working capital for production;
- special collateral, for example, future products, livestock, agricultural machinery;
- close connection with natural-climatic conditions, biological arguments of plants and animals, as well as natural resources.

2.1.1. Problems in the field of agriculture during lending

The reasons for the weak development of lending to small farms in the Republic of Azerbaijan (AR) are the problems in the field of transport and irrigation infrastructure, unfavorable trade conditions for agricultural products, inefficient use of land and lack of agricultural machinery. Overcoming these shortcomings can increase the productivity and profitability of small farms. These specifics make agriculture lending more difficult than in other economic sectors. The incomplete use of the budget allocated for state support in the field of lending to entities engaged in agricultural production is due to the following reasons:

- a) absence of applications from farms;
- b) non-compliance of farms' applications with the established norms for submitting applications for subsidies;
- c) low level of planning in the regions;
- d) difficulties in implementing the measures. The indicators announced at the beginning of the fiscal year are subject to significant changes by the end of the year, which limits the use of budget funds at the end of the year;
- e) lengthy procedures related to cadastral works and land formation;
- f) inadequate level of explanatory and consulting services provided to farmers by local authorities.

One of the important problems of the current mechanism for regulating banking activities in the country is that it ignores specific factors such as low profitability of agriculture, instability of incomes, high level of debt of agricultural producers, dependence on natural and climatic conditions.

3. MACROECONOMIC STATISTICAL ANALYSIS OF AGRICULTURE

The agrarian sector is one of the most important parts of the economy, as well as an important sector that characterizes the socio-economic development of the state, employment, as well as food security. From this point of view, it is important to study and analyze the processes taking

place in the agricultural sector. To determine the role and impact of agriculture in the country's economy, let's look at the statistics given in Table 1:

Table 1: Separate indicators of GDP and the agricultural sector of the economy for 2005-2018

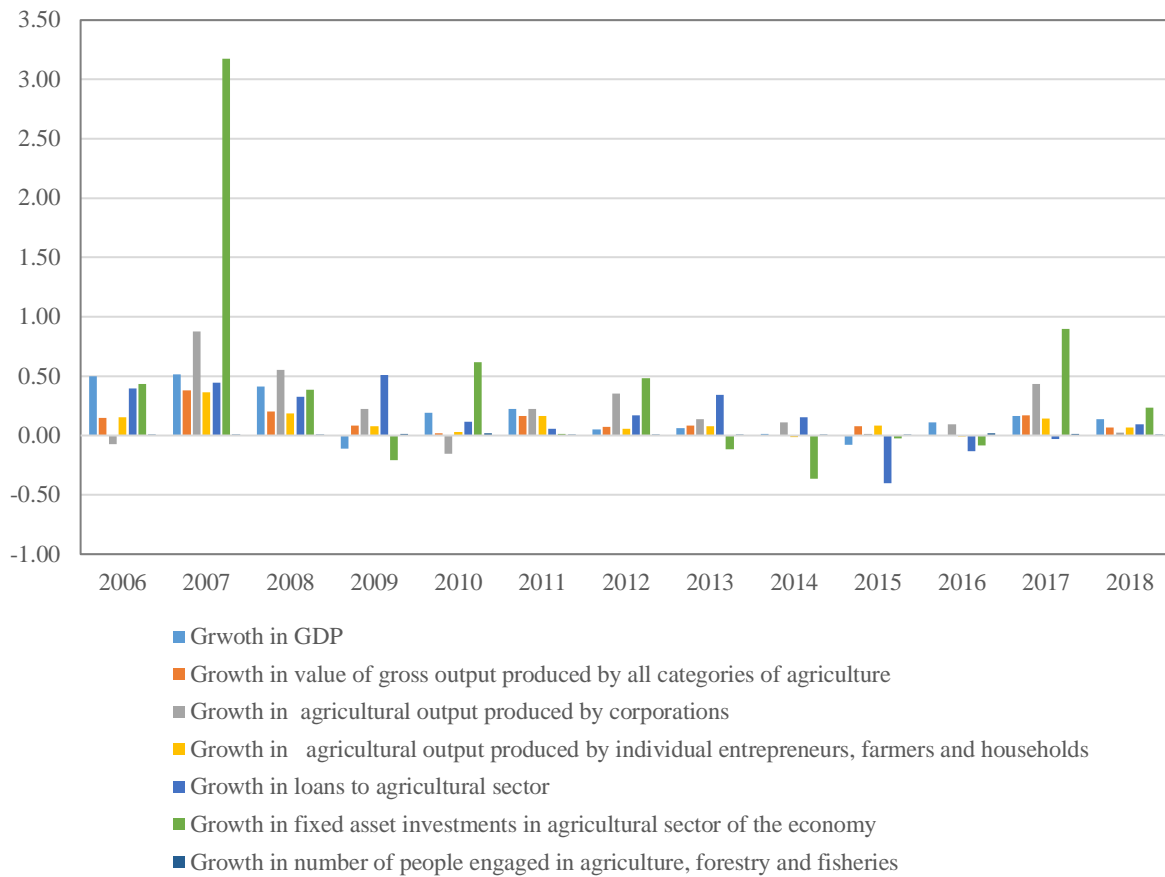
Years	GDP (mln. AZN) X1	The value of total gross agricultural output (mln. AZN) X2	The value of gross agricultural output produced by corporations (mln. AZN) X3	The value of gross agricultural output produced by individual entrepreneurs, farmers and households (mln. AZN) X4	Loans to agricultural sector (mln. AZN) X5	Fixed asset investments in agricultural sector of the economy (mln. AZN) X6	Number of people engaged in agriculture, forestry and fisheries (thousand people) X7
2005	12522,5	1 844,8	68,8	1 776,0	97,6	40,7	1573,6
2006	18746,2	2 115,5	63,7	2 051,8	136,5	58,3	1583,2
2007	28360,5	2 918,6	119,6	2 799,0	197,2	243,3	1597,6
2008	40137,2	3 505,9	186,0	3 319,9	261,5	336,5	1611,3
2009	35601,5	3 805,5	227,9	3 577,6	394,8	266,6	1628,6
2010	42465,0	3 877,7	192,6	3 685,1	441,3	431,0	1655,0
2011	52082,0	4 525,2	236,0	4 289,2	466,7	437,3	1657,4
2012	54743,7	4 844,6	319,4	4 525,2	546,2	648,8	1673,8
2013	58182,0	5 244,6	363,9	4 880,7	733,3	574,3	1677,4
2014	59014,1	5 225,8	404,5	4 821,3	847,3	363,9	1691,7
2015	54380,0	5 635,3	410,1	5 225,2	508,1	355,4	1698,4
2016	60425,2	5 632,4	449,2	5 183,2	441,3	325,1	1729,6
2017	70337,8	6 580,0	645,4	5 934,6	429,2	617,8	1752,9
2018	80092,0	7 010,0	660,9	6 349,1	470	764,4	1770,8

(Source: www.stat.gov.az and www.cbar.az prepared by the author on the basis of information obtained from the websites)

According to Table 1, the share of the value of agricultural products in GDP varies between 8-14 percent. Thus, the highest rate was observed in 2005, and the lowest in 2011. If we pay attention to the volume of credit investments in this area, we can determine that in those periods, ie in 2011 compared to 2005, the volume of credit allocations increased 4.4 times, but the volume of agricultural production increased 2.4 times. As for investments in fixed assets in agriculture, in 2011 there was an increase of 10.7 times compared to 2005. These indicators lead us to the conclusion that the misuse of funds has led to the loss of material resources. The role of individual entrepreneurs or family farms in the creation of agricultural products is greater. This, in turn, means a larger development in the retail trade in agricultural products. In the context of widespread entrepreneurship, the development of private-public partnership as a priority at the macro level could have a positive impact on this area. With regard to employment in this area, it should be noted that although the trend of increasing the number of workers for comparable periods is observed, it can not be attributed to per capita productivity. The highest figure for comparable periods in terms of per capita agricultural production was in 2018. Let's describe the growth dynamics of the indicators in the areas mentioned in Figure 1:

Figure following on the next page

Figure 1: Growth dynamics of separate indicators of GDP and agricultural sector of the economy for 2005-2018



According to Figure 1, the volume of investments in fixed assets in the agricultural sector of the economy in 2007 increased more than 3 times. In 2006-2018, according to the above diagram, the growth dynamics in no area exceeded 100 percent. The biggest decline between these years was observed in 2015 in the volume of increased loans to the agricultural economy. However, in the same year there was an increase in the total value of agricultural products. The study concludes that the increase in the volume of loans allocated to this area is not so decisive in increasing productivity. Let's use the method of correlation statistical analysis to measure the interaction of individual indicators related to GDP and productivity and financing of the agricultural sector of the economy for 2005-2018. In this case, the correlation coefficient between the indicators was calculated in the excel editor and described in Table 2.

Table 2: Correlation between GDP and separate indicators of the agricultural sector of the economy for 2005-2018

	X1	X2	X3	X4	X5	X6	X7
X1	1						
X2	0,984894	1					
X3	0,940375	0,969203826	1				
X4	0,986289	0,999413402	0,960201652	1			
X5	0,71411	0,686058743	0,571347524	0,698670751	1		
X6	0,88577	0,839999788	0,78129766	0,844073119	0,611289958	1	
X7	0,962519	0,981124662	0,974863248	0,977217971	0,618566757	0,795911173	1

As we know, the correlation coefficient varies in the range $-1 \leq r \leq 1$ and indicates the opposite when it is negative, the opposite when the value is negative, and a positive relationship when it is positive. As can be seen from Table 2, there is a medium-positive and a high-positive relationship between GDP and other area indicators analyzed. In other words, the impact of the increase in the cost of production in the agricultural sector on GDP is directly proportional. At the same time, the fact that the correlation coefficient in Table 2 is higher than 0 indicates the existence of a positive interaction effect among other indicators. Since there is a positive correlation between the value of gross agricultural output and GDP, let us use the regression analysis method to determine the extent of this positive effect between them. Here, let's analyze the regression by taking the value of the agricultural product as a factor and the GDP as a result. Regression analysis is expressed by the following formula:

$$\hat{y}_x = a + bx + e$$

From here,
and - straight line parameters;

- factor sign.
- is a standard error.

The following formula is used to solve the linear regression equation and determine its parameters:

$$a = \frac{\sum y \sum x^2 - \sum xy \sum x}{n \sum x^2 - \sum x \sum x};$$

$$b = \frac{n \sum xy - \sum y \sum x}{n \sum x^2 - \sum x \sum x}$$

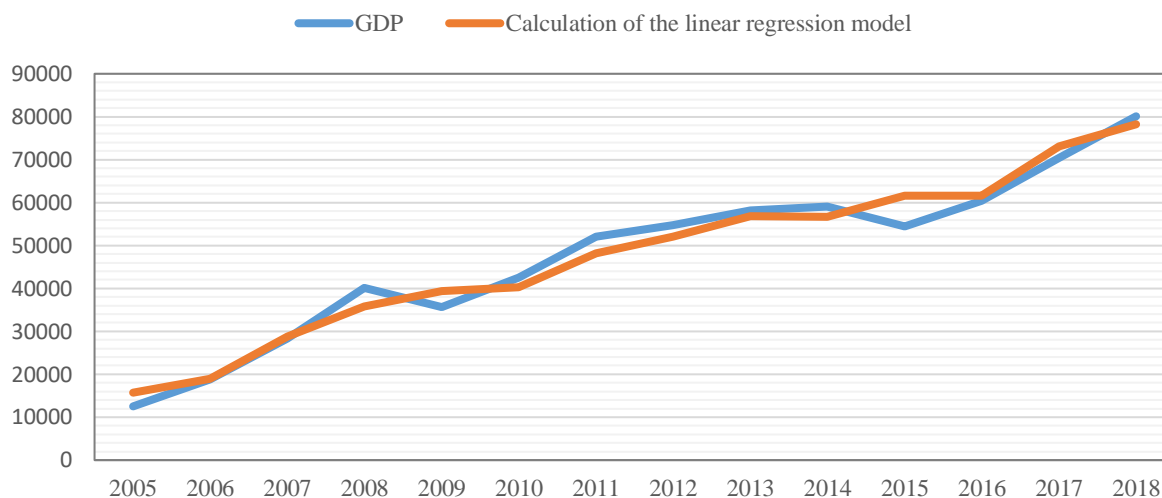
As a result of our calculations, the regression model of the relationship between the value of gross agricultural output and GDP is defined as follows:

$$\hat{y}_x = -6614,8423 + 12,10366605x$$

To verify the validity of the linear regression model, let's show the relationship with GDP in Figure 2:

Figure following on the next page

Figure 2: Description of the relationship between GDP and the indicators obtained as a result of the calculation of the linear regression model



According to the obtained linear regression model, if the value of agricultural products increases by 5 percent in 2020 compared to 2018, the GDP for this year will be 82,474.2 million manat.

4. ISSUES TO IMPROVE IN AGRITULTURAL FINANCIAL SUPPORT

In order to increase the efficiency of the production of agriculture products, taking into account the above, the following directions can be attributed to the development of the national agrarian financing system:

- development of preferential agriculture lending for seasonal production needs. That is, based on the season in different areas of farms, the possibility of providing holiday loans during periods of production stagnation, the possibility of deferred payments in the fourth quarter;
- support of targeted credit funds by providing loans directly to agriculture organizations;
- to ensure that the demand for financial resources is met on more favorable terms than market conditions;
- simplification of the document flow procedure, which is to determine the number of required documents in proportion to the amount of the loan, as well as to improve the single database of agriculture manufacturers on key financial indicators;
- reduction of interest rates, in particular, the provision of interest-free loans, long-term loans, interest compensation, as well as compensation for rent for agricultural machinery by the state.
- determining the status of the country's national agrarian financing system at the legislative level;
- establishment of the Agrarian Development Bank of the Republic of Azerbaijan and an investment promotion fund, the activities of which are regulated by a special law. Granting the Agrarian Development Bank of the Republic of Azerbaijan the status of a bank that does not have a regional network and sells banking products wholesale.
- transformation of Agrarkredit Bank's regional offices into independent regional agrarian banks participating in the national agrarian lending system on the basis of a real private-public partnership;
- providing institutional, legal, capital and resource support for the establishment and development of banking cooperatives with the participation of small and medium-sized agricultural producers.

4.1. Public-private agricultural partnership

The target direction reflected in paragraph 7.3 of the Strategic Roadmap of the Republic of Azerbaijan is the application of important driving mechanisms for the realization of goals in the field of trade. The country needs a functional restructuring in order to develop the sector. The application of the public-private partnership model may be considered expedient for the successful implementation of restructuring works (www.e-qanun.az, 2020). To this end, the organization of joint ventures will lead to the elimination of this risk. In the field of agriculture, joint venture is a form of entrepreneurship based on the combination of fixed and working capital of partners, distribution of revenues from production, services, management of the enterprise and the distribution of risks associated with its activities. In a joint form, public and private enterprises as a separate economic unit have their own features and characteristics in the national economic system and in the world economy as a whole (Г.Мыстафаева, 2019, p. 14). Through private sector outsourcing or partnerships, government price reductions can provide a strong incentive for private firms. Typically, private companies experimenting with new technologies and procedures can avoid the bureaucratic problems that plague state and local governments. The public-private agricultural partnership allows the government to expand the range of services without increasing the number of government employees, as well as without investing heavily in facilities and equipment. Private companies are able to take higher productivity from the labor force at their disposal compared to the civil service system, apply a half-day system if necessary, as well as use less labor-intensive methods of providing services. The private sector partnership allows the state to make the most of the scale benefits of the economy. Collaboration with several suppliers guarantees the sustainability of services to the government. By cooperating on a competitive basis in the service sector, the state can determine the real costs of production and thus prevent waste. Cooperation with the private sector also allows the government to adjust the size of projects as an additional demand or need variability. Partnerships that completely or partially drive inefficient state-owned enterprises out of the market can help reduce government subsidies or expenditures, as well as ease fiscal pressure on national wealth. Public-private agricultural partnerships are usually able to respond more quickly to “market signals”, integrate modern technology more easily, and create stronger opportunities for infrastructure maintenance. Cooperation between the private and public sectors not only meets the demand for consumer goods and services, but also stimulates job creation and income growth.

4.2. Support for agriculture subjects in the context of the COVID-19 pandemic

In the event of a pandemic, the current legislation provides for a basic social insurance premium of 6% of the minimum wage for each able-bodied family member, regardless of whether the individual owns agricultural land or not. Considering that the minimum monthly wage has been increased to 250 manat, the state pays 60 manat per month to individuals who use up to 5 hectares of land and agricultural land suitable for 4 family members (www.taxes.gov.az, 2020). The proposed amendments to the social insurance legislation provide for the calculation of mandatory state social insurance premiums for each family member of individuals using agricultural land, depending on the area of land, the minimum monthly wage at the following rates:

- up to 5 hectares - in the amount of 2 percent;
- from 5 to 10 hectares - in the amount of 6 percent;
- More than 10 hectares - in the amount of 10 percent.

It is also planned to replace the submission of social insurance reports by landowners with a fixed receipt.

In addition to the above, a number of tax benefits and exemptions are expected to cover businesses operating in the field of agriculture (www.fins.az, 2020):

- Withdrawal of income from the expenses incurred by the taxpayer for the necessary preventive measures, including disinfection, carried out by the taxpayer in order to prevent the epidemic and protect the life and health of the population;
- Periodic exemption from VAT of certain types of products necessary for food and medical needs of the population.

5. CONCLUSION

There are sufficient financial and infrastructural resources for the development of agriculture in Azerbaijan. Also, at the macro level, all sectors are directly or indirectly dependent on the development of the agriculture sector. In this regard, the financing and development of agriculture is one of the important issues that stimulate the development of the country's economy. Among the steps taken by the country to develop the non-oil sector, there is progress in the agriculture sector. Thus, the growth rate in the value of the gross output produced by agriculture is almost the same as the GDP. The value of gross output produced by individual entrepreneurs, family farmers and households in agriculture exceeds the value created by farms operating in the relevant field. The continuation of this situation for many years means the development of retail trade. Credit investment in the agriculture sector has not led to a significant increase in productivity in the short term. In 2018, more than 10% of the total value created in the field of agriculture was the volume of investments in fixed assets in the agriculture sector of the economy. This means that investments are relatively unlikely to recover. In conclusion, agriculture is an important part of the country's economy in terms of ensuring food security, as well as increasing funding for large-scale export production, including re-examining the allocation of funds for non-performing activities or accurate risk assessment and government support in this area. programs need to be developed.

ACKNOWLEDGEMENT: *Although the results of our research show that the amount of funds allocated from the government budget is sufficient, the issue of control over the problems of transparency in the delivery of these funds is also one of the most important issues. At the same time, it would be more expedient to provide credit terms provided by the state in more accessible forms for agricultural entities. It should also be noted that the increase in productivity in the field of agriculture is weakly related to employment.*

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ASSESSMENT OF POLICIES AND STRATEGIES OF ECONOMIC INTEGRATION OF SMALL AND MEDIUM ENTERPRISES (SMES) IN MANUFACTURING SECTOR IN ETHIOPIA: THE CASE OF TIGRAY REGIONAL STATE

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ABSTRACT

Eradication of poverty requires multi-pronged strategies and actions involving both macro and micro policy initiatives on different fronts. Well-designed strategy satisfies the need for economic integration and economic growth. This should be addressed by the policy makers to support and co-ordinate the local and international market, However, the strategy was not fully responding to this need. Thus, the development of Small and Medium Enterprises (SMEs) in manufacturing sector has been highly agenda on Tigray Regional State as a means of generate employment and reduce poverty. The purpose of this study is to assess the policies strategies and its implementation to support the economic integration of SMEs in Ethiopia, in the case of Tigray Regional State Mekelle. This study was employed qualitative research method. Collected data by interview 15 key informants and 8 focus group discussion including non-participatory observation of the researcher. The result also revealed that SMEs are the missing element, no support to middle enterprises in the strategies especially with related to finance rather focus on micro and large-scale enterprises; the level of implementation of the strategies of SMEs is less effective .The problem of knowledge on operational manuals and guidelines, inadequate capacity to solve the constraints of SMEs locally and internationally affects competitiveness of SMEs, There is also a poor coordination and communication platforms of the federal with regional bureaus, lack of creating backward and forward linkages large enterprises with SMEs, improving industrial relationship .All the above issues are not addressed by the strategies. SMEs are operated in a difficult situation suffering from financial constraint and work premises are found challenging to all SMEs. In addition, the commitment, capacity, and attitude of leaders at different level is weak. So, SMEs strategic should be revisited to incorporate the SMEs current issues and considering the political and economic situation in the ground ; the government officials should re-orient the implementation strategy of Growth and Transformation Plan II towards improving SMEs; leaders should be equipped themselves with the required knowledge and skills and positive attitude towards the policies and strategic of SMEs.

Keywords: *Small and Medium Enterprise, Economic Integration of Small Enterprises, Work premises*

1. INTRODUCTION

In developed and developing countries, small and medium enterprises (SME) in manufacturing sector plays a significant role in transforming the overall economic growth and future strength through alleviation of poverty and employment creation, (Weldegabriel,2012). Considering these, the Ministry of Trade and Industry which is the responsible organ of the Federal Government in the formulation of policies and strategies to promote the growth and expansion of small enterprises designed the Micro and Small Enterprise Development Strategy (MSEDS) in November 1997 E.C, which takes a systematic approach to addressing the difficulties and promoting the growth and expansion of the sector (MoTI 1997). In order to ensure institutional coordination in the sector, CSA 2003; Mesfin,2015) the ministry created the new Federal Micro

and Small Enterprise Development Agency in 2005 (Proclamation 33/98) (Belay 2000: CSA 2003; Mesfin, 2015). In 2008, the Regional governments also established Regional Micro and Small Enterprises Development Agency to provide extension services to the sector at the regional level (Adil 2007; Mulatu 2005). The strategy stresses that “various policy, structural and institutional related problems and bottlenecks” have constrained the role and contribution of the MSE sector in the national economy. It thus primarily aims at creating and enabling legal, institutional, and other supportive environments for the development of micro and small enterprises. The specific objectives of the strategy include facilitating economic growth and bring equitable development; creating long-term jobs; strengthening cooperation between micro and small enterprises; providing the basis for medium and large-scale enterprises; promoting exports; and balancing preferential treatment between MSE and bigger enterprises. The intended micro and small enterprises support include creating legal framework; improving access to finance; introducing different incentive schemes; encouraging partnerships; providing training in entrepreneurship, skills, and management; improving access to appropriate technology, information, advice and markets; and developing infrastructure. The strategy also states its intention to strengthen private sector (Wolday et al., 2001). Following these, the Regional State of Tigray have also developed Tigray Micro and Small Enterprises Development Agency (TMSEDA in 2008 to facilitate the implementation of SMEs strategies. The Tigray Micro and Small Enterprises Development Agency (TMSEDA) have taken several measures by designed plan action 277/17 and divided the MSE into Micro and SafetyNet and SMEs in 2018 to the enterprise sectors. In addition, it has established a network forum with major stakeholders including chambers of commerce, micro financial institutions, municipalities, and other government organizations. However, this strategy does not include the middle enterprise in the category which is too much recommendable as transition to large scale enterprises though Growth and Transformation Plan II has given priority as a pillar of economic growth through the process of economic integration (Amare, 2017). Economic integration is removed the economic barriers between two or more economies to mutual exchange their production factors. Eshetu and Mammo (2009) argue that “Ethiopia has failed to benefit from the remarkable growth in the SMEs manufacturing sector,” which emanate from the lack of appropriate policy and strategies to integrate into development strategy and sector oriented support services agencies restrain the development and expansion of SMEs. This implies that SMEs operate in a difficult business environment due to the government failure in addressing to the above overall problems and has not made significant progress in pulling labor out of agriculture into more productive. Thus, the Federal government decide to establish SMEs coordinating body at a regional level policy guidance and based on capital labor, and employees taken experiences from different countries especially from India, Japan, and Malaysia. Tigray Regional State SMEDA also design a SMEs action plan 277/2017 to support and coordinate SMEs in the region. However, because of different reasons the strategy is not implemented effectively. Therefore, this study analyzes the implementation of the existing policies in relation to economic integration in manufacturing sector and examine the practice of economic integration among SMEs in the manufacturing sector.

1.1. Problem Statement

The Ethiopian economic development strategy is expressed by the Growth and Transformation Plans (GTP) to accelerate and enable a sustainable economic growth and transformation by promoting an agriculture-based, manufacturing-led industries and export-focused development through light manufacturing sector and Small and medium enterprises. The SMEs strategies is enhancing productivity, creating job opportunities, and reducing poverty. The regional government of Tigray is now looking into the future and has embarked on development strategies, evaluated the implementation of policy and strategies organized worldwide Tegar

Diaspora and internal and external academician conference in 2018 and 2019 at Mekelle aimed at transforming Tigray into the most dynamic and technologically advanced region in Ethiopia (GSTS, 2019). However, the country has failed to benefit from this due to lack of appropriate policy and strategies to integrate into development strategy (Eshetu and Mammo, 2009). It was difficult to make the strategy practical specially in delivering business development service for SME operators (GSTS, 2019; Arega et al., 2016). Absorbing unemployment into the productive sector to achieve the objective of the of SMEs in manufacturing sector is challenging in the region. Additionally, not enough research studies are conducted on SMEs policy and strategies in the areas of economic integration among SMEs in manufacturing sector. Thus, this study assesses the effects of policies and strategies areas related to SMEs in Tigray Regional State. The basic questions of this study is, how does the existing policies and strategies implemented to support the economic integration of the SMEs in Tigray? What is the existing situation of SMEs in Tigray Regional State and to what extent does the government support SME needs for deeper integration in Tigray?

2. SME POLICY AND STRATEGY DEVELOPMENT IN ETHIOPIA

The Government of Ethiopia has set several national development goals to be achieved in the lower middle-income status by 2025. According Guang Zhe Chen, 2015, the Ethiopian government has prepared a private sector development strategy to improve the productivity and modernization of the agricultural sector and boost the technological sophistication and economic input of the industrial sector. This include, among others, design a strategies of light manufacturing sector that leading country in Africa with rapid economic growth annually by 11% till 2025, increased contribution of industrial sector to GDP: form 15% in 2015 to 28% by 2025 and manufacturing sector from 5% in (2015) to 18% in (2025). The priority sectors identified in these strategies are: Leather and leather product, textile and Garment, wood and metal work and agro-Processing. However, the performance of manufacturing sub sector is not appreciated that is 11.36, 11.50 and 11.34 percent in 2016, 2017 and 2018, respectively due to lack of proper strategies and coordination system of the supporting package by different actors and weak networking among the SMEs themselves (GTP, 2015/16; Tegay, 2018). The Ethiopia economic development strategy is expressed by the Growth and Transformation Plans II (GTP II). The main aim of GTP II is to secure broad-based, accelerated, and sustainable economic growth and transformation by promoting agriculture-based, manufacturing-led and export-focused development strategy. The GTP II set the objectives to consolidate and further develop the infrastructure, in particular public sector led projects; focusing on agricultural development as the basis of economic growth, emphasizing on the needs to increase agricultural investment, productivity and non-farm rural activities; promoting the industrial sector as the leading sector and stress the need to develop dynamic and private-sector led manufacturing industries; and increasing exports of manufacturing goods with a goal of doubling exports in five years (GSTS, 2019). Although employment creation is an important objective in the GTP I and II, the disproportionately lower job growth has in recent years become a critical economic policy concern, both politically and socially, in the country, including Tigray (Mokennen, 2019). Hence, it is crucially important to enhance current and developing new policies and strategies to promote economic integration that generates an adequate number of quality jobs by strengthening the investment-growth-employment and encouraging SMEs to participate in the 2018 free trade agreement within African countries. World Bank Group (WBG, 2015) also identified that several policies, and strategies has been developed to create enabling environment and come a long way in achieving significant progress increasing employment opportunity and reducing poverty through micro and small business enterprise. However, Ethiopian firms face significant financial constraints because financial policy do not accommodate the demands of the small and medium enterprises.

As Gebrehiwot & Welday 2004; Haggblade et al. 1990, the policy and strategies biased that favor large firms over small and medium enterprises, have been made quantify policy-induced cost differentials between small and large enterprises in accessing resources such as labour and capital. However, such bias is often difficult to explain as some policies may be biased against small and medium enterprises while others favour them. This is shown that the strategies designed in 1997 of MSMEs in Ethiopia which is missed in the middle elements. In line with this strategy, the regional government of Tigray has embarked upon implementation of the plan focusing mainly on the development of light manufacturing industries and preparing SMEs strategy plans. To this effect, the Government has adopted policy focused on the development of the manufacturing sector using industrial parks to attract FDI and to support SMEs. Targeting SMEs is important as they are an engine for jobs creation and a manifest of a thriving and dynamic economy. Furthermore, Ethiopia has not made significant progress in pulling labor out of agriculture into more productive and industrial jobs. The share of employment in the manufacturing sector has changed only slightly and is virtually unchanged since 1999 at below 5 percent of total employment (report 2015). Thus, the performance records of GTP I and ongoing GTP II, at the region have been somewhat disappointed. If additional measures are not taken to accelerate development of manufacturing sector by integrating all stakeholders and government, the likelihood of widening income and development gap in the region are unbeatable. This calls for urgent and systematic research on economic integration among SMEs policies and strategies and practices in the region. Economic integration brings striking increase in competition from imports, the entry of new foreign investors, and strengthening of domestic large firms that take over traditional, mostly local SME markets (OECD, 2004). Ariman (2001, and Chen (2005) point out that small and medium enterprises require policies conducive to growth, a good incentive package and encouraging business environments to produce products that are competitive both locally and internationally. A government that is committed to the promotion and development of small and medium enterprises makes fiscal policy and monetary setting stable with reasonable interest and exchange rates (Berkham et al. 1996 and Berry 1995). Furthermore, financial markets and tax rates should be stable and moderate in addition to endorsing policies that minimize the cost of business registration and licensing. The Federal Government and the Tigray Regional Government playing the role of job creator either directly or indirectly, including public investment in infrastructure using labor-intensive techniques. Public infrastructure spending can be more directly employment-generating, including indirectly through higher multiplier effects within the economy, But the question is, has employment been at the front-row of the Tigray Regional and Federal Government's economic development strategy, or has it been subsumed under the investment, trade and economic growth strategies/imperatives? Is there a critical need for developing a holistic employment strategy that is also coherently integrated with the overarching economic development and transformation strategy? (Makonnen, 2019). Additionally, the underdeveloped productive capacity of the economy in Ethiopia and Tigray; and the challenges of absorbing into the economy the annual entry into the labour market of over two million working age population in Ethiopia and over 200,000 in Tigray. ii. Challenging unemployment and employment indicators. Urban unemployment rates in Ethiopia and Tigray in 2018 were 19.1% and 21.5% respectively. Furthermore, challenging youth unemployment in urban areas, where 25.3% of young people aged 15-29 in Ethiopia and 27.8 % in Tigray were unemployed. Similarly, very challenging economic activity/labour force participation rates, employment rates and informal activity rates for Ethiopia and Tigray (Appendix 1). iii. The low volume and growth of employment generated in the industrial and manufacturing sectors. iv. Similarly, the relatively low volume of employment generated by micro and small enterprises (MSEs). For example, 144,107 jobs in Ethiopia and 31,556 in Tigray in 2017/18. v. Lack of structural transformation of the economy, including the phenomenon of urbanization without industrialization and an

under-developed agricultural sector. vi. The underperformance of the export sector, and the shortage of vital foreign exchange. vii. Growing government debt burden.

3. RESEARCH METHODOLOGY

This study has employed a qualitative research method conducted in Ethiopia: Tigray Regional State Mekelle city, focusing on the policies and strategies of SMEs and its status and implementation for Economic Integration of SMEs. The data were collected through interviews on 15 key informants (10 SMEDA leaders and stakeholders, five selected SMEs owners) and eight focus group discussions with the SMEs council and experts about challenges faced during the implementation of the strategy in the operation of SMEs activities. It also used non-participatory observation of the researcher. The data gathered were presented, analyzed, described, and interpreted through conceptualization, explanation and interpreted qualitatively in addition, secondary data were also analyzed.

4. FINDINGS AND DISCUSSIONS

4.1. Related policies and strategies implementation in supporting SMEs integration

Question related to the relevancy of the Small and Medium Enterprise policy and strategies:

- The researcher raised some questions to the SMEDA officials and other stockholders' like "How is the Small and Medium enterprises strategies designed? Is it flexible? If your answer is yes, when is it amended? Is the policy applicable for SMEs? How the SMEs strategies link with other sectors, to what extent the SMEs contribute to the stated objectives in the policies, strategies including GTP of the country in general, focusing on Tigray Regional State in particular? Does the existing policies and strategies protect SMEs from the new trade agreement signed in March 2018?

Because the free trade agreement may be extremely challenging to SMEs due to lack of negotiation, if the market is unhealthy, it affects the genuine market. Therefore, it requires new trade and market policy, motivation, support and subsidize to SMEs to increase ability to create linkage between local firms and foreign firms to produce and deliver high quality goods and service. The key informant said that policies and strategies are applicable to the region's SMEs and gets out of poverty if it works out properly but, the strategy was not fully responding to the need of SMEs. The problem of the strategy was started from the establishment of SMEs. No proper studies were conducted before SMEs were established such as the criteria to be established, demand driven rather than political driven, who support them? Do the supporting unit have a capacity in knowledge, skill, and administrative system better than the SMEs? Most of the supporting bodies were graduated from TVET and they are teachers who have not gotten benefits to support SMEs. The expert's knowledge and skills are not better than SMEs operators. Lack of clarity in the strategy by the supporting units. Additionally, it lacks proper implementation because of the various reasons. First, policies are dynamic which have broader direction, so it lacked skilled experts, commitment of the leaders especially at low level position. Second, SMEs are the missing element in the strategies, especially with regards to finance, no support to SMEs rather focusing on micro and large-scale enterprises. Thirdly, the strategies and principles of SMEs need to be link with agriculture, export lead human intervention, linkage with local and foreign investors, participation of community, and intervention of government critically. Fourth, the linkage of SMEs strategy with other development sector is weak even though the interest of government is very high. Fifth, the strategies lacked proper action by government officials and less effort of SMEs. Finally, SMEs are not protected from the new trade agreement signed by Ethiopia Government because they are not competing in the international market due to lack of resources and technology. Hence, the respondent did not give recognition to the contribution of policies and strategies

implementation in supporting SMEs in Mekelle city to play their role in the economic integration and they added that the SMEs development strategy and the six supporting packages were not properly implemented on the ground. On the other hand, the operators are not happy by the supporting officials and experts or the manufacturing agency. while the agency also were not happy because its mandate is only as facilitator but no power to provide full supporting package to SMEs. The operators and officials are coming from formal graduate educational backgrounds having very weak knowledge, but they enter business through practice. Furthermore, the interview results show that there is a failure in creating business environment, SMEs have face wide range of challenges, there is a failure of the organizing permanent forum with enterprises, and inability to provide the required service. According to the interview, the respondents in their own words says the leadership in the small and medium enterprise development is an issue, and lack of conducive environment for enterprises to function in the economy. There is poor coordination of responsible sectors, improper functioning of council, and great lack of contribution in establishing a suitable environment for the SMEs in accessing current information, providing a favorable working place and attractive market opportunity. Data from key informants indicate that though the capital is allowed from Kaza capital goods 15% of the total held for leasing finance and development bank loan saving of 20% implanting strategy in the city is weak. It takes time to get any loan. The Capital is tied up in the whole process of the loan influenced by bureaucracy and the demands of SMEs are not addressed adequately which is the missing element in the strategy. Availability of land has been cited as one of the top constraints for small and medium manufacturing enterprise development and expansion. Land allocated for industrial zone by regions and Mekelle city administrations remain unutilized. Weak coordination between Federal and regional government, and lack of access to infrastructure are cited as the main reasons for not utilizing lands. The Tigray Small and Medium manufacturing industry Agency report (2019) shows that the first impeding factor for SMEs in manufacturing sector in the city is lack of access to working premises. Once land is acquired, the biggest obstacle reported is infrastructure, particularly in outlying expansion areas. Infrastructure is one of the most critical factors affecting firms' productivity in the long term and electricity stands out as one of the top bottlenecks highlighted by firms. On the other hand, no action is taken as the ideal land held by firms, the deadline for any land is four months. This implies weak follow-up by the municipality and SMEDA officials. Not only that, but the gap raised from the strategies are leading to limited experience, information, and networking, of SMEs in the manufacturing firms searching local and international market through effective competition. Because, factors that determine the competitiveness in economic integration are production factor, demand, competition, supporting facilities, and government as an external factor. These were assured by the group discussant that added, SMEs' are not capable to produce high-quality products and innovative to meet market demands internationally though they are highly competition each other in the domestic market. The reason they said is lack of quality input supply source.

5. CONCLUSION AND RECOMMENDATION

5.1. Related policies and strategies implementation of SMEs in the manufacturing Sector

Addressing SMEs manufacturing sector development concerns will have a paramount effect on the process of socioeconomic development of the study area. In line with this, the study indicated that concerned public sector leaders in the strategies implementation should play their role in grasping the required knowledge, skills and attitude of the industry strategy, preparing genuine working plan for economic integration, awareness creation and permanent SMEs forum and exhibition programs; creating conducive environment, providing with the basic supports (like human resource development-training, financial and loan facilities, working place, market development and marketing support, technological development and growth,

BDS), commitments to support, organizing, directing, coordinating, and conducting close follow up to speed up the SMEs development. The Addis Ababa action agenda on financing for development lays out financing priorities that calls for multiple interventions to build strong SMEs notable in the area of access to finance, skill, knowledge, technology transfer and creating linkage with regional and global value chain (UN, 2017; Eshetu, 2008). Regarding the implementation strategy, the concerned public leaders show progress, particularly in organizing one to five (net working or army development), creation of exemplary SMEs models, organize exhibitions and bazaars. However, there is still a remaining effort to play their pivotal role in implementing and practice in the SMEs development of the city properly at the expected level and it needs additional effort to play their roles.

5.2. Practice of economic integration among SMEs in the manufacturing sector

Relevance of program design and the circumstances of the problem under consideration is a key parameter in evaluating development programs. Hence, from the review of documents and analysis, the industry strategy has been relevant and timely to address the existing urban socioeconomic problems of the country including the study area. Despite the promised improvements achieved of economic integration among SMEs in the manufacturing sector. In practice the study indicates that the level of the economic integration among SMEs status issue result revealed that operators are not parallel to develop as with the city development or growth and the major issues of government incentives (tax reduction, subsidy and training of SMEs) in the study area. This directly implies that the level of implementation practice of economic integration status is less effective from the perspective of support instruments provided because of the gaps in monitoring and evaluation, absences in remedial measures need to be keep on track, the problem of knowledge on operational manuals & guidelines, inadequate capacity to discharge their roles, and training were nominal. Industrial transformation is not merely about increasing the number of manufacturing enterprises and/or earning hard currency from manufacturing exports. Enhancing the Competitiveness of SMEs in economic integration have indispensable roles in development. Levels and importance of economic integration for SMEs in manufacturing industry are crucial. This can be implemented when leaders perform their roles and responsibility properly in a systematic way. But there is lack of clarity on the implementation of the industrial development strategy. The strategy focuses mainly on the development of industrial parks to attract and FDIs (Foreign Direct Investment) to meet manufacturing targets. In other words, the industrial strategy of the country is about developing suitable industrial environment where numerous locally owned micro and small enterprises will be emerged, incubated, and grew all over the country. Growth and Transformation Plan II has no clear direction as to how it will solve the constraints that have hindered the development of the vast industrial enterprises and micro and SMEs in the country and bring about the needed manufacturing transformation. For instance, how will the GTP II solve the critical shortage of industrial inputs, shortage of foreign currency, under developed trade logistics, how to improve the management and technical skills of local entrepreneur and enhance their competitiveness, technology transfer, research and dissemination, poor coordination and communication platforms of the federal with regional bureaus, creating backward and forward linkages as well as the large enterprises with micro and SMEs, improving industrial relationship (employer-employees), are not properly addressed. At this time SMEs are not protected because they are not competing in the international market due to lack of resources and technology. These requires the government adequate support to SMEs.

5.3. Recommendations

- 1) The government officials should re-orient the implementation strategy of GTP II and the political situation in the ground towards improving the manufacturing sector effectiveness;

- 2) The government should set a criterion to form SMEs;
- 3) The government should form SMEs based on their willingness and know-how to operate a business;
- 4) The policies, strategies and plan for action should be inclusive in the missing elements (middle enterprise) that constraint access to finance and establish a separate financial institution;
- 5) The public sector leaders should be committed and persistent to implement different activities related with economic integration among SMEs in manufacturing sector;
- 6) Leaders should encourage and promote active involvements in functioning of SMEs council and proper coordination of stakeholder, private sectors, and the SMEs at large to develop SMEs in the city;
- 7) The work should be mainly focused on awareness creation and capacity building of business operators and support providers to be able to understand how they can work and change their mindset;
- 8) The SMEs operators should create the ability of independent mentality to promote their products and access to market. Additionally, SMEs should avoid the rent seeking behavior related to land that were sold without added value;
- 9) SMEs Development Agency should create vertical and horizontal networking among actors and SMEs to solve common problems, sharing experience, develop a clear business plan that help to run their business and fulfill the requirement of access to finance, linkage with input suppliers and buyers in the competitive market.

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LOGISTICAL ASPECTS OF CHINA'S "ONE BELT ONE ROAD" INITIATIVE FOR AZERBAIJAN ECONOMY: CONTRIBUTION TO ECONOMIC GROWTH

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ABSTRACT

The South Caucasian region started to capture China's attention in 2013 when the «One Belt One Road» Initiative was announced. China's interest to expand its economic impact in this region can be explained based on a few factors: the region's growing demand for large investments, the economic crisis of neighboring countries caused by US and EU sanctions against Iran, Russia, and Turkey. It should be noted the growing geo-economic role of Azerbaijan in the implementation of the big logistical projects such as Baku-Tbilisi-Kars railway, Free Economic Zone within Alat International Sea Trade Port, international transport corridors "East-West" and "North-South". These projects have increased Azerbaijan's viability to become a logistical hub on the trade bridge between China and Europe. Today 96 percent of trade volume between China and Europe is carried out via sea routes. China is interested in using the remaining 4 % via land routes throughout the territories of countries that the Great Silk Way passed through in ancient times. This article will analyze the historical and economic aspects of trade relations between Azerbaijan and China, assess the carrying capacity of its transport potential, the possibility of attracting new investments and accessing their impact on its economy and GDP as a whole. Today, the Chinese economic system, and the world economy, is facing a very strong enemy-the coronavirus. A sharp drop in world oil prices on the background of coronavirus slowed global GDP and decreasing of demand for goods supplied by China to foreign markets. According to the Chinese government, the drop in exports for January-February 2020 in dollar terms was 17.2%. To strengthen ties with the world, first of all, all countries must be cured of this disease. And we believe that this difficult task will be solved and the "One Belt One Road" project will be realized.

Keywords: *Export, GDP, Great Silk Way, Investment, Logistical hub, Trade relations, Sea routes*

1. INTRODUCTION

Laid in the II century BC caravan route linking East Asia with the Mediterranean was used mainly for the carriage of silk, from China to Persia, Europe, and Africa. First developed in China, silk was very much demanded by world civilization and became a very profitable commodity for Chinese trade. That is why in the 19th century, the German traveler and scientist Ferdinand von Richthofen named this route the Great Silk Road (11). Of course, the route not only silk was carried along the Silk Road. Many other things tangible and intangible made their way from East to West, and vice versa. Chinese traders brought also delicate porcelain plates and thin but durable paper money (11). Despite the fact that Azerbaijan is not marked on the ancient maps of the caravan route, many sources say that in ancient times, the abovementioned route ran through the territory of Azerbaijan. This is evidenced by an excerpt from the book of the Azerbaijani historian and philosopher Abbas-Kuli-Aga Bakikhanov "Gulistan and Iram», written in 1841: "There is a tradition among the local inhabitants that in ancient times there was

an isthmus from Baku to the Turkmen coast, through which the Turkmens rode in masses to plunder here” (Bakikhanov, A. 1991, p.21). According to many signs, we can assume that the Caspian Sea has periodic tides that occur every few hundred years, but this phenomenon has not yet been determined reliably due to a lack of observations. Historical and archaeological documents provide valuable information that the Caspian Sea has experienced frequent sea-level oscillations during the historical period.

2. THE SECRET OF THE CASPIAN SEA

The Caspian Sea is surrounded by 5 countries: Iran, Azerbaijan, Russia, Kazakhstan, and Turkmenistan. The total surface area of the Caspi is 393,000 km² and the catchment area is 3.5 million km². The bottom of the sea is rich in oil and gas. Due to its landlocked nature, Caspi has fluctuated repeatedly during its geological period. The Sea is quite well studied (Rychagov, G., 1986, p.17), but in its mode many mysteries remain. The most characteristic feature of the water reservoir is the instability of the level with sharp drops and rises. The last increase in the level of the Caspian Sea occurred from 1978 to 1995 (Mikhajlov, V., 2000, pp. 67-68). According to this source during the Pleistocene (the last 700-500 thousand years) the level and the form of the Caspian Sea have changed many times in the range of about 200 m: -140 to +50 abs. m. Significant fluctuations in the level of the Caspian Sea occurred during the new Caspian stage of its history, coincided with the Holocene (last 10 thousand years). The changing shape of the Caspian Sea can be seen on the Posidonia map dated 150-130 BC. (12).

Figure 1: Caspian Sea on the map of Posidonia



Source: <https://i-mar-a.livejournal.com/288908.html>

In ancient times, the silk road ran through the territory of Azerbaijan. Preserved to this day in the village of Surakhani Temple Ateshgah and Saraies (motels), were used by tradesman for rest on a long way remind about the connection of the ancient silk road between China-India-Azerbaijan. (Sharma, B., Kundu, N., 2017, p.43). In ancient sources, the Caspi was also known as the Hyrkanian Sea. Strabo, and a number of ancient authors (Bakikhanov, A., 1991, p.72) Pliny, Arrian, Ptolemy used both names (Khalilova, T., Khalilov, E., 2018, pp. 24-25). Hecateus of Miletus, Strabo noted high mountains around the Hyrkanian Sea. According to the French-Russian researcher of the ancient paleogeography of the Caucasus and the Caspian Sea, S. Muravyov, the Great Caucasus range in ancient times extended in the direction of North-West to the South-East. Thus, in the North of the Caspian Sea, we can assume the location of the Absheron threshold, which is a continuation of the Caucasus mountains (stretching South-East towards Kopetdag in Turkmenistan), but is currently submerged by the water of the Caspian Sea. (Muravyov, C., 1983, p.127). Absheron threshold located above the water level formed a land isthmus connecting Absheron Peninsula with the coast of Western Turkmenistan and as a

result, tectonic movements of the bottom of the Caspian Sea, could sink under the water. Thus, the Absheron threshold, before the VI-VII centuries ad, was land and connected the Western and Eastern shores of the Caspian Sea. Probably, as a result of tectonic processes the Absheron threshold sank under the water (Khalilova, T., 2018, p. 120). Analyzing ancient maps and chronicles in this work, attempt is made to show that the Great Silk road to Europe in ancient times passed through the Caspian Sea on the Absheron threshold, and then to the Black sea. The Hyrkanian isthmus served as a link between Europe and Asia. If compared to the Caspian Sea in ancient times with its current shape, the difference is obvious and we can assume that Strabo's road is not an ancient myth, but a historical fact.

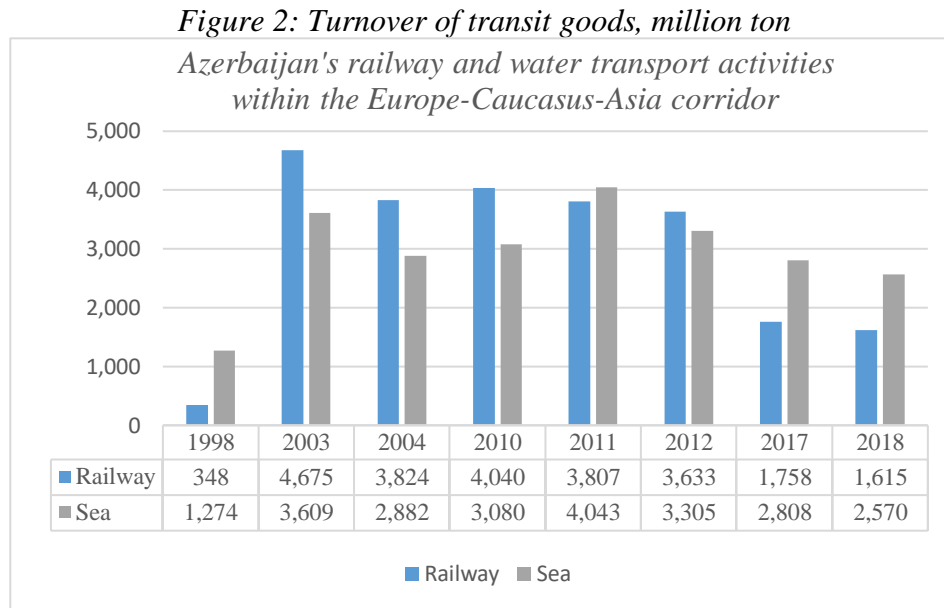
2.1. Does Azerbaijan's geo economic potential allow it to participate in the «One Belt One Road» project?

Today, the delivery of goods by camel caravan over vast distances is like a fairy tale and has remained in the past. The «One Belt One Road» project renews the ancient road and considers the transportation of a huge batch of all kinds of goods from East to West using the extensive infrastructure of railways, seaports, airports, and high-ways through the territories of the countries located on this route. Nowadays China is becoming a major economic actor in the world market, and Azerbaijan undoubtedly represents its value for Chinese global projects because Azerbaijan has created a modern transport network of railways, seaports, airports, and land roads. The Baku–Tbilisi–Kars railway was constructed in 2017 and is intended to finish a regional transport corridor linking Azerbaijan to Turkey including Central Asia and China to Europe. In the short term, this line involves the transportation of 6.5 million tons of cargo per year. The long-term goal is to increase cargo volume to 17 million tons. The Alat Free Economic Zone, created as part of the Alat International Sea Trade Port, will allow transportation of goods from 15 million to 25 million tons annually. (13). All these projects, geo-economic and stable political environment helped to increase the viability of the country and become a transportation hub on the China-Europe trade route. The creation of the transport hub will allow Azerbaijan to become an important transit node in the international logistical corridors "East-West" and "North-South". Azerbaijan has built six international airports. There is a new Shipyard, which will allow to produce all types of vessels and increase cargo transportation on the Caspian Sea, as well as to establish communication with Central Asian and European countries. According to the Global Competitiveness Report-2019 Azerbaijan's Rail Service' efficiency index is equals 70.8. This index has exceeded indicators of the USA (69.2), Germany (65.3), Estonia (60,9), Norway (57.6), Sweden (49.3). An efficiency index is calculated by combining next indicators: frequency, punctuality, speed, price. Azerbaijan ranked 11th among 141 countries in the world in this indicator. (Schwab, K., 2019, p. 9-13). According to the Davos world economic forum, Azerbaijan roads are ranked 34th in the world in terms of quality. Last years, 15 thousand kilometers of land roads have been laid. The geo-economic role of Azerbaijan in the implementation of major logistics projects, such as the Baku-Tbilisi-Kars railway, the creation of the Alat free economic zone within the framework of the Alat international sea trade port is very attractive for many countries. These projects boosted the region's viability for becoming a hub on the China- Europe trade route. 96 % of the trade between China and Europe is being conducted via ocean routes.

3. ORGANIZATION OF TRANSIT THROUGH AZERBAIJAN

The socio-economic model based on energy resources provided Foreign Direct Investment inflows and sustained economic development in 1993-2013. The fall in world oil prices in 2014, the economic downturn, and the double devaluation of 2015 dictated the need to adopt a new development program focused on strengthening the private sector. Therefore, in December 2016, the President of Azerbaijan I. Aliyev approved a new framework program for the

development of the country. To diversify the national economy, strategic roadmaps were adopted for 11 main industries. One of them was the "Strategic road map for the development of logistics and trade in the Republic of Azerbaijan", which defined the economic development policy in the field of logistics and trade of Azerbaijan for the period up to 2020, 2025 and after 2025. (14). After 2025, Azerbaijan's long-term goal is to become a regional logistics hub through efficient logistics centers with strong links with other countries. By creating a number of logistics centers in the country, Azerbaijan is trying to increase its share of transit trade in the region. As the chart shows, the highest level of transit cargo turnover was achieved by rail in 2003 - 4,675 million t-km, and by water transport - 4,043 million t-km in 2011.



Source: Self-compiled on the base of <https://www.stat.gov.az/source/transport/?lang=en>

Transit cargo turnover is always subject to certain risks and very much depends on global factors. The signing of the "Contract of the century" by Azerbaijan in 1994 and high world oil prices until 2003 contributed to the growth of transit cargo turnover. The invasion of Iraq by USA Armed forces in 2003, the beginning of the global financial crisis in 2008, the annexation of Crimea by Russia in 2014, the growth of oil production in the US, and the double devaluation of the Azerbaijani manat led to a cyclical turnover of transit cargo. Sharp fluctuations in world oil prices, trade wars between the United States and China, sanctions against Iran and Russia, and local wars over territorial claims of some countries have a negative impact on the entire world economy, isolating countries from participation in the international division of labor and increasing confrontation. All these reasons characterize the uneven distribution of transit cargo turnover. To become part of the global logistics chain, each country strives to create and use all its competitive advantages. Falling energy prices will soon lead to their replacement and cause a decrease in demand for them. In 2017, the economy of Azerbaijan revived after the stabilization of world oil prices, respectively, the volume of energy production increased and the turnover of transit cargo by water transport increased. The adoption of the law on the free economic zone "Alat" in 2018 and the completion of the construction of the Baku International Trade Port accelerated the receipt of strategic benefits for Azerbaijan from transport projects. Today, the Alat Trade Port is the largest port on the Caspian Sea. The Port has 13 berths and can handle up to 100,000 tons of cargo annually and aimed to become the main center in regional supply chains by offering complex logistics, customs, and temporary storage warehouses, value-added services, and acting as a regional intermodal distribution center. (16). 80 % of the total amount of transit cargo coming by rail from Kazakhstan and Turkmenistan is

served at the ferry terminal of the port of Baku and then sent to Europe. The Port of Baku has access to four major international railways: 1) the railway running from Baku to the South of Russia and further to the North-West; 2) the Baku-Tbilisi-Kars railway (BTK); 3) the railway from the South-West to Iran and then to Turkey; 4) the railway extending from the South to Astara on the border of Azerbaijan with Iran. Baku-Tbilisi-Kars railway is economically efficient, stable, safe, and fully complies with world environmental standards. This railway line will expand the possibilities of multimodal transport in Azerbaijan and ensure the growth of passenger and freight traffic. Azerbaijan has reconstructed all its main roads connecting the country with Georgia, Russia, and Iran over the past decade. In the North-South international transport corridor from Mumbai to Saint Petersburg, Azerbaijan plays an important role in the transit of goods from India, Iran and other Gulf countries through Azerbaijan to Russia and Europe. (Daly, J., 2015). The main partners of Baku Port are Djibouti Ports & Free Zones Authority (Djibouti), Alexandria Port (Egypt), Guangzhou Port (China), Lianyungang Port Holding Group (China), Cusco Shipping Lines (China), Mumbai Port (India), Indonesia Port Corporation (Indonesia), Port of Busan (South Korea), Port of Antwerp (Belgium), Bulgarian Ports Infrastructure Company (Bulgaria), Port of Constanta (Romania), Samsun Port (Turkey), Anaklia Sea Port (Georgia), Batumi Sea Port (Georgia), Panama Sea Port (Panama), Aktau International Sea Trade Port (Kazakhstan), Kuryk Port (Kazakhstan), Turkmenbashi International Sea Port (Turkmenistan), DP World (UAE), Qatar Ports Management Co.(Qatar). (16). Up to 10 million tons of cargo per year can pass through the Alat international seaport along the existing TRANS-Caspian route. Azerbaijan plans to receive more than \$ 2 billion in revenue per year from the transit of goods. If the cargo from China to Europe now arrives by sea during 40-45 days, then the cargo through the port of Alat will go in 12-14 days. In comparison with other routes this is the shortest existing corridor and it is shorter than the Northern corridor by 4.5 thousand km and the southern corridor by 1.2 thousand km. (Khalilova, T., Khalilov E., Renying, L., 2017/2019, p. 645). The development of sea transport and the growth of cargo turnover in transit is considered as a real contribution to the sustainable growth and diversification of the economy of Azerbaijan. Three maritime partners from China reflect its interest in including Azerbaijan in the "One Belt One Road" project. Another advantage of the Baku Port is that in comparison with other transport partner countries, Azerbaijan provides cargo services at lower prices, providing a high-quality service strategy. (16).

4. CONCLUSION

The new silk road is a trade corridor connecting China with Central Asia, the Middle East, and Europe. According to the global consulting firm McKinsey, this project can cover about 65 percent of the world's population, 1/3 of the world's GDP, and about a quarter of all goods and services in the world. (17). Beijing is ready to provide an \$ 8 trillion loan for infrastructure development in 68 countries, most of which are emerging markets. As for Azerbaijan, we can say that the country geographically, politically, and economically corresponds to the goals of the "One Belt, One Road" project. The construction of a commercial sea port and the Baku-Tbilisi-Kars railway facilitate transit trade through Azerbaijan. Modern transport infrastructure will expand the possibilities of multimodal transport in Azerbaijan and ensure the growth of cargo flows. The Caspian countries are increasingly interested in using Azerbaijan as a transit corridor. Kazakhstan is interested in developing the transport potential of Azerbaijan. In 2013, Kazakhstan transported about 3.5 million tons of oil, mostly by rail. Since Kazakhstan has its own terminal in the Black Sea Port of Batumi, it will need to transport oil through Azerbaijan to load the terminal. To be more comprehensive, the Azerbaijani logistics industry should develop a combined model of transit and logistics hub. The total potential of transit through Azerbaijan in 2023 may grow from 7 to 10 million tons.

In order to become the transport and transit center of the region, Azerbaijan must constantly search for cargo. To ensure continuous transit, it is necessary to increase the fleet of new cars and vessels, actively introduce elements of digitalization of the transport process, which will ensure the accelerated passage of goods through customs checkpoints and solve logistical problems as they arise.

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ANALYSIS OF EMPLOYMENT BY INDUSTRY TYPE IN THE REPUBLIC OF AZERBAIJAN AND SOME POST-SOVIET COUNTRIES

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ABSTRACT

The article is devoted to the study of employment by industry type in Azerbaijan and some post-Soviet countries. As known, the distribution of employed persons by different sectors of the economy is one of the key indicators that shows the level of development of the country's economy. The development of civilization has significantly changed the ratio of people employed in the economy in favor of service industry. A large share of this sector in GDP and employment is an indicator of the country's high level of development. In the post-Soviet countries which experienced a difficult period of transition, has formed a certain employment structure characterizing the level of economic development. In sectorial structure of employment there can be traced progressive and regressive changes that occurring in the economy of the country. The purpose of the research is to assess the current trends in the sectorial structure of employment in Azerbaijan and some post-Soviet countries. The article analyzes the changes in the structure of employment in Azerbaijan during the period of independence. The progressiveness or regressiveness of these changes are assessed and the reasons are explained. The article provides information on the sectorial structure of employment in Russia, Kazakhstan, Belarus and Georgia and it also provides a comparative analysis of the data in these countries with the situation in Azerbaijan. As a result of the study, the basic data are generalized and recommendations are given to improve the sectorial structure of employment. The article used the methods of comparative analysis, synthesis and logical generalization.

Keywords: *Sectors of the economy, Employment structure, Post-Soviet countries*

1. INTRODUCTION

The sectorial employment structure is one of the key indicators of the country's level of economic development. Growing service share in GDP and overall number of employees indicates a high level of country development. In underdeveloped countries, mining and agriculture prevail in GDP and in the number of employed. Service workers account for more than 75 per cent of total economic employment in most developed countries. According to 2017 data, the share of people employed in the services sector was in Luxembourg - 87.09%; Hong Kong - 86.74%; Singapore - 83.57%; Great Britain - 80.53%; Sweden - 80%; USA - 79.45%; Canada - 78.43%. At the same time, African countries account for less than 10 % of the service industries (Burundi, Somalia, etc.) [Economic newspaper. Structured employment in 2018 <https://neg.by/novosti/otkrytj/strukturirovannaya-zanyatost-v-2018-godu>]. The problems of the formation, distribution and use of labor resources, as well as labor market regulation are devoted to the works of such authors as. Works by such authors as A.N. Apaniev, E.G. Antosenkov, B.N. Belkin, B.D. Breev, A.N. Grzhegorzhevsky, A.Z. Dadashev, E.V. Kasimovsky, N. S. Kistanov, V. G. Kostakov, A. E. Kotlyar, K. I. Mikulsky, A. A. Nikiforova, G. E. Slesinger, G.A. Azizova, D. Hammersha, D. Karda identify the issues of the formation, distribution and use of labor resources, as well as labor market regulation.

The modern employment by industry type in developed countries was formed in favor of the service sector as a result of a phased change in the number of people employed in economic sectors during the 20th century. The changes first influenced agriculture, where a reduction in labor was observed in the 50s and 60s of the twentieth century. Further, there has been a decrease in employment in the industrial sector since the 70s of the XX century and an increase in the number of people employed in the services sector. It's important to note that economic development and the characteristics of each country determine the structure of the working population. In recent years, economic volatility, the growth of information technology, and scientific and technological advancements as a whole have an impact on the sectoral employment structure [R.I. Kapelyushnikov].

2. ANALYSIS OF THE EMPLOYMENT BY INDUSTRY TYPE IN AZERBAIJAN

The workers were allocated in Azerbaijan on the eve of independence in 1990, as follows: 12.7 % in industry; 30.9 % in agriculture; 6.8 % in construction and 49.6 % in services. By 2003, the share of workers in the agricultural sector increased to 40.1%; manufacturing decreased 5.6%; in construction, up to 4.8%; in the services sector, it stayed almost at the same level - 49.5%. Comparing world trends and Azerbaijan's situation, it should be noted that the changes in the country's sectoral employment structure slightly contradict the processes taking place across the world. [G.A. Azizova, p. 123-124, 165]. On the one hand, the increase in the number of people employed in agriculture was based on the fact that part of the labor force that had been released from industries found work in agriculture. On the other hand, the high proportion of people working in agriculture is explained by the fact that the population with a land plot is regarded as being employed in Azerbaijan. That exaggerates the actual number of people working in agriculture. Unlike the agricultural sector, the number of people employed in the country's industry decreased. In terms of the sectoral employment structure in industry for 1997-2003, it should be noted that, with the total number of employees decreasing by 27.7%, the number of employees in the mining sector increased by 22.2% and in the manufacturing sector decreased by 49.4%. In addition to the mining industry, the number of people employed in electricity, gas, and water production and distribution has increased 2.2-fold. In many industries the decline in jobs was caused not by a rise in labor productivity, but by a decline in volumes of output. The key explanation for growing jobs in manufacturing was the transition crisis and the resulting decline in volumes of output for many forms of industrial goods. Industrial production's physical volume index in 2003 was 34 % of the 1985 level. This indicator was 78 % in the mining industry, 81 % in the electricity industry and 25 % in the manufacturing sector [G.A. Azizova, c. 129]. Unlike manufacturing, the proportion of people working in the services sector has barely changed for this time. The recession associated with the transition crisis was gradually delayed in subsequent years, which consequently impacted employment. Let us consider how the sectoral employment structure has changed in Azerbaijan in the coming years.

Table following on the next page

Table 1: Dynamics of the number of people employed by economic sectors for 2005-2018 in Azerbaijan (thousand people)

	2005	2010	2014	2015	2016	2017	2018	2018 to 2005 (B%)
Total in the economy	4062,3	4329,1	4602,9	4671,6	4759,9	4822,1	4879,3	120,1
In the agricultural sector	1573,6	1655	1691,7	1698,4	1729,6	1752,9	1769,3	112,4
Specific weight (%)	38,7	38,2	36,8	36,4	36,3	36,4	36,3	
Production sector	292,5	306,2	324,2	321,4	338,2	345,3	363,7	124,3
Specific weight (%)	7,2	7,1	7,0	6,9	7,1	7,2	7,5	
In the construction sector	211,9	287,5	334,1	336,4	343,8	347,9	354,5	167,3
Specific weight (%)	5,2	6,6	7,3	7,2	7,2	7,2	7,3	
In the service sector	1984,3	2080,4	2252,9	2315,4	2348,3	2376	2391,8	120,5
Specific weight (%)	48,8	48,1	48,9	49,6	49,3	49,3	49,0	

Source: <https://www.stat.gov.az/>

In Azerbaijan the total number of employees increased by 20.1 % in 2005-2018. Construction saw the biggest increase in employment-67.3 %. Employment growth in the services sector was similar to the average level-20.5 % and in industry - 24.3 %. The number of people employed in agriculture is also increasing-12.4 %. The share of people employed in agriculture has slightly decreased over the study period from 38.5 % to 36.3 %, and the industry ranks second in the overall importance of employees. In the largest part of the workforce, the share of employees in the service sector increased slightly from 48.8 % to 49.0 %. The increase in the proportion of people employed in industry was also insignificant-from 7.2 % to 7.5 %. There was also an increase in the share of employees in construction from 5.3 % to 7.3 %. It should be noted that, compared to 1990, there was an increase in the number of employees in all sectors, except in industry, where the number of employees decreased by 22.5 % compared to the beginning of the transition period.

3. COMPARATIVE ANALYSIS OF THE INDUSTRY EMPLOYMENT STRUCTURE FOR SOME POST-SOVIET COUNTRIES.¹

3.1. Republic of Belarus

The total number of employees in the Belarusian economy decreased by 7.2 % between 2011 and 2017. 12.5 % in agriculture; 14.6 % in industry; 30.1 % in construction. The only sector where growth in employment has been seen is the service sector, where the number of jobs has risen by-8.6%. As a consequence of these processes the sectoral job structure has shifted. To a greater degree, the shifts impacted agriculture, where the share of employees dropped from 28.3% to 15.4% and the service sector, where the number of employees increased from 53.0% to 64.8%. There was a small increase in the share of employees in industry-from 11.7 % to 12.7% and from 7.0 to 7.2% in construction. Reducing employment in agriculture and increasing employment in the service sector is a gradual change in the sectoral employment structure in Belarus. Source: <https://www.belstat.gov.by/upload/iblock/f2e/f2ea58074c86319b0a7542c87ff7a021.pdf>

¹ Analysis of the sectoral employment structure in Azerbaijan covers the entire period of independence, indicators are provided for the rest of the post-Soviet countries according to the statistical commissions and cover indicators for a shorter period of time.

3.2. Republic of Georgia

Let us consider how the population that was employed was distributed among economic sectors. Data for Georgia, for just 2 years. And their analysis showed that the total number of employees declined by 1.0 % for 2017-2018. In agriculture, there has been a decline of 10.5%; in other industries, there has been a rise in the number of employees: in manufacturing, by 2.1%; in construction, by 20.5%; in services, by 6.0%. In 2017, the percentage of people working in agriculture was 43.2% and decreased to 38.9% in 2018. The 8.1 % share of people employed in industry was 8.1 %, and 8.3 % in 2018. In construction, this indicator was 4.8 % in 2017 and 5.8 % in 2018; in the service sector, 44.0 to 47.0 % respectively. [<https://www.geostat.ge/ka/modules/categories/38/dasakmeba-da-umushevropa>] In Georgia, the share of the self-employed population is currently large in the employment structure, which is more than 41 per cent of the economically active population, according to 2018 statistics. The self-employed population is primarily in the Georgian economy's agricultural sector. [Trading Economics <https://ru.tradingeconomics.com/georgia/indicators>] It should be noted that self-employed citizens, according to Gruzstat, include all owners of their own enterprises that have a goal, family income. Citizens involved in family-owned businesses are also self-employed on a free basis, amongst other things. It should be noted that the indicators in different sources of information for the employed population can vary considerably, this is due to the fact that self-employed citizens, some sources consider employed, others do not. The high level of people employed in Georgia's agriculture is explained by the fact that 2/3 of the country's region is mountains, quite a lot of rivers and a favorable climate for agricultural production. For this reason, the agricultural sector operates a large portion of the self-employed population.

3.3. The Republic of Kazakhstan

In Kazakhstan, the total number of staff increased by 5.8 per cent in 2010-2017. There was an increase in the number of employees in construction-7.8%; 14.9% in industry; 29.3% in the service sector. Agriculture is the only industry in which the number of people employed has decreased. The reduction was considerable-42.5 %. The sectoral employment structure has changed as a result of the ongoing shifts; in Kazakhstan, the share of people employed in agriculture has decreased from 28.3 % to 15.4 %. For 2010-2017, the proportion of people employed in the service sector rose from 53.0 to 64.8 %. The share of employees in industry and construction grew slightly by 0.2 and 1.0 percentage points. A major decline in jobs in agriculture and a subsequent rise in services is seen as a gradual change in Kazakhstan's sectoral job structure. Source: <https://stat.gov.kz/official/industry/25/statistic/7>

3.4. Republic of Kyrgyzstan

In Kyrgyzstan, the number of people employed in the economy rose 4.2 % in 2012-2018. There has been a significant increase in employment in industry-by 45.0 %. The number of employees remained unchanged in construction and in the service sector increased by 17.7%. In Kyrgyzstan, the number of people employed in agriculture fell by 29.8 percent. The employment structure was affected by changes in the number of employees per industry. Thus, the proportion of people employed in industry rose from 10.4% in 2012 to 14.4% in 2018, and in agriculture dropped from 30.1% to 20.3%. The share of employees in construction marginally decreased from 11.3% to 10.9%, while in the service sector it increased from 48.2% to 54.4% [<http://www.stat.kg/ru/statistics/zanyatost/>]. A decrease in the share of workers in agriculture and an increase in the share of workers in industry are showing progressive changes in Kyrgyzstan's employment structure.

3.5. The Republic of Moldova

The total number of people employed in Moldova 's economy rose by 9.5 % in 2010-2018. Agriculture saw the largest increase in the number of employees-by 43.5 %. The number of employees in industry remained virtually unchanged, rising by just 0.7 %. The number of employees decreased by 3.4 % and 11.9 % respectively in the services and construction sectors. A substantial growth in the number of people employed in agriculture was reflected in the proportion of people working in this sector, from 27.6% in 2010 to 36.1% in 2018. In other sectors, the share of employees decreased: from 12.8% to 11.7% in industry; from 5.9% to 4.7% in construction; from 53.8% to 47.4% [<https://statistica.gov.md/pageview.php?l=ru&id=2193&idc=263>] in the service sector. Increasing the number of people employed in agriculture and decreasing the number of people employed in the service sector indicate regressive changes in the sectoral structure of people in Moldova who work.

3.6. The Russian Federation

In the Russian Federation, the total number of people employed in the economy for 2005-2016 increased by 5.9 per cent. The number of people employed in agriculture dropped by 29.8 percent and 8.5 percent in industry. There is a 13.8 and 16.5 per cent increase in the number of employees in the construction and services sectors, respectively. Changes in staff numbers have affected the sectoral employment structure. Thus, if the share of people working in agriculture in 2005 amounted to 10.1% of the total number of employees, it dropped to 6.7% in 2016. The decrease in the number of people employed in industry resulted in their share decreasing from 22.9% to 19.8% from 2005 to 2016. The opposite had been true in the construction and services sectors. Thus, the share of employees in industry rose from 6.7% to 7.3% and 60.3% to 66.3% in the service sector. Reducing industrial jobs in favor of those working in the service sector suggests progressive changes in the Russian Federation's employment rate. Source: https://www.gks.ru/free_doc/doc_2018/rab_sila18.pdf

3.7. The Republic of Uzbekistan

In Uzbekistan, the total number of employees increased by 14.4 % in 2010-2016. Construction has seen the largest increase in the number of employees in Uzbekistan-by 22.2 %. The number of employees in agriculture increased by 17.0%; in industry by 12.3%; and in the services sector by 12.2%. No significant changes have occurred in the sectoral employment structure in Uzbekistan during the years under study. The majority of employees accounted for the services sector in 2016, as in 2010, and amounted to 49.5 %. In terms of the number of employees in Uzbekistan, second place is in agriculture, with a share of 26.8 % in 2010 and 27.4 % in 2016. The proportion of people employed in industry is 13.6%, and in construction-9.5% of the total number of people employed in the economy. [<https://stat.uz/ru/164-ofytsyalnaia-statystyka-ru/6580-rynok-truda2>] Consequently, the increase in the number of people employed in 2010-2016 did not contribute to changes in Uzbekistan's sectoral employment structure.

3.8. Ukraine

Let's consider how the number of people employed in Ukraine changed for 2012-2018. The total number of employees in Ukraine decreased by 15.1 % for the years analyzed. In manufacturing, the largest decrease in employment opportunities was seen-by 25.0 %. The number of employees in construction decreased by 10.5 %; 13.0 % in the service sector; 11.2 % in agriculture. With a decrease in employment in all sectors of Ukraine 's economy, the sectoral work environment hasn't changed much. A slight increase in the share of employees in agriculture is observed-from 17.2 to 18.0 % and 61.7 to 63.2 % in the service sector. The share of employees in industry declined from 16.8% to 14.8% and in construction from 4.3% to 4.1% [ukrstat.gov.ua].

Ukraine is one of the few post-Soviet countries where the number of employees has been reduced due to the rejection of the Crimean peninsula and military operations in the eastern part of the country.

3.9. Let us consider what place the major industries occupy in the structure of employment in some post-Soviet countries

Table 2: The place of the industry occupied in the structure of employment in some post-Soviet countries

	Industry	Agriculture	Construction	Services sector
Azerbaijan	4	2	3	1
Belarus	2	3	4	1
Georgia	3	1	4	2
Kazakhstan	3	2	4	1
Kyrgyzstan	2	1	1	1
Moldova	3	2	4	1
Russia	2	4	3	1
Uzbekistan	3	2	4	1
Ukraine	2	3	4	1

As can be seen from table 2, a greater proportion of those working in the service sector characterizes the sectoral structure of the employed population. With the exception of Georgia, the majority of those working in all countries are in the service sector. At the same time, the share of people employed in the services sector in Russia, Kazakhstan, Ukraine and Belarus is more than 60.0 % of the total number of people employed in the economy. This situation suggests that the employment structure in these countries is being approximated to the situation in developed countries. Service industry is an important part of economic development, and includes many different industries. A specific description in this field can be found in literary sources. For example, the material production services range includes transportation and domestic services. Trade, which creates a system of intersectoral relationships, contributes to the development of industries within the real economy, occupies a significant place in the services sector. Trade is an intermediate link between producer and consumer which ensures goods are promoted. Some services industries, for example, generate non-material products such as health care, culture, education, technology, art and many others <https://neg.by/novosti/otkrytj/strukturirovannaya-zanyatost-v-2018-godu>]. The service sector is very diverse, and thus has a large share of the population's employment. One of the benefits of the service sector is that some of its sectors don't require large investments in fixed assets, and the investment payback period is short. Thus employment is generated at the lowest cost in the service sector, which is of great social importance. There are a lot of services available in today's digital world, using modern technologies and the Internet. For instance, various printing services, analytical services performed using certain programs, information (data collection and analysis), Internet advertising services, and various applications. The "Blogger" profession has appeared and is developing at the moment and this activity can also be attributed to the service sector. Industry is the second most employed in Belarus, Russia and Ukraine, which suggests a greater utilization of the industrial capacity available compared to other post-Soviet countries. In the Republic of Belarus, the highest level of employment in industry is observed-more than 23 % of the total workforce.

Agriculture is the second-most-employed in Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova, and Uzbekistan. This reality demonstrates the employment structure's regressiveness, and the need for reform. It seems to us that some of those employed in this field should be free from the transition to a more highly productive method of production in the agricultural sector. There is an untapped potential for industrial development in each of the above countries, especially in manufacturing. Structural and investment policies will help improve employment in advanced industries and reduce the economy's dependence on exports of raw materials. In Russia and Azerbaijan, construction is in third place, and in other countries, this industry takes fourth place. The only country where the share of employment in agriculture is the smallest is Russia. Construction is in third place in Russia and Azerbaijan, and in other countries this industry ranks fourth. Russia is the only country which has the smallest share of employment in agriculture. In post-Soviet countries, depending on the form of economic operation, major variations occur in the amount of expenses incurred to pay for labor. In several post-Soviet countries the highest labor costs are noted in mining firms, in information and communications firms, and in financial and insurance organizations. The lowest labor costs were found in farming, forestry and fisheries enterprises, in accommodation and food services sector organizations, and in educational, health and cultural institutions.

4. CONCLUSION

The sectoral employment structure is determined, on the one hand, by general trends in growth, and, on the other, by the characteristics of each region. The common thing is that all post-Soviet countries were moving from a command to a market economy and were going through a difficult period of transformation. A large-scale change of ownership occurred during the transition period, and many companies moved from state ownership to private ownership. The recession in industry and the lack of investment resources to restructure industrial enterprises in all post-Soviet countries contributed to a large-scale decline in industrial production. As a result of the crisis in the industry, many workers have been forced to look for work in other sectors, such as creating a service sector business or engaging in private household agriculture. Thus, the rise in the number of people working in the service sector was caused not by an increase in industrial labor productivity, as was the case in developing countries, but rather by a structural crisis. A significant part of the employed in 6 out of 9 post-Soviet countries is in agriculture, which indicates the regressiveness of the sectoral employment structure. It is necessary to increase labor productivity in this industry to change the situation, to contribute to the transformation of small farms into highly productive farms. The construction of industrial enterprises processing these products on the basis of agricultural enterprises would, on the one hand, ensure industry development, and, on the other, contribute to the growth of employment. The governments of the post-Soviet countries can stimulate the growth of priority sectors to ensure structural changes in the employment structure. For example, development of high-tech manufacturing industries is desirable in industry. The development of the manufacturing industries will reduce the dependence of the economy on exports of raw materials and achieve balanced economic growth. Science and ICTs need State support in the service sector. The presence of different employment trends in post-Soviet countries indicates differing conditions for the formation of sectoral employment proportions. Nevertheless, progressive employment shifts will occur at different speeds in these countries, and they will switch to a post-industrial type of economy with a predominance of progressive industries and an increase in employment in the service sector. Changes in the services sector will influence the shaping of the sectoral job structure in the future. New digital technologies are currently developing, remote work is becoming increasingly popular, new professions are appearing and some professions are becoming unclaimed.

Industrial enterprises are switching to automatic production processes, replacing people almost entirely. Therefore we note that signs are characteristic for the current stage of labor market development, such as:

- A new type of employee;
- The transformation of labor markets under the influence of digitalization;
- New activities and new forms of employment.

All of these processes will contribute to progressive change, bringing the sectoral employment structure in post-Soviet countries closer to the level of developed countries.

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IMPACT OF INNOVATIONS ON THE ECONOMIC ADVANCEMENT OF AZERBAIJAN

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ABSTRACT

This research article attempts to identify the significance of innovations and reviews the key factors behind the innovation-driven development of Azerbaijan's economy. It overviews the major ongoing trends in the advanced economies and justifies the need for comprehensive macroeconomic governance and increase of investment flow. This governance features an integrated innovative approach benefiting from scientific and technological advance. The above defines relevance and importance of innovations at the current phase of social and economic development of Azerbaijan. The methodology is well wired to fundamental studies and researches carried out by the United Nations Organization, the World Health Organization, the World Intellectual Property Organization (WIPO), Cornell University, and INSEAD Research Institute. This study presents, inter alia, outcomes, analyzes innovative performance in industrial production, and identifies available resources and conditions for innovations in Azerbaijan, the neighboring countries, and global leaders in innovative development. The article looks into economic, production and other factors governing innovative development in Azerbaijan. The technological structure of the industry has been scrutinized based on the theory of long waves authored by N. Kondratyev. The structure depicts the country's economy as mixed. The performances of the country's high- and medium-tech production, hi-tech re-export, and ICT service export have been compared with those in the neighboring countries. The findings, propositions and measures proposed in this paper are seen applicable in monetary, investment and fiscal policies, short- and medium-term planning and forecasting, both micro- and macroeconomic. The findings and propositions adduced are applicable to monitor innovative development of Azerbaijan's economy and forecast a short-, medium- and long-term perspective.

Keywords: *Cycles, Factors, Innovations*

1. INTRODUCTION

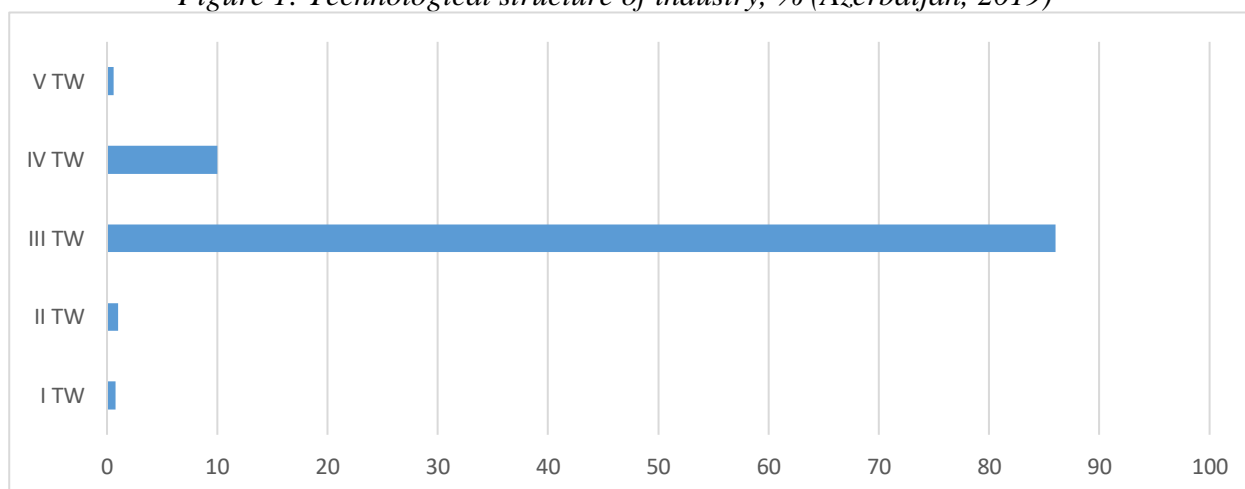
The mass media keep reaching us with new notions like digital and cognitive economy, NBIC technology, microchip implants, crypto currency (bitcoins, etc.), digital passport, endless reforms in education, and many more. All this is indicative of ongoing fundamental developments and changes that impact virtually all aspects of human life. The surveys by the US Defense Advanced Research Projects Agency (DARPA) suggest that impending threats to emotional well-being shrink spatial and conceptual public awareness of the surrounding environment. Therefore, a better insight into the global economy is needed for appropriate social and economic development. Separate notions mirror a process that has enveloped the world when moving to the sixth technological wave. N. D. Kondratyev attached high importance to dynamics of technological innovations. He linked technological cycles with ones of technological innovations, a concept popular on the cusp of the 20th and 21st centuries. Schumpeter (Schumpeter 1939) boosted it seeing waves of technological innovations as a paramount reason of big cycles.

This hypothesis was later developed by the following scientists: Mensch (1979), Kleinknecht (1981), Dickson (1983), Freeman (1987), Tylecote (1992), Glazyev (1993), Mayevski (1997), Hirooka (2006), Papenhausen (2008), and others. Kleinknecht, van der Panne 2006 presented empirical evidence of Schumpeter's waves of technological innovations. This approach suggests that every K-wave correlates with a specific and leading economic sector or sectors, a technological system, a technological and economic paradigm (A.A. Akayev, A. V. Korotayev, 2014). Since the first industrial revolution, manufacturing industry being exposed to innovations has drastically swapped human lifestyle. Many routine activities are impossible without technology breakthrough in manufacturing (automobiles, washing machines, computers, recent smart-phones, and 3D-printers). When first emerged on the market, they were accessible to quite a few. However, non-stop innovations and competition have made them available for a larger number of households worldwide (the UN, UNIDO).

2. TECHNOLOGICAL STRUCTURE

The branches of the sixth technological wave known as Kondratyev cycles are being explored and developed globally. The major branches of the wave have already entered a growth phase; this refers to nano- and bio-technology, nano-electronics, nanophotonics, nanomaterials, molecular, cell and nuclear engineering, optical informatics, photonics, cognitive economics, etc. In the next 10-15 years, information systems of science, education, culture, ecology, medicine, etc. will also be receiving a fresh impetus. Since the advent and at the peak of the fifth technological wave, by the 90s of the last century, over 33% of products made in Azerbaijan belonged to the fourth wave. This signaled our readiness to move to the fifth technological wave. But the collapse of the Soviet Union made it impossible, unlike in the advanced economies. While developed countries were hugely profiting from advanced technologies of the fifth wave, the principal resources of the post-Soviet nations were marshaled to move from the administrative-command system to a market economy and focus on stabilization efforts. 86% of the turnout in Azerbaijan and the post-Soviet space can be attributed to the third technological wave - production technologies of construction materials, light, food, wood, and extracting industries. Around 10% of the turnout corresponds to the fourth wave and only less than 1% to the fifth one.

Figure 1: Technological structure of industry, % (Azerbaijan, 2019)



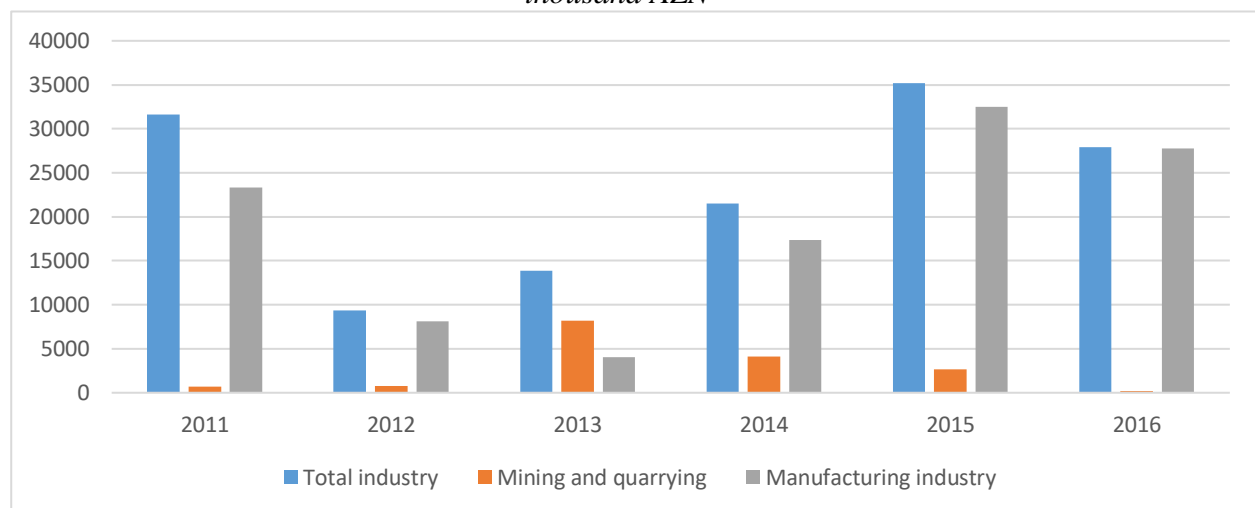
The sixth wave in the developed countries is slightly constrained (about 5% of US GDP accounts for the output of the sixth wave) by insufficient technologies and unavailability of socio-economic environment for their extensive use. It suggests that we are enjoying a good chance of just few years to enter the sixth wave as well-niched full members of international

division of labor rather than becoming dependent on new technology and innovations of developed nations. The question - do we need it? Yet we are quite comfortable with the output of the fifth wave. The fact is that the capitalist system in its various forms has come up with no other resources but labor, land, and capital for the last 300 years of its growth. Innovative has only been scientific and technological progress which took extensive reproduction off for intensive production. Physical labor, at first, and subsequently intellectual labor have been optimized based on recent invention of AI; the concept of labor resource and entrepreneurial ability transformed into human capital. A human being has turned into an asset to be optimized. These seemingly innocent notions deeply imply that a human being is physically imperfect, i.e., humans can and should be transformed based on technological achievements. Human capital will be optimized by those controlling advanced technology and innovations. Therefore, it is strategically important to the CIS countries to reach the sixth wave. China, India, Singapore, Taiwan, and other countries have amassed technological breakthrough (G. G. Malinetsky, 2012). Their experience proves that a state can improve its innovative potential and join the club of technologically advanced nations during growth of a next technological wave. Dominance in a certain wave requires huge efforts. For example, South Korea made one of the leaders of the fifth wave at the cost of up to 43% of its GDP going to investments and innovations.

3. INNOVATION EXPENDITURE

The world economics clearly defines and amply explores the role of innovations and innovation theory, whereas the economy of Azerbaijan has yet to look into application of innovations. This is evident from small investments in innovation and a low volume of newly-introduced and innovation-based revised product of industry. An additional comprehensive study is needed to explore the above and remove obstacles impeding sustainable economic development of Azerbaijan in the longer term.

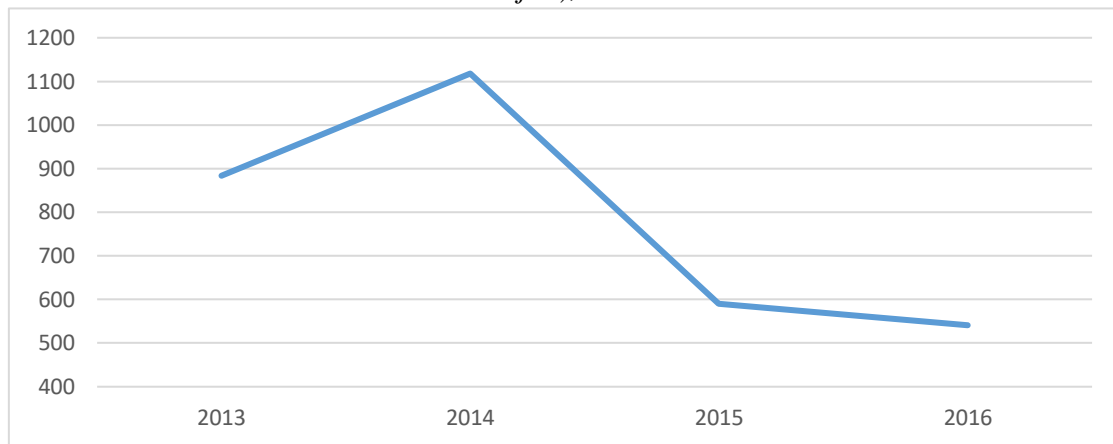
Figure 2: Technological innovation expenditure in industry by type of innovation, thousand AZN



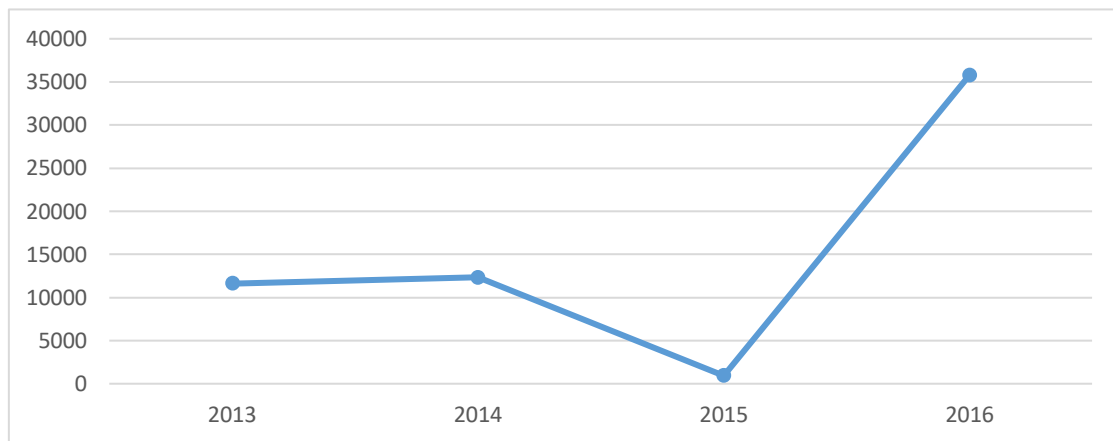
Source: Statistical yearbook, 2017, p. 92-93

Nevertheless, considerably modified or reintroduced products of industry grew by 3.07 times within three years, from 2013 till 2016. The economy made quite a good progress testifying a considerable share of innovative products in Azerbaijan's GDP. The share of improved products went down 38.7% within the same period. In that way, non-competitive products are withdrawn and replaced with new and greatly modified ones.

Figure 3: (a, b): The volume of innovative product by level of innovation (total industry of Azerbaijan), mln. AZN



a - Considerably modified or reintroduced products



b - Improved products

(Source: Statistical yearbook, 2017, p. 91)

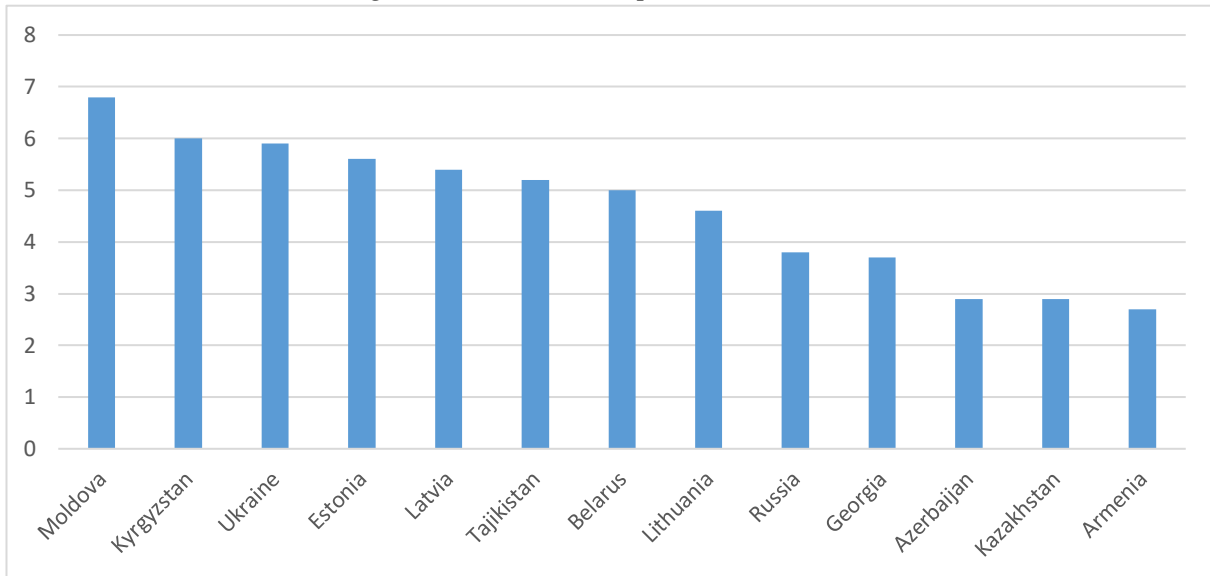
As reported by Global Innovation Index 2016, Azerbaijan possesses resources and conditions to boost innovation. The key parameters are expenses for education, business development, and university students. The country is undertaking reforms in these directions to eventually improve them as being insufficient.

Table 1: Resources and conditions available for innovation in Azerbaijan and neighbouring countries

Neighboring countries	Expenditure on education		Development Business		Students In universities	
	% GDP	Rank	Score	Rank	%	Rank
Kazakhstan	2,9	102	25,4	96	48,5	54
Turkey	2,9	103	27,6	86	79,0	16
Russia	4,2	79	37,5	37	78,0	18
Iran	3,1	98	22,8	111	66,0	31
Georgia	2,0	115	26,5	90	39,2	65
Azerbaijan	2,5	109	19,7	123	23,2	88

Source: Global Innovation Index, 2018, p.161-250

Moldova tops among the post-Soviet nations in education investment, yet being among the also-rans for its GDP per employed person (in constant USD prices, 1990).

Figure 4: Education expenditure, % GDP*Source: World Bank, 2019**Table 2: Development of technology and knowledge economy of Azerbaijan and neighbouring countries*

Neighboring countries	High and medium technology production		High technology re-export		Export of ICT services	
	% GDP	Rank	% of externally - trade	Rank	% of externally - trade	Rank
Kazakhstan	16,5	63	4,8	34	0,2	112
Turkey	28,2	43	1,2	62	0,1	116
Russia	26,3	46	2,1	51	0,9	83
Iran	33,8	33	0,5	72	0,2	115
Georgia	12,1	72	0,3	87	0,7	89
Azerbaijan	10,4	76	0,1	105	0,5	97

*Source: Global Innovation Index, 2016, p.141-250**Table 3: The development of technology and knowledge economy leading countries*

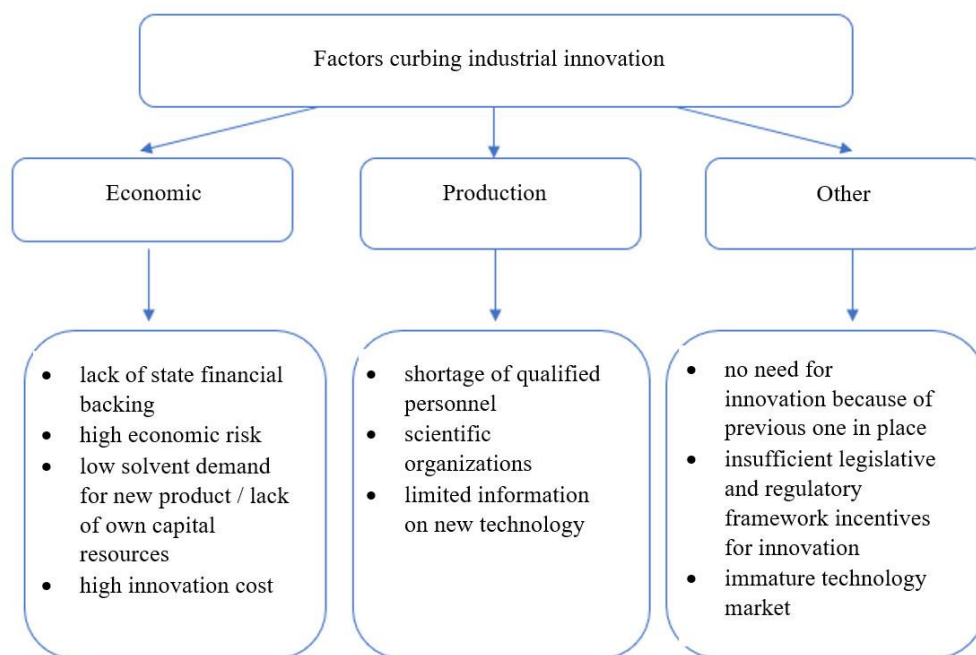
Leading countries	High and medium technology production		Hightechnologyre-export		Exportof ICT services	
	% GDP	Rank	% ofexternally - trade	Rank	% ofexternally - trade	Rank
Switzerland	66,1	2	14,2	11	3	25
Sweden	47,3	10	8,8	24	6,7	6
Great Britain	41,4	21	8,9	23	2,5	39
USA	43,3	15	6,8	26	1,3	71
Finland	34,9	29	5	33	5,7	8
Singapore	69,3	1	26,8	1	1,0	79
Ireland	57,6	4	9,1	22	-	-
Denmark	44,1	11	6,1	28	1,9	51
Netherlands	41,0	22	13,1	14	-	-
Germany	54,7	7	13	15	1,8	54

Source: Global Innovation Index, 2019, p.141-250

4. FACTORS CURBING INDUSTRIAL INNOVATION

Rapidly changing business environment and fierce competition in the global context prompt innovative development as the only survival option for businesses. A priority should be given, in this regard, to creation of favorable innovation climate for continued and targeted scientific and technological activities and application of results in economic activity. Creation of favorable innovation climate requires analysis and systematization of factors effecting innovative development. Factors favoring innovative development encompass considerable scientific and educational potential, interaction of universities and vocational schools with relevant enterprises, leading national and foreign universities to conduct joint research and experiments, regulatory and organizational framework, personnel, production, and other factors. Organizational factors of innovative activities include introduction of advanced techniques for production and operations management at enterprises and organizations, outsourcing, building of corporate mechanisms and structures that promote innovation. The State Statistical Committee of Azerbaijan reports immature factors as a drawback to innovation. For example, the most urgent economic factors prevail in insufficient state financial backing of businesses, high economic risk, etc. The most prevailing production factors encumbering innovation are shortage of qualified personnel, limited information on new technology, scarce opportunities to cooperate with enterprises and scientific institutions. Figure 1 classifies these factors in detail. According to the Global Innovation Index, factors scaling up innovation in Azerbaijan's enterprises relate to FDI net outflows (% of GDP = 2.6), ICT & organizations model creation (rank = 29), national feature films (rank=13) and others.

Figure 5: Factors curbing industrial innovation



Source: Statistical yearbook, 2017, p. 101

The above urges increase in science and R&D expenditure in Azerbaijan at least to the level of developed countries. But it is often unaffordable, taking into account budgetary needs of many advanced economies to explore technology of the sixth technological wave. To ride out this, the author of the article suggests increase of currency issue, participation with other countries in advanced scientific research and studies, adoption of experience of the fifth and sixth technological waves and across their sectors, their integration and promotion in the economy of Azerbaijan, and a niche in industry and international division of labor.

For example, the Large Hadron Collider is the world's largest experimental machine. Its construction and research continue to employ over 10,000 scientists and engineers from over 100 countries. Apart from construction, annual expenses total about USD 5.5 bn. The US Defense Advanced Research Projects Agency (DARPA) launched two 4 year-long research programs with the total budget of \$100 mln. The program involved 15 companies and 200 researchers. The project seeks to reduce the cost of chips applicable to Internet of Things, animals, electronic devices, and people. Development of advanced mono-crystal circuits (System-on-a-Chip or SoC) is estimated at \$300 mln. It includes preparation, design, project verification, prototypes, verification of engineering samples and error-correction. But in two years the costs will reach \$500 mln. Mass production warrants this cost, let alone complexity of work that only few corporations-developers can take up. DARPA project will have to substantially reduce the cost by 2020 and further improve efficiency of solutions by 2022 and beyond. Formally, the project introduces two programs under Electronics Resurgence Initiative (ERI) supervised by the US Congress. ERI was presented in late June this year. It will cover a 5-year period with estimated cost of \$1.5 bn. As seen, certain projects have budgets exceeding GDP of some countries. This massively aggravates competition, still possible under economic governance based on scientific and technological achievements committed to the national economy.

5. CONCLUSION

The innovative component has a potential to advance in Azerbaijan as the sectors of the fourth and fifth waves appear low in the economic structure of Azerbaijan. The economy also enjoys the lack of capital investment burden in the outdated production lines. This makes easier to generate industrial engineering systems of a new wave without detriment to other sectors. On top of that, our social and economic institutions are structurally transformable. Study of global economic trends and analysis of Azerbaijan's economy technologically-wise lead to the following insights and suggestions:

- It is necessary to estimate and analyze available resources including nonproduction ones;
- It is reasonable to pick key sectors of the emerging sixth technological wave to introduce and develop them in Azerbaijan;
- It is crucial to efficiently distribute and redistribute available resources;
- It would be beneficial to selectively borrow technology to develop it in local research institutions;
- It is advisable to benefit from entering the new wave of the Kondratyev cycle at the embryonic phase;
- It is necessary to determine options for technological catch-up.

Therefore, the authors of the article suggests designing a common innovation strategy of the regional countries (adjacent to Azerbaijan) to lay the foundation for closer scientific and research cooperation and targeted activities. This will enable to consolidate national resources to explore basic industries of the sixth technological wave and achieve sustainable economic catch-up and advance in the region. Pooling and recovery of spiritual, cultural, scientific and educational values and intellectual resources are indispensable for socio-economic progress of the region. A vibrant and rapidly advancing economy strengthens sovereignty of the countries and secures our glittering future.

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PROBLEMS OF APPLICATION OF QUALITY MANAGEMENT SYSTEM AT ENTERPRISES

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ABSTRACT

Currently, the most serious problem for enterprises is the creation of a quality system that will ensure the production of competitive products. The purpose of the study is to identify and substantiate the problems of quality management systems of enterprises and organizations that reduce the potential of these systems. For any company, it's vital it is important to maintain and develop effective quality management system (QMS), which allows you to develop effective ways to increase customer satisfaction with quality products that increase efficiency and organization competitiveness in modern dynamic business environment. One of the main goals of quality management is the operation of the enterprise Ensuring their satisfaction by building on the wishes and requirements of customers is to be made. That is why "customer satisfaction" is the main requirement in the standard and all operations focus on this issue. Therefore, ISO 9001 is used as the most powerful marketing tool in the modern market economy system. The application of the standard leads to an increase in sales of the enterprise, customer satisfaction, as well as the efficient use of enterprise resources, ensuring the firm's stability in the market by gaining the trust of customers. The article shows that in enterprises and organizations there is an incomplete use of the potential of modern quality management systems.

Keywords: *QMS, ISO 9000 series standards, Quality, Enterprises*

1. INTRODUCTION

The concepts of "quality", "QMS", "ISO 9000 series standards" in recent decades have become quite commonplace used in publications, speeches, during various events, forums, meetings. Over this period, a large number of attempts have been made to interpret these concepts, analyze their evolution, create concepts, theories, systems, methods, technologies, etc. An interesting fact is that the relevance of the topic does not decrease, its severity is even growing. In many respects, this is determined by the fact that organizations that have implemented a QMS in themselves begin to search for answers to specific questions in specific areas of activity in the field of quality. In recent years, Azerbaijan's integration into the world and European space has been expanding. The location of our country on the Eurasian transport corridor, ensuring sustainable economic development, the existence of a favorable investment climate accelerate this process. As a result of the existing economic freedom in our country, the favorable conditions created for the development of the private sector, the volume of foreign trade relations, import-export operations is growing every year. The wide field of free enterprise and initiative creates ample opportunities for the production of competitive products based on new, modern technologies in the country. Quality has already proved that it has great potential as one of the foundations of economic and social development of different countries in modern times. The experience of developed countries shows that quality improvement is a strong enough force to affect the economy. The modern approach to solving the problem of quality is that the main direction of any quality management system is to meet the needs of consumers. When creating a management system and applying a quality management system, production processes are considered from this point of view. In terms of efficiency and effectiveness of the main task, the processes become elements of management and are subject to improvement in terms of meeting the needs of the consumer.

During the application of the product quality management system, a quality management document is formed and submitted to the customer. The main purpose of a quality management system is to implement a complex interaction of processes and procedures that make up this system, to achieve a high level of quality of products or services that satisfy the consumer. The quality management system covers the process of creating a product, starting with the purchase of raw materials, including all subsequent stages, and completing its sale to the final consumer. Each link in this chain, which can affect product quality at any stage, is part of a quality management system.

2. LOCAL EXPERIENCE IN QUALITY MANAGEMENT

Today, the basis of quality management in the system is the creation of a competitive product. Of course, provided that the system is effective. World experience in product quality management shows that it is impossible to ensure product quality stability without achieving quality stability of raw materials. Therefore, there is a tendency for manufacturers to interact very closely with suppliers of raw materials, materials and complex parts. This happens in various forms, both in developed and developing countries. It is no coincidence that in the international standard, the supplier selection procedure is presented as an element of the standard quality assurance system. The cost of goods as an important factor of competitiveness has a direct impact on quality costs. Systematic analysis to optimize these costs is an integral part of quality programs in enterprises. International standards in the quality assurance system also reflect this element. If the principle of "quality first of all" is not just a slogan, the role of top management in creating such an environment in the team is undoubted. In the conditions of market competition, the developed countries of the world consider it as a symbol of high quality strategic trade and the most important source of national wealth. Quality determines the authority of the state and government in many areas. The main condition for the development of Azerbaijani industry under the conditions of severe competition brought by globalization is to produce products that meet the requirements of the world, in other words, to produce goods and services that are competitive in the international arena. Economic reforms in Azerbaijan in recent years have increased attention to the problem of quality. Strengthening our national economy depends on quality. The experience of advanced countries forces us to agree with this opinion [1]. The most obvious example of the Quality Policy pursued in Azerbaijan is the Quality Association. The role of public associations and non-governmental organizations, such as the Quality Association, in the development of quality management systems in our country, the certification of these systems is great. The Quality Association is a self-governing, non-profit, non-governmental organization founded on November 25, 2007. The main purpose of the Union is to help raise awareness about the quality and competitiveness of products and services in the country. The Association carries out the following tasks to achieve its goals:

- Facilitate the promotion of international and national standards in quality management;
- To promote basic knowledge in the field of quality management;
- To study the achievements of foreign countries in the field of quality and explore the possibilities of their application;
- To promote the development of the country's economy;
- Carry out educational activities related to the development of entrepreneurship.

One of the important activities of the Association is to study the best practices of enterprises that have achieved success in the field of quality and management, achieved high quality indicators and won customer sympathy, dissemination among local enterprises, as well as forming a positive image of their products. To achieve these goals, the Union has established a scientific, technical and economic journal "Quality and Management", which conducts accurate analysis and assessment of trends in quality and management with the close participation of

renowned scientists and leading experts of the country, as well as national (AZS) and international standards (ISO 9001, ISO 14001, OHSAS 18001, etc.) as well as information on standardization, certification, metrology, analytical articles are published [8]. The main purpose of such public associations should be to develop the activities of individuals and legal entities in order to improve the quality of products and services in our country and increase their competitiveness. This is because it is very important for managers interested in improving the quality and competitiveness of products and services in Azerbaijan to unite and promote world experience in this field through research, events, advice, training and awareness-raising among the business community and the public. In recent years, an increasing number of Azerbaijani enterprises have made a strategic decision to create a quality management system (QMS) according to international standards, moreover, we can safely predict an increase in interest in obtaining an international certificate in the near future. The reasons that encourage Azerbaijani enterprises to initiate the certification process according to international standards are quite diverse: it may be the desire to increase their own competitiveness or the effectiveness of their activities, the availability of a certificate may be a requirement of the law, strategic partners, owners or investors. Unfortunately, quite a lot of Azerbaijani enterprises, initially formally approaching the construction of a quality management system and naturally not having a positive effect, are disappointed in the very idea of quality management and transmit their negative attitude to this system to other enterprises. Indeed, if the company aims to obtain a certificate, rather than building a quality management system (for example, when the availability of a certificate is a legal requirement), then almost certainly under the guise of a quality system the company will receive only an additional bureaucratic burden on its core business. Meanwhile, we repeat that the quality management system is a tool that can be applied with different efficiency: it can be used to build a system for continuous improvement of the enterprise's activities, or you can "litter" the management system with unnecessary instructions and regulations, hindering the activities of employees and not receiving any positive effect. The main goal of creating international standards was to develop requirements for the organization, the implementation of which would testify to the ability to produce products in strict accordance with the requirements of customers. Standards contain a number of requirements that the organization implements in the most acceptable way for itself in its activities. Thus, the quality system is built individually for a specific organization in accordance with its goals and objectives, the specifics of the external environment and the internal characteristics of the activity. The quality management system developed in accordance with international standards is a management subsystem based on a structured set of documents regulating the main aspects of the enterprise. The documentation of the quality management system should describe the activities of the enterprise, especially those processes that significantly affect the quality of products. A documented description of key business processes ensures their traceability, clear understanding, management and continuous improvement [6]. The concept of international standards is based on a process approach, according to which the activities of the enterprise are described as a series of interrelated processes, managing which the company improves its own activities. The concept of international standards is based on a process approach, according to which the activities of the enterprise are described as a series of interrelated processes, managing which the company improves its own activities. The quality management system contains several more built-in self-improvement mechanisms (internal audits, management analysis, customer feedback, etc.), which together provide, firstly, timely changes to the system in response to changes in the external and internal environment, and in -second, continuous improvement of the enterprise. Establishing a quality management system can reduce the enterprise's costs for the detection and correction of defects, as well as external and internal losses caused by defects and non-conformities. An effective quality management system can also reduce management costs: documenting the key processes of the company ensures their

better manageability; monitoring, analysis and review of processes ensures their continuous improvement; the distribution of powers and responsibilities of personnel provides mechanisms for monitoring the performance of duties and measures to prevent negative results. As a result, the enterprise becomes more transparent for its managers and (if necessary) for the external environment, the accuracy, quality and efficiency of managerial decisions are increased. The implementation of a quality management system involves the involvement of personnel in quality improvement activities, which enables the company to more fully and efficiently use the abilities, knowledge, skills and abilities of its employees. The involvement of personnel in quality management activities and a specially built incentive system increase employee satisfaction and, accordingly, positively affect the results of their activities; career planning and staff training are also aimed at improving the efficiency of the use of labor resources of the enterprise. The alignment of the enterprise's activities in accordance with the process approach implies the presence of documented results of the processes, as well as tools to determine the effectiveness of each process, which makes it possible to assess the profitability of buying the results of some subprocesses on the side, i.e. application of outsourcing. The services of third-party organizations can be used to reduce costs, provided that the current quality of the products is maintained or to maximize product quality at a given level of costs. As a result, the company gets the opportunity to either reduce prices, and thereby increase sales, or increase the financial stability of the business, or improve product quality. Improving quality from the point of view of defining an international standard means that the products are manufactured in greater accordance with the requirements of consumers, which leads to an increase in their satisfaction with the products, and, as a result, to increased customer loyalty and increased sales.

3. ECONOMIC BENEFITS OF A QUALITY MANAGEMENT SYSTEM FOR ENTERPRISES

To more clearly illustrate the economic benefits that the company receives when developing and implementing a quality management system, we consider the impact of certification according to the international standard on the value of the enterprise. Two groups of enterprises can be distinguished that are interested in valuing/raising their own value: those that seek to attract foreign or local investments, and those that are preparing for a partial or full sale. Certification of a quality management system changes the value of these enterprises due to the influence of various factors. Companies seeking to attract foreign or local investment. The very existence of an international certificate of a quality management system can be crucial in attracting investment, as it increases the level of reliability and trust in the company from potential investors, significantly reduces the risks of providing investment support to the company, and is a kind of guarantor for investment companies. Working with an internationally certified company is considered less risky due to 2 key factors:

- Internal structured and streamlined activities of the enterprise, greater transparency of the management system;
- The existence of periodic external control by an independent registrar.

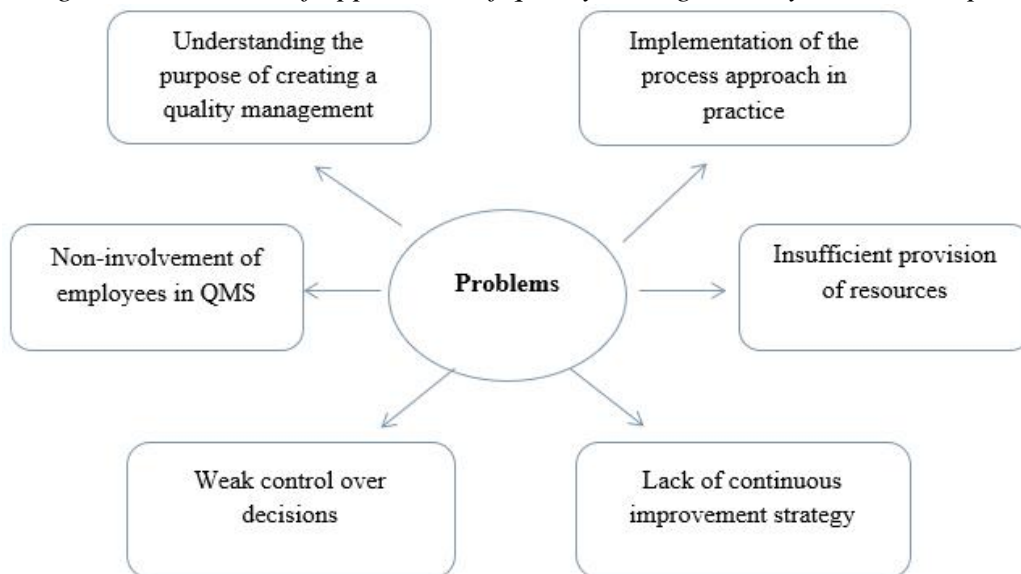
For potential investors, the value of the enterprise is most often determined by the income method, based on the determination of the discounted cash income that the business will bring in the future; using this method, the feasibility of investment in the company is checked. When assessing the value of the enterprise by the income method, the presence of an international certificate increases the cost in two ways: by reducing the risks of future income, as well as due to an increase in the volume of future cash flows. Enterprises preparing for partial or full sale. The reasonable market value of an enterprise is the sum of the value of the system of its elements (assets) plus the systemic effect (goodwill). Goodwill, "good name" - is the intangible assets of an enterprise, including its image, business reputation, relationships with clients,

trademarks, location, product range, etc. These factors are not separately allocated and not evaluated in the statements of the enterprise, but create real economic benefits. The construction of a quality system allows to significantly improve such components of goodwill as the image and reputation of the enterprise. At the same time, the certified quality system of the company itself is one of the components of goodwill, respectively, obtaining a certificate directly affects the increase in the market value of the company. According to the international registrar Det Norske Veritas, certification of a quality management system for compliance with international standards increases the market value of an enterprise by an average of 10%.

4. PROBLEMS OF APPLICATION OF QUALITY MANAGEMENT SYSTEM

One of the reasons hindering the widespread use of quality management systems is the "separation" of quality management from the overall management of enterprises. Many business leaders do not realize the fact that the quality of the company's work, investment attractiveness, market position directly depends on the quality of management. Therefore, quality management is often perceived as a kind of supplement that does not give an immediate return, but also forces staff and resources to be distracted. The situation is aggravated by the fact that without knowing all the features of the international standards of the ISO 9000 family, a lot of time is spent on the preparation of documents in the KMS and maintaining their relevance. Document confusion often leads to staff misunderstandings and dissatisfaction with the development and implementation of the Quality Management System. We have tried to show some of the problems in the implementation of the quality management system.

Figure 1: Problems of application of quality management system at enterprises



The main reason for the delay in the implementation of KMS is the low level of general management in enterprises, which often operates in an unstable external environment. Many of them are in a state of hidden crisis and their goals are far from quality problems. Another reason for the low efficiency of the quality management system is the lack of mandatory staff and low discipline. As a result, the large number of regulatory documents that force staff to perform their duties and the lack of "reliable" working conditions can drastically reduce the number of documents. These problems are quite common and significantly reduce the potential of the QMS in domestic organizations. Among the significant problems, in addition, the lack of a strategy for continuous improvement. Firstly, such a feature of domestic enterprises and organizations as an insufficient emphasis on the interests of consumers is clearly distinguished.

It is obvious that QMS is primarily a tool to achieve, maintain and increase customer satisfaction. In this context, the QMS should ensure the implementation of the main goal of the organization and its mission, namely to achieve maximum satisfaction of its customers. All modern management concepts focus on customers. For example, I. Masaaki, speaking about the content of the Kaizen concept, notes: “All leadership efforts aimed at kaizen come down to two main words: customer satisfaction. Any work is useless if, ultimately, it does not lead to the achievement of this goal” [2]. Within the company, ISO 9000 standards positively affect the quality management system, product quality, financial results, personnel management and the organizational climate, competitiveness. It is concluded that the standards allow to expand the market, increase sales by improving product quality and increasing customer satisfaction. Employee productivity will also increase in a company with a real QMS. In general, the financial performance of an organization using the requirements of the ISO 9001 standard is better than those of companies that do not use modern quality management mechanisms. In fact, it is the commitment and leadership of senior management in matters of quality that act as the trigger for the real work of the organization’s QMS. It is difficult to expect devotion to quality from performers if the management itself does not demonstrate high standards of quality work. Significant attention was paid to this issue by world authorities in the field of quality. Thus, J. Juran claimed that the management system is responsible for 85% of the quality problems, and only the remaining 15% are performers. E. Deming strengthened this rule. The most pressing problems of the QMS of enterprises and organizations are the process approach in practice, the lack of involvement of senior management in the QMS and the lack of leaders in this area. Indeed, the process approach requires the restructuring of the entire management system with a clear focus on consumers. However, in conditions when customer satisfaction is not the main goal, companies simply do not have sufficient motivation to switch to “horizontal” management. As for leadership, one of the points of Deming’s well-known concept called “Establish Leadership” reads: “Learn and put leadership into practice as a working method designed to help employees do their best job.” Leaders of all levels should be responsible not for bare numbers, but for quality ”[5]. In other words, the main difference between a leader and an “ordinary” leader is that the leader spends most of his time and energy not on controlling employees, but on their involvement and “inspiration” in the context of implementing the quality strategy in the organization. In addition, continuous improvement is a necessary condition for advancing and using changes in the external environment in the interests of the company, without which the organization is unlikely to be successful. The international standard ISO 9004 is little used in the activities of enterprises and organizations, although many managers are aware of this standard. Pointing out the desired changes in the new version of ISO 9001: 2015, company representatives did not name the definition of the requirements of all interested parties (not only consumers) as one of the priority innovations. Thus, again there is a secondary task of increasing stakeholder satisfaction.

5. CONCLUSION

So, it is imperative for Azerbaijani organizations to increasingly accept the importance of a quality management philosophy. It can be assumed that the following methods and procedures will solve the problems of application of the Quality Management System:

- Teaching the basics of quality management system to all staff (mastery by staff);
- First of all, to involve young specialists and project partners in the work;
- Development of employee motivation system;
- Reflect responsibility in job descriptions for the purpose of developing, implementing and maintaining a quality management system;
- Involvement of the head of the head office to solve the mentioned problems;

- Inclusion of quality assurance in the project of application of Quality Management System in all structural units;
- Work planning for the establishment of each stage of the Quality Management System;
- The management of the company must hold meetings (not less than 2 weeks) to register the decisions on quality service and monitor their implementation.

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PROBLEMS AND SOLUTIONS IN CIVIL RELATIONS WITHIN THE IMPLEMENTATION OF E-MUNICIPALITY IN THE REPUBLIC OF AZERBAIJAN

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ABSTRACT

Municipal structures are interested in achieving high citizen satisfaction in the area, which is due to their responsibilities. For this reason, it is very important for municipalities to study and apply the modern capabilities of digital technologies and directly or indirectly affect their activities. According to this approach, the relevance of the article is based on the organization and improvement of e-citizen relations to support effective performance in modern municipal governance. Currently, there are certain problems in the full implementation of municipal services electronically. The reasons for these problems manifest the incomplete compatibility of municipal structures with technological changes, lack in funding for the introduction of e-services, qualified personnel in this field, as well as the ability of citizens to use e-services. The article primarily examines the concepts of local governance, information technologies and e-government from a theoretical point of view. The main purpose of the study is to study the methods of wider use of citizens by the range of e-services offered by the municipality. From this point of view, the establishment of an electronic citizen model can be considered as a scientific innovation of the research. The application of this model will make it possible to implement the process of submitting documents online. In addition, the participation of citizens in web surveys and analysis of the municipality's activities will allow them to quickly benefit from socially important projects. The new model proposed in the study is aimed at solving operational problems by performing the function of a call center. Analysis of the research topic consists of synthesis, systematic analysis, comparative approach methods. The result of the study includes set out of the economic content for the digitalization of municipal services, as well as its features, role and manifestations.

Keywords: *E-municipality, Local self-government, E-citizen model, Information, Digital economy*

1. INTRODUCTION

Thanks to the development of information technology in modern times, it has become possible to carry out a large number of transactions and services over the Internet. As a result, e-municipal programs have become widely used, enabling the rapid and efficient implementation of real municipal services that require a large number of bureaucratic procedures. The application of new information and telecommunication technologies is one of the priorities of social development in the context of a progressive global trend in strengthening the socio-economic spheres and strengthening the image of governance in our country. Towards the middle of the current decade, our country has left behind the difficult limits of modern “civilization”. Thus, in 2018, more than 75% of the population of Azerbaijan has access to communication and telecommunications technologies. (www.stat.gov.az/source/information_society, 2020). A new form of governance to increase transparency in the dynamic progress of the Republic of Azerbaijan (AR) towards the “information society” is emerging in local self-government. The information society reflects new forms and shades of building joint relations in self-government bodies. Here, e-government allows citizens to communicate with the municipality, participate in governance processes and communicate with each other.

2. THEORETICAL FUNDAMENTALS OF ELECTRONIC CIVIL SERVICES

The mechanism of interaction between the state and society is, as a rule, passive and irregular. As a result of the lack of integrated approaches to the formation and development of the information society, a number of problems can be identified in the interaction of the state with the population. One of the problems is to provide information to the public. The population learns about new laws and government decrees mainly through the media, and is unable to access these documents when needed. Another important problem is the low level of public services. And finally, the third problem is the payment for public services, which often forces long lines to be protected. As a result of the problems that arise, citizens are often unable to be aware of any of their rights or the law, such as compensation or benefits. An “e-government” was created to solve such problems. In the context of the formation of the digital economy, a large number of e-services are being developed in all countries to ensure the effective operation of the e-government system and the effective interaction of the population, business and government. (Жуковская И.Е., 2019, p. 65) In most developed and developing countries, the application of ICT in the transformation of public administration, citizen-centered e-government, e-services, the development of more effective governance mechanisms achievements are highly appreciated. The transition from modern economy to products and services and the rapid development of the information economy, electronic systems are two important trends combined in the concept of e-services. E-governance is a wider concept than e-government. In a broad sense, e-government has more impact than e-government. Gartner defines e-government broadly: “E-government is the permanent optimization of service delivery, election participation and governance by transforming internal and external relationships through new media, the Internet and technology.” The mentioned relationships include Government to Citizen, Government to Employee, Government Business and Government to Government. (Z. Fang, 2002, p. 3). In the narrow sense, e-government is defined in the strategic plan of the government of a number of countries as follows: all levels of government, government activities carried out through electronic communication between citizens and business circles, including: acquisition and provision of products and services; placing and receiving orders; to provide and obtain information; and completion of financial transactions. Although e-government is defined as the delivery of public services and information to the public through e-services, e-government involves the direct participation of voters in e-democracy, e-voting and political activities outside the government. Thus, the broadest concept of e-government will cover the functions of government, citizen participation, political parties and organizations, parliament and the judiciary. E-governance doesn't include only government websites and emails. It's not constrained with just provision of services over the Internet, nor digital access to government data and electronic payments. This governance process enhances as the relationships between citizens and the government and among citizens as well change. This opens up new concepts of citizenship in terms of both need and responsibility. E-government is understood as a way of provision of information to citizens, businesses and other branches of government through mutual information technology and offering currently functioning public services (<http://sci-article.ru/stat.php?i=1419508372>, 2014).

2.1. Principles of e-municipality-citizen relations

The mentioned municipal-citizen relations should be based on the following seven principles:

1. Recognition and localization - what information should be obtained from which government agency and where this information can be found;
2. Fitness - information must be stored in standard digital form and accessible via electronic data carrier;

3. Management - instead of providing the public with a large amount of mixed information, conditions should be created for citizens to find the necessary information themselves through the proper use of state-run search engines;
4. Correspondence - the value of information should not be an obstacle in any way, depending on the extent to which the information is primarily for society;
5. Reliability - the public must trust the accuracy, completeness and authenticity of the information;
6. Clarity - the information should be as clear as possible in terms of content, content and presentation;
7. Special needs - the information should be useful for people with disabilities.

The above-mentioned principles focus on accessibility in the appropriate location, taking into account the appropriate form of information and the different nature of the potential audience. Citizens can access information via the Internet through various electronic devices from different places, such as homes or workplaces, Internet cafes, libraries, health care and educational institutions.

2.2. Software package of e-municipality-citizen relations

Elements of e-government are implemented in developed countries, both at the local level and at a higher level, while providing appropriate material and human resources. A typical set of programs includes:

- Informing about the activities of local self-government bodies;
- Providing feedback and interactivity;
- Compiling a list of persons who will receive information;
- Extensive use of the Internet;
- Preparation of bulletins and information systems;
- Creation of multimedia content;
- Monitoring the efficiency of municipal services.

Let's take a look at the best of these services implemented in municipal practice. Informing about the activities of local self-government bodies is usually possible through the creation of information resources on the Internet. Created sites are based on a customer-oriented approach. Unitary or other enterprises may be established to provide profitable financing for the provision of certain services, for example, with the possibility of making a profit by providing part of the services on a commercial basis, with a part of subsidies. Feedback and interactivity in the provision of e-services is achieved by filling out the form directly on the official website or by entering the e-mail address of local government employees. Experts usually answer the questions asked when providing services to the population. The answers are published on the official website. Interactivity can be achieved by posting conference chats on the official website or using instant messaging services. In this case, a small group of employees can respond to a large number of citizens and organizations. The most important direction of municipal reform is to compile a list of persons who will receive information on changes in legislation and other normative acts related to specific social groups of the population. Electronic bulletins and informational letters on documents of special importance are prepared for those who sign any information material electronically. The practice also includes the creation of multimedia content on the official websites of government agencies. In this case, the transparency and accessibility of services is ensured.

3. ACTUAL PROBLEMS TO BE SOLVED IN E-MUNICIPAL ADMINISTRATION IN AR

Research on e-government, lack of awareness, lack of citizens' ability to use the e-municipality's website, as well as lack of trust in this service by citizens, security problems, resistance to change, lack of skills and finances, risk factors in data protection. In this case, there is a need to take comprehensive measures. Building a successful e-government depends foremost on choosing the right technology, though comprises not only the ladder. In addition, organizational capacity, institutional and regulatory constraints, environmental, political, cultural and social issues, and required human resources should also be taken into account (Weerakkody V., Dwivedi Y.K., Kurunananda A., 2009, p. 174). The challenge for governments is to constantly seize the opportunities provided by ICT and to meet the needs and expectations of society when it is effective. Common obstacles to the creation of e-municipalities can be summarized as follows:

- High cost and underdevelopment of data transmission channels;
- Inconsistency of format and protocols of information exchange;
- Lack of economic mechanism and legal norms of municipal entities in the single information space;
- Shortage in material and technical resources;
- Low level of expertise and users.

In addition to organizational infrastructure problems, there are problems with the population's access to the Internet. In this case, there is a need to implement educational training programs to provide access to information networks. With the increase in the number of users of information technology, it is inevitable that relevant information services will be downloaded during the introduction of electronic document management. In this regard, the targeted e-government program not only offers solutions to obvious problems, but also raises a number of new problems:

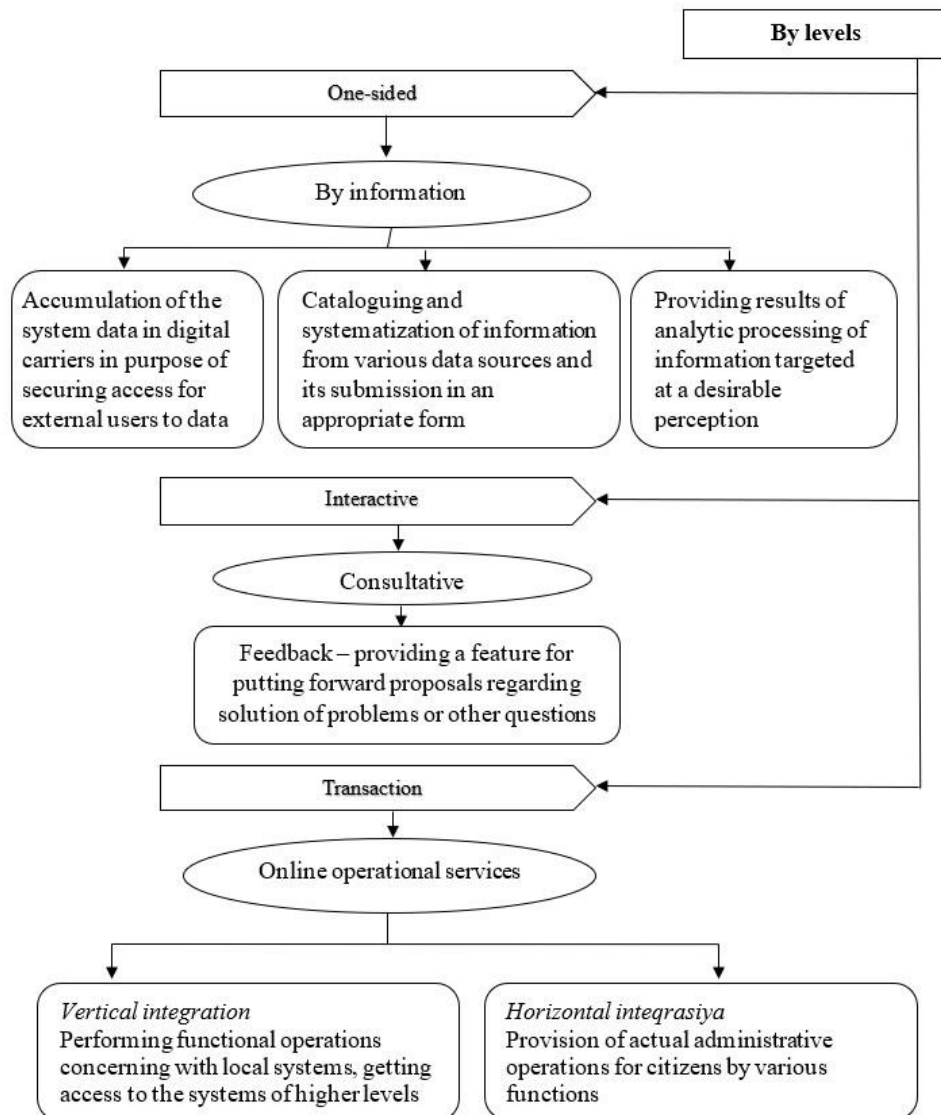
- Ensuring information transparency and openness of the state to civil society;
- Improving government, state and municipal governance through the application of ICT;
- Interaction of the state with economic entities to prepare the ground for the introduction of IT in the real sector;
- Support for the development of independent media through the introduction of ICT;
- Improving vocational education and staff development;
- Development of social network infrastructure for education on the principle of “lifelong learning”, as well as the opening of specialized points for the use of state and municipal services on the principle of “single window”.

4. ELECTRONIC CITIZEN MODEL IN MUNICIPAL ADMINISTRATION

The e-cooperation mechanism provides information interaction of management bodies in the provision of administrative services and performance of duties. The establishment of e-municipality-citizen relations covers 3 levels of management block based on technical, organizational and management features: one-sided, interactive and transactional. These levels of governance are explained in the form of an institutional model set out in Figure 1.

Figure following on the next page

Figure 1: Model for establishment of cooperation mechanism between e-municipality and citizens



4.1. State-citizen cooperation model

As the development of information technologies expands, the opportunities for mastering the model of state-citizen cooperation, which combines the individual characteristics of each state and society, based on the internal dynamics, increase. The new model aims to create a new network of relationships based on dialogue and interaction, overcoming the authoritarian constraints imposed by political systems, focusing on the problem of identifying the best state and society based on information and communication infrastructure. New challenges are emerged by web surveys in minimization of nonresponse and measurement error. They provide an enormous opportunity for research of their contribution to self-administered surveys. Definition of web surveys as either a technological advance above the mail survey format or completely new platform with multimedia capabilities is of widely recognized importance. (Couper M.P., Traugott M.W., Lamias M.J., 2011, p. 251). Public administrators of traditional state authorities tend to develop new e-government model, consisting of four-stage growth model: cataloguing, transaction, vertical and horizontal integrations. The integration of Internet-based government models with traditional public administration involves fundamental changes in the form of government. (Layne K., Lee J., 2001, p. 123).

New governance offers great opportunities for e-economic relations. Thus, the acceleration of events and processes and easier access to the general public make e-municipality an active force in economic processes. In this model, citizens will be actively involved in decision-making processes, along with the concept of e-government, which combines multilateral and network-based communication processes based on mutual and horizontal communication, instead of one-way information flow from higher authorities representing the main features of traditional public administration. The main goal is to strengthen the level of efficiency and effectiveness of public services.

5. ISSUES FOR IMPROVING E-MUNICIPAL SERVICES

At present, as a result of the development of information technology in municipal administration and its widespread application in all areas of activity, a transition to a new form of information - an electronic document (e-document) - has been realized for many years as an alternative to paper documents. Computer systems for electronic document management or electronic document management have begun to be used in the management of this type of documents, both in the private and public sectors. Electronic document circulation means the movement of electronic documents from the moment of their preparation or execution until they are received and sent to the address. The law on electronic document circulation in Azerbaijan came into force in 2004 (Salayev E.A., 2018, p. 490). In a modern organization, electronic document management systems (EDMS) are becoming an indispensable element of IT infrastructure. With their help, commercial companies and industrial enterprises increase the efficiency of their activities, and in state institutions, on the basis of electronic document management technologies, the tasks of internal management, interagency interaction and interaction with the population are solved. A common abbreviation is EDMS, although, along with it, ADMS (automatic document management system), EDMS (electronic document management system) and DAS (document automation system) are also being introduced (<https://www.sites.google.com/site/upravlenieznaniami/tehnologii-upravlenia-znaniami/sistem>

y-elektronnogo-dokumentooborota, 2020). Electronic document management system (EDMS) is an organizational and technical system that provides the process of creating, managing access and distribution of electronic documents in computer networks, as well as providing control over the flow of documents in the organization. The following necessary issues should be addressed in purpose of regulation of the activities conducted by local self-government bodies at the state level:

- Expecting unity among the main directions of budget funds allocated for informatization of local self-government bodies;
- Integration of all state programs in the field of high technologies, informatization, development of telecommunications, provision of electronic services to the population and business structures under the unified leadership at the highest state level;
- Involvement of specialists from municipalities to determine the priorities for the establishment of e-government;
- The need to accelerate changes in legislation that stimulate the use of electronic technologies.

In addition to the above-mentioned issues, there is still work to be done in the implementation of e-municipalities. From the point of view of socio-economic development of e-municipalities, the priority areas are as follows:

- Information system of social protection of the population. In other words, the organization of a single information system on paper subsidies for housing subsidies. Such a system

includes information networks in the departments of social protection and housing and communal services, reception points;

- Although computers are introduced in city administration offices, the mentioned use only covers individual workplaces. Necessary comprehensiveness is not envisaged in the informatization of management;
- Consequently, city administration does not meet residents' expectations.
- There is a need to adopt decrees envisaging the creation of a single information space and recommending the participation of local self-government bodies of cities and settlements in the measures taken in this direction;
- Coordinated and resource-intensive measures should be taken to ensure the effectiveness of local self-government bodies in cities, as well as the level of interaction with the population in accordance with modern requirements;
- The creation of an "e-municipality" should serve to improve the living standards of the population.

Among the public services related to the financial sector, services related to the declaration of income and payment of taxes are in the first place. Entrepreneurs mostly are used to benefit from the following e-services provided by e-government: (<https://u3a.itmo.ru/tema-10.-elektronnyie-uslugi-v-ekonomicheskoy-sfere-finansyi.html>, 2020)

- a) Receiving up-to-date information on property and vehicles, on the amounts of accrued and paid tax payments, on the presence of overpayments, on tax arrears to the budget;
- b) Controlling the status of settlements with the budget;
- c) Receiving and print tax notices and receipts for tax payments;
- d) Paying tax debt and tax payments;
- e) Application to the tax authorities without a personal visit to the tax office.

6. CONCLUSION

E-government is essentially network management that provides communication between networks. This is a management model that envisages the participation of all stakeholders in public administration within a network-type organization with a horizontal coordination structure, and the use of local information networks for this purpose. E-governance is the application of the concept of management to administrative functions, which aims to strengthen the skills of forecasting, transparency and management in a moral, accountable and responsible management style under the influence of information technology. E-governance includes not only computerization activities that support back-office operations, but also radical changes that characterize the nature of the legislative, executive and judicial branches, as well as civil-state relations. The interaction of the citizen with the state, public institutions and organizations begins at the birth of the citizen and ends after it is added to the procedures for leaving the world. The operational status of a person arising from the manifestation of the organization of this interaction at the level of virtual public administration is called e-citizen. An e-citizen is an individual who has the ability to interact and communicate with e-government. E-municipality is an ideal mechanism for creating optimal choices in the joint decision-making process with citizens. Participation in decision-making is carried out by organizing surveys. The purpose of these surveys is also to find out what citizens think about what materials and information are mostly posted on the official websites of local self-government bodies.

ACKNOWLEDGEMENT: *E-government in municipalities is essentially a network management that provides communication between citizens. This involves ensuring the participation of all stakeholders within the network-type organizations with a horizontal coordination structure. Incorporates the administrative functions of the concept of governance,*

which aims to strengthen transparency and management skills, including moral or material support to citizens within the framework of accountability and responsible management style under the influence of information technology in the organization of e-government. E-governance reflects not only the computerization activities that support back-office operations, but also the radical changes that characterize the nature of the legislature, the executive and the judiciary, the citizen-state relationship.

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THE INFLUENCE OF DIGITAL ECONOMY ON THE POTENTIAL OF ENTREPRENEURIAL ACTIVITIES

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ABSTRACT

The digital economy should not be considered as a simple advanced type of economy which is based in general on electronics and microelectronics and which only specialization is to provide production and realization of respective commodities and services. Certainly, one of the main features of such type of economy is using computers in all possible spheres of economic & social development, but it is not enough to characterize it. In reality the digital economy is a new qualitative type of economy which is changing conditions of not only process of labor but of the whole life of population in contemporary states, so increasing the level of human capital. It can be seen from different points of view, examli gratia in widening potential of people's entrepreneurial activities. By saying this, we mean new different possibilities for contemporary human being to realize his/her own ideas as innovator, and we also should obligatory emphasize that he/she can do it both as a member of personal staff at the modernized plant or as the owner of private entrepreneurial business. So we should also pay special attention to the fact of enlarging the people's financial potential particularly because of quantitative and qualitative widening of the sources of investments and receiving credits. The realities of digital economy positively affect the speed of investment decisions and also widen possible ways of profitable investing because they directly contribute to forming more favorable conditions of doing business and the whole environment for potential investors.

Keywords: *Digital economy, Entrepreneurial activities, Enlarging of investment potential, Increasing of the level of human capital*

1. INTRODUCTION

The development of the digital economy involves not only revolutionary changes in the organization and structure of material production, in the organization of the social sphere and management system at all levels. The digital economy is not just an advanced economy, based on maximum electronization and primarily on production and advanced methods of selling goods and services. Of course, the digitalization of the economy is provided by such components as the widespread computerization of production processes and the introduction of computers in various spheres of life support and social development. However, the digital economy is not limited to just only these changes. This is a truly qualitatively different economy, the basis of which is formed by data that were unthinkable until very recently, and today constitute the canvas of almost the entire vital functions of a modern human.

2. ENTREPRENEURSHIP AS THE REALIZATION OF CREATIVE ABILITIES

This involves such aspects of the life of modern society as an integrated system of municipal management, including electronic document management, legal services, as well as notarial acts, remote sensing technology in the earth's crust, forecasting climate changes, etc. Of course, we, economists, can, first of all, speak about the growing range of economic transactions carried out via the Internet literally every day. All this, in turn, provides truly genuinely unimaginable hitherto opportunities for making quick and at the same time effective and competitive decisions in the field of economy, in particular, the production of completely new products and types of services.

But, of course, we are talking about the production of ideas, that is, about accelerating the scientific and technological progress itself. Therefore, we can justifiably speak of the digital economy with its capabilities becoming the driving force behind the development of innovation. Now let's look at the problem from a slightly different point of view, namely, from the point of view of providing qualitatively new opportunities for the majority of the population of modern states for implementing their own entrepreneurial ideas and projects. We take into account the fact that, when speaking of “entrepreneurial ideas and projects”, we do not necessarily mean exclusively commercial projects, that is, those that necessarily requiring the creation of any scheme or structure that generates profit - whether once or permanently. For example, clearly and competently designed charitable projects represent the same implementation of an entrepreneurial idea in the broad sense that from the very beginning existed in the intentions of its developer (or developers). After all, what is “entrepreneurial idea” in our understanding? In any case, this is a realized creative plan, ultimately bringing public benefit. In other words, this is a well-developed, calculated idea, which implies the achievement of a specific result in the end, and it, will repeat it again, can not necessarily be expressed only in profit. In this case, on the other hand, it should be taken into account that entrepreneurial ideas and projects that are not initially commercial in nature, therefore, need not only be completely charitable. This is the other extreme, and it must also be excluded, and this, in our opinion, is precisely the dialectic of the development of the phenomenon that we are considering. It is not for nothing that in recent years such a direction as social entrepreneurship has been widely developed in various countries, suggesting, on the one hand, the social orientation of entrepreneurial activity, and, on the other hand, organizing this activity in such a way that it is not unprofitable if possible. In other words, a person engaged in entrepreneurship in this area should see a concrete and constant interest. The digitalization of the economy in the sense of such an organization provides not only some additional (separate), but really qualitatively new, systemic opportunities. First of all, this refers to the opportunity to master the store of knowledge that is necessary for any kind of entrepreneurial activity in modern conditions. Here is just one example. It seems to us that such opportunities, first of all, open due to the large-scale training and retraining of highly qualified specialists in various areas of digitalization.

3. CHALLENGES OF SPECIALIST TRAINING FOR THE DIGITAL ECONOMY

First of all, national projects and programs involving joint activities of high-tech business, science and education on a national scale should be mentioned. Such events will combine, on the one hand, the use of the best practices of academic and university science, and on the other hand, the implementation of specific plans and projects of leading companies. If we talk about the educational potential of modern Azerbaijan as a whole, we will see that the total number of people employed in the education system, according to official statistics, in 2018 exceeded 334 thousand people. In percentage terms, the number of employees in this industry ranks first in our national economy: according to the results of 2017-2018, the number of people working in the education system amounted to about 22 percent of the total number of employees [1, pp.92-93]. However, in modern conditions, it is, above all, not about the number of employees, but about the results of their work. In this case, of course, the main "burden" in providing young professionals with a modern set of knowledge lies with the institutions of higher and secondary specialized education. And here it should be noted that at present, our government has the right to expect greater returns from higher education - and not only in the field of quality of students already being trained, which should not be inferior to the quality of global educational standards. As noted in the Strategic Roadmap on the Prospects for the National Economy of the Republic of Azerbaijan, at present, the level of enrollment of Azerbaijani youth in higher education remains low in light of the objectives to increase the overall international competitiveness of our economy [2, pp. 94-95].

Recall that this basic document, which defines the main directions of socio-economic development of our country for the medium-term (until 2020), long-term (until 2025) and in remote perspective (after 2025), is the main one in the package of Strategic Roadmaps for the national economy in general and 11 key sectors of the economy of Azerbaijan, adopted in accordance with the decree of the President of the Republic at the end of 2016. In relation to the strategic plans for the socio-economic development of our country, indicated in the given Strategic Road Maps, it is intended to involve material and financial, scientific and educational as well as comprehensive administrative and organizational resources. Another characteristic feature of them, we believe, is precisely the fact that all the planned activities are guided by the achievements of the digital economy. Accordingly, opportunities for the development and launch of models not only for training, but also for retraining of specialists arise, and not just on a modern basis, but precisely on the basis of practical project activities and the development of digital projects allowing the implementation of the variety of entrepreneurial ideas. Moreover, opportunities for implementing entrepreneurial ideas and projects are far of being limited by just the scope of national projects and only on the territory of leading universities. So, within the framework of specialist training for the digital transformation of the economy, measures are being taken not only at the national, but also at the sectoral and regional levels. And each of them provides opportunities for a qualitative improvement of the qualifications of specialists of various profiles, which naturally enhances their competitiveness in the labor market and the possibility of a significant increase in their “earning potential”. First of all, we mean specialists of that profile that are directly related to the digitalization of the economy. So, in some cases, the term “digital competencies” is already used, which means belonging to specialties that are directly related to digitalization processes. For example, experts in the field of applied informatics, applied mathematics and computer science, various IT specialties are already firmly occupying the most favorable position in the labor market, and, according to experts, their importance and demand will only increase over time. However, the realities of digitalization of the economy are increasing demand for representatives of, so to speak, “related” technical specialties linked, for example, to electronics, transport, etc. The task of improving the actual management of production processes (whether it is the creation of a product in tangible physical form or a service) - the very one discussed above - is not going away. Therefore, there is still the remaining demand for specialists in the field of, as recently said, the science of management. In this regard, let’s say, students receive additional opportunities to increase their “salary” status through training in a number of special training programs that the leading universities of our country, based on the experience of leading universities in the world, are able to organize in collaboration with interested business structures, as well as foreign partners. So, in the event of the interest of business partners within the project, more active development that has already earned good feedback from internships by senior students in interested commercial partner firms in order to acquire the necessary experience and with the prospect for subsequent employment, is possible. If we talk about older age groups of specialists, it is clear that the digital economy opens up the widest opportunities for retraining and skills development, as it was mentioned above. We are talking about mature specialists, including those in various forms of distance learning, all sorts of counseling and professional communication, in particular, Internet and video conferencing gaining more popularity. Naturally, in all the cases mentioned above, salary opportunities – and this is nothing more than personal financial ones – for specialists in these areas, on the one hand, and a further increase in demand for their services in the market, on the other hand, also mean an increase in entrepreneurial opportunities of the given specialists. This refers to a quantitative increase in the means of their self-realization in two ways - both as highly paid employees and as potential organizers of their own business.

4. FINANCIAL OPPORTUNITIES FOR ENTREPRENEURSHIP DEVELOPMENT IN THE CONTEXT OF DIGITAL ECONOMY

Now we will consider the situation with the implementation of entrepreneurial opportunities in a slightly different way and, on the other hand, from the perspective of expanding the capabilities of consumers. On the one hand, it is clear that the digitalization of the economy, which affects the entire sphere of relations in society, provides, in simple terms, literally unlimited possibilities for expanding the consumption of goods and services from a technical point of view. On the other hand, it is also clear that the same consumer opportunities remain within the budgetary constraints of consumers - as experts in the field of economic theory wrote about this, and we could read in the first textbooks published at the end of existence of the Soviet Union. For example, American economists Robert Pindike and Daniel Rubinfeld in their textbook "Microeconomics" noted that consumers "have only limited income for the purchase of commodities (highlighted by us)" [3, p. 66]. None of the famous contemporary authors argued with this, speaking in a positive sense, "reinforced concrete" statement. In principle, no one refutes it even now - from the point of view of the basic postulates of a market economy. At the same time, income constraints themselves in the digital economy are becoming more mobile. This happens under the influence of both the growth of opportunities for self-realization in the labor market mentioned above, and in connection with the emergence of new opportunities for mobilizing of own available financial resources. What is meant by this? Firstly, in the context of ongoing, and in some cases developing intermittently technical and technological progress, there is a quantitative increase and qualitative improvement of financial support tools for small and medium-sized businesses, including those related to facilitating the procedure of the initial for those wishing to start up their own business - and the subsequent, current, already in the course of development and expansion of such a lending business. Secondly, the possibilities of consumer lending to the population are expanding, which increases the number of options for disposing of free funds and, accordingly, expands the very framework of income constraints and expands the boundaries of the possibilities of people as consumers. But, as long as this is so, nothing prevents the individual from using - that is, in other words, consuming - the funds received for personal needs to implement some entrepreneurial ideas and projects. Thirdly, qualitative changes are taking place in the possibilities of resolving the investment issue, which is crucial for any economic development. This issue deserves special consideration. It is clear that the results of scientific, technical and technological changes taking place in connection with the development of the digital economy provide huge opportunities for:

- Firstly, expanding the areas of application of invested funds themselves, which will be discussed more specifically further;
- Secondly, accelerating the return on investment in many sectors and spheres of economy, which positively affects the potential willingness of investors to invest;
- Thirdly, speeding up the decision-making procedure itself on investing in certain industries or specific enterprises and projects.

We emphasize once again that what has been said is absolutely applicable both to the problems of investment activity at the macro level - at the scale of the national economy, and at the micro level. This, in particular, is fully applicable to the capabilities of a separate modern individual, in other words - in terms of increasing his opportunities to earn and the subsequent use of his personal financial resources. If we talk about the macro level and consider an example with a specific situation in our country, we have to admit that in the modern Azerbaijani economy, a real problem has arisen with investing in fixed assets. Let's look at the main macroeconomic indicators according to official statistics. So, they show that for the period 2015-2018, investment growth occurred only at the end of 2017, amounting to 2.8 percent compared to the

previous year. According to the results of 2015-2016 and 2018, there was an absolute decrease in the inflow of investments into our national economy [1, p.25]. Of course, such results were affected by the general instability of the economy. In a situation of such volatility and uncertain investor behavior, in our opinion, the development of the digital economy can contribute to rectifying the situation and give an impetus to intensifying investment in two directions. Firstly, to stimulate the attraction of capital to fundamentally new areas of economic relations - to a place where until recently it was simply technically impossible or did not promise acceptable returns. For example, at present, it is the use of advanced technologies created with the help of effectively implemented investment technologies in areas related to the development of new knowledge that allows you to get a return in the form of:

- Elementary reduction, and in some cases - minimization of entrepreneurship risks existing just yesterday;
- The formation of investment environment generally attractive for the entrepreneurship community in such areas.

This is a unity of action in the field of creation, practical application and transfer of new knowledge. Such, one might say, mainstream direction of investment activity arises from the tasks outlined in the Strategic Roadmap on the prospects for the national economy of the Republic of Azerbaijan, already mentioned by us [2, p. 94]. Secondly, the requirements and challenges of the digital economy are prompting the formation of a qualitatively different paradigm for creating new job opportunities. Such job opportunities are distinguished not only by new, advanced technical equipment - although such equipment, of course, is one of the characteristic moments. However, the main thing is still different: the very approach to the process of creating a material product or service, which should become brand new.

5. CONCLUSION

All mentioned above allows us to draw the following conclusions. Firstly, the development of the digital economy significantly increases the opportunities for expanding and diversifying entrepreneurial activities at various levels - from an individual employee (citizen) to large corporations. Secondly, the digitalization of the economy provides tremendous opportunities to increase its overall efficiency, in particular, for providing sustainable growth, while it does not at all mean any automatic reduction of its separate sectors, on the contrary, it opens up new options for more balanced development, thereby increasing the overall international competitiveness of the state. Thirdly, the digital economy gives space not only for getting primary education by employees in many industries, but also for professional retraining in accordance with the requirements of the labor market, and opens up opportunities for a general increase in the level of human capital, in particular, by providing options for increasing personal financial capabilities of a person and implementation of own entrepreneurial ideas and projects.

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