

# **REPUBLIC OF AZERBAIJAN**

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## **ABSTRACT**

of the dissertation for the degree of Doctor of Philosophy

### **ASSESSMENT OF THE IMPACT OF CSR (CORPORATE SOCIAL RESPONSIBILITY) AND ESG (ENVIRONMENTAL, SOCIAL, CORPORATE GOVERNANCE) PRINCIPLES IN THE BUSINESS PROCESSES OF COMPANIES**

Speciality: 5308. 01 – “General economy”

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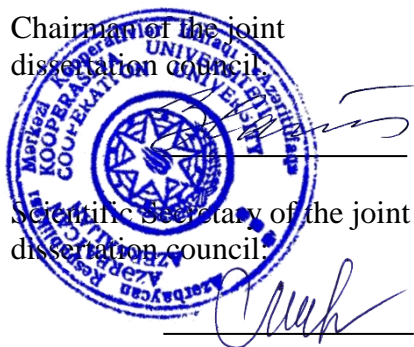
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## INTRODUCTION

**Research issue rationale and development rate.** The prospects of sustainable activity in the XXI century bring to the fore the implementation of CSR and ESG principles in the business processes of companies. From this point of view, in order to realize the aspect of “Green Economic Growth”, which is one of the National priorities for socio-economic development of Azerbaijan 2030, there is a need to form and develop ecological social responsibility in our country at the present time. This, in turn, indicates the importance of developing a system of influence of CSR and ESG principles on business. The conducted researches and observations give grounds to say that corporate social responsibility (CSR) and environmental, social and corporate governance (ESG) principles are extremely relevant in terms of in-depth analysis of the relationships between companies and society.

In order to create a “dynamic, inclusive and socially just society”, which is one of the main directions of socio-economic development, the country has also set a goal of creating a “clean environment and green development country”. As part of these goals, it is important for companies to operate in accordance with the principles of corporate social responsibility (CSR) and environmental, social and corporate governance (ESG). When making decisions in accordance with the principles of CSR and ESG, companies should take concrete steps, taking into account the impacts of both the internal and external environment. In this direction, companies should implement CSR and ESG concepts more precisely with intellectual approaches and ensure the application of measures in accordance with these principles. Also, effective proposals should be put forward to correctly assess the impact of these principles in the business processes of companies.

In accordance with the Environmental Principles, companies should increase the use of green energy, reduce the volume of waste and carbon emissions in order to minimize environmental impacts. At the same time, initiatives related to sustainable use of resources, nature protection, combating climate change should be implemented,

and on this basis, long-term business strategies that do not harm the ecosystem should be developed. The activities of companies in accordance with the principles of Social Responsibility are aimed at developing human capital in society, improving the well-being of employees and equal opportunities. Ensuring safe and healthy working conditions for employees, financing various education and development programs, as well as supporting gender equality and inclusion are the main priorities in this direction. Transparency, accountability and ethical management play an important role in ensuring the sustainable and successful activities of companies in accordance with the principles of Corporate Governance. Establishing effective management structures, optimizing decision-making processes and adhering to corporate values, establishing mutually beneficial relationships with stakeholders, managing risks and protecting company values in the long term are integral attributes of corporate governance.

In order to create a “dynamic, inclusive and socially just society”, which is one of the main directions of socio-economic development in Azerbaijan, the goal has been set to create a “clean environment and green development country”. As part of these goals, the possibilities of ensuring the activities of companies in accordance with the principles of CSR and ESG should be thoroughly investigated.

When making decisions in accordance with the principles of CSR and ESG, means should be identified to support companies in taking concrete steps, taking into account the impacts of both the internal and external environment. In this direction, companies should implement CSR and ESG concepts more precisely with intellectual approaches and ensure the implementation of measures in accordance with these principles. Also, effective proposals should be put forward to correctly assess the impact of these principles in the business processes of companies.

It should not be forgotten that the importance of CSR and ESG is conditioned by the pressures of investors and customers to meet the growing social and environmental expectations, as well as to adapt to global changes. For this reason, the study of the impact of CSR and

ESG principles on business processes will always be on the agenda.

Initial measures are being taken to implement corporate social responsibility and environmental, social, and corporate governance principles in business entities operating in our country. Although initial steps have been taken in these business entities to adapt to CSR and ESG principles, real business processes do not meet the above requirements. Therefore, in order to assess the impact of the principles discussed on society, the environment, and the internal management system, scientific support for the creation of a favorable social and ecological environment that will accompany the financial success of companies should be strengthened.

There are quite different scientific approaches to CSR and ESG in the various studies conducted to date. In general, the works of the following scientists on the role of business in sustainable development can be noted first of all: Samadzade Z.A., Guliyev E.A., Atashov B.X., Adilman Nadir, Muzaffarli N. M., Abdullayeva R.S., Habibova Z.Z., Allen W. Wood, Bentham, J., Freeman R. E., Mark R., Kramer, Drucker P.F., Carrol A.B., McWilliams A., Siegel D., Wagner T., Lankoski, L., Halme M., Barroso J., Jeffrey D. Sachs, Moon, J.,Matten, D., Reis A., Monteiro, Kemp R., Reid E., Toffel M., Waddock, Visser W., Bobrova O.S., Kostin A.E., Kuzhetsova N.V., etc.

However, these scholars did not set themselves the goal of studying and evaluating the impact of corporate social responsibility and environmental, social, and corporate governance principles on companies' business processes. All these aspects reveal the relevance of the topic "Assessing the Impact of CSR and ESG Principles on Companies' Business Processes" in accordance with the requirements of the modern era.

**Object and subject of research.** The object of the study is companies operating in various fields.

The subject of the study is the processes of implementation of the principles of Corporate Social Responsibility (CSR) and Environmental, Social and Corporate Governance (ESG) by these companies and their economic relations in their business activities.

**Aims and objectives of the research.** The aim of the research is to examine the current state of Corporate Social Responsibility (CSR) and Environmental, Social and Governance (ESG) within the business processes of companies, to analyze the reasons why companies undertake social responsibilities. At the same time, this research aims to expand and promote the potential opportunities for the implementation of CSR and ESG.

To achieve this goal, the following tasks have been set:

- To provide a characteristic of theoretical approaches in the business processes of companies;
- To explain the role of CSR and ESG principles in the sustainable development of companies;
- To provide analysis and application features of international practices;
- To assess the current state of CSR and ESG implementation in the business processes of companies;
- To identify priority areas in terms of regulating the application of CSR and ESG principles;
- To identify areas for regulating compliance with ESG and CSR management principles in business processes;
- To educate and prepare Azerbaijani companies to operate in accordance with global ESG and CSR principles;
- To provide suggestions and recommendations on improving decision-making and future directions in the application of CSR and ESG principles in the business processes of companies.

**Research methods.** Various scientific approaches and methods were used during the research. Mainly, systematic analysis and logical generalization methods were applied, surveys were conducted and expert evaluation was carried out. In addition, comparative analysis, statistical grouping, functional analysis, econometric modeling and forecasting methods were used, statistical indicators were examined and the data obtained through analytical analysis were analyzed and general conclusions were drawn. These methods were the main means of achieving accurate and substantiated results on the topic of the research.

### **Basic theses for defense.**

1. Systematization of theoretical approaches to CSR and ESG shows that these principles play a significant role in the sustainable development strategies of companies in the modern era, and their application acts as an important tool in solving economic, social and environmental problems.

2. The essence of the concept of environmentally-oriented corporate social responsibility ensures that the interests of all members of society are taken into account, while at the same time increasing the competitiveness and economic efficiency of companies within the framework of the concept of Creating Shared Values (CVS), which reflects the responsibility of companies for their impact on consumers, employees and the environment in all aspects of their activities.

3. It is necessary to analyze the dynamics of social, corporate management activities related to environmental protection in the national economy and develop an appropriate concept based on the specific features of the development of environmentally-oriented corporate social responsibility in the country.

4. Econometric assessment of the current state of the activities of companies on environmentally-oriented corporate social responsibility in Azerbaijan and its impact on the country's green economic growth will make a special contribution in this direction.

5. In order to ensure sustainable development from a CSR and ESG perspective, it is of great importance to systematize companies' decision-making processes and more fully implement planning strategies and future directions in these processes.

### **Scientific novelty of the research**

- Within the framework of the study, the advantages of CSR and ESG principles from economic perspectives were identified based on a theoretical approach.

- In the process of the research, the dynamics of social and corporate governance activities related to environmental protection in the national economy were analyzed, the specific features of the development of environmentally-oriented corporate social responsibility in the country were revealed, and the main provisions

of the proposed concept were determined.

- An analysis of the current state of the activities of companies on environmentally-oriented corporate social responsibility in Azerbaijan and an econometric assessment of its impact on the country's green economic growth were conducted, and forecast models were built.

- A Decision Making Model was developed to support sustainable decision-making based on the assessment of risks related to internal and external factors in the field of CSR.

- Possible ways to expand the application of CSR and ESG principles were proposed.

### **Theoretical and practical significance of the research.**

This research contributes to modern scientific discussions by analyzing the impact of CSR and ESG principles on business processes in a broad and systematic manner. Its main theoretical significance is in strengthening the scientific basis, proposing new theoretical models and methodologies for measuring the integration of principles into business strategies, how to apply ESG in the context of corporate governance, sustainable development and social responsibility, conducting comparative analyses on the application of ESG at the international and national levels and identifying development trends. This study deepens the theoretical foundations of ESG principles in business management and studies their real economic and social impacts. As a result, it provides new scientific approaches for both academic circles and provides useful recommendations for business entities, government agencies and investors.

In terms of practical significance, the results of the study provide important directions for practical decision-makers and companies in the field of applying ESG principles. Practical recommendations for companies on the effective integration of ESG principles into their business models, supporting companies in establishing long-term sustainable development strategies, enabling investors to make informed decisions by learning how to reduce their risks and the impact on the market value of companies, and supporting proposals and recommendations for improving the legal framework and



formulating policies related to ESG are important.

**Approbation and implementation.** The main provisions and main results of the dissertation were reflected in 5 theses (3 of which are abroad) and 10 articles (4 of which are abroad) in authoritative local and foreign publications recommended by the Higher Attestation Commission, as well as in the materials of scientific and practical conferences of republican and international importance. Among the conference materials, the following theses can be cited: “Financial condition and trends in the development of the banking system of Azerbaijan” (Makhachkala, 2016), “The role of economic growth in sustainable development” (Baku, 2018), “Responsible Behavior of Business: Approaches to understand cooperation between the private and public sector” (Prague, 2018). During the research, the author also published the following publications: “Comparative analysis of methods used by commercial banks to assess credit risks” (Makhachkala, 2014), “Economy and sustainable development” (Baku, 2016), “CSR (Corporate Social Responsibility) as part of the Sustainable Development” (Baku, 2018), “CSR integration processes” (Baku, 2020), “CSR Decision Making Model” (Baku, 2020), “Corporate social responsibility strategies of transnational companies in Azerbaijan in the context of sustainable development” (Baku, 2021).

**The name of the organization where the dissertation was conducted.** Academy of Public Administration under the President of the Republic of Azerbaijan.

**The volume of the dissertation’s structural sections separately and the general volume.** The total volume of the dissertation work is 252956 characters. Including, the introduction is 12494 characters, Chapter I is 64502 characters, Chapter II is 61192 characters, Chapter III is 65344 characters, Conclusion is 9268 characters, 151 references and Appendices. The dissertation work contains 2 figures, 10 tables, 9 graphs. The volume of the dissertation work excluding tables, graphs, figures, and the list of references is 212800 characters.

## BASIC CONTENT OF THE DISSERTATION

In the "**Introduction**" of the dissertation, provides information on the relevance and degree of development of the topic, the object, subject, goals and objectives of the research, methods, main provisions put forward for defense, scientific innovation, theoretical and practical significance of the research, its approval and application, structure and scope.

**In the first chapter, dedicated to the theoretical methodological foundations of CSR and ESG application in the business processes of companies,** first of all, modern approaches in the business processes of companies are characterized. The role of CSR and ESG principles in the sustainable development of companies is clarified, foreign experiences in corporate social and ecologically responsible business are analyzed, and their application possibilities are characterized.

The complementary ideas of classical representatives of economic science in their attitude to business (entrepreneurship) form the basis of modern business theory. Business theory and practice, which were formed on this basis and achieved significant achievements, have created favorable conditions for the emergence of new approaches. The specific features of modern business processes are the result of the intensification of globalization processes to a decisive extent, the role of the innovation factor in the competitiveness of business entities, the transformation of green business in accordance with the concept of sustainable development into an objective necessity, the deeper penetration of digital transformations into economic activities, and the influence of a number of such factors.

The qualitative changes observed in modern business processes can be considered, first of all, the result of the influence of the following factors: the expansion of the scope of digital transformations and the formation of a qualitatively new and more dynamic business environment under the influence of this factor; the objective necessity of adapting business to the requirements of the concept of sustainable development and the transformation of green business processes into reality; the rather serious changes caused by

green and digital development in the competitive environment in which business processes are implemented; the many times reduction in the materialization period of business ideas of the most diverse nature and level on a global scale.

Based on the assumption that sharing products and services is more economically advantageous, the sharing economy realizes the possibilities of changing the purpose of use and reuse of products (services) regardless of the state of participation in circulation. Relevant business models (sharing business) are presented as an economic model in which resources and products are shared and used together in order to transform assets into services. The development of a business based on the sharing principle takes place precisely on the basis of big data and digital platforms. Sharing business significantly intensifies the competitive struggle in the relevant market segments by facilitating the accessibility of products and services. Another important factor that intensifies the competitive struggle is the active and creative use of digital tools and technologies by business, especially in the sharing economy.

Although the hybrid form of business has existed for many years, it is currently considered the subject of a new approach. In this case, as a rule, joint development opportunities for related areas of activity are realized. The jointly realized potential of the sharing business model and the digital environment serves a new level of development of the hybrid form of business. As a criterion for characterizing the effectiveness of the hybrid approach, along with the known criteria, the minimization of displacements should also be taken.

The main goal of business is customer satisfaction, and customer loyalty, expressed in its continuity, can be strengthened with new approaches. The Agile methodology, which realizes new opportunities for the use of agile management methods and tools in the digital environment, involves an operational response to changes in customer needs and desires, as well as the effects of external factors. In our opinion, digital transformations will intensify research on improving approaches to differentiating the main and secondary criteria in order to expand the area of practical application of multi-criteria optimization.

In the development of companies, CSR promotes activities that contribute to the implementation of social obligations, not to business entities serving their own interests. In other words, CSR is a company's sustainable development policy and is the first step of ESG.

By examining the data of various international organizations, it can be concluded that global climate change, shortcomings in territorial planning, and expansion of cultivated areas in unplanned directions exacerbate biodiversity problems and the climate crisis.<sup>1</sup>

The implementation of CSR strategies in companies operating in the People's Republic of China has been actively taking place recently. In the PRC, CSR strategies in large transnational companies are implemented in conditions where the government regulates them quite strictly. China's very important role in the world economic system, its growing importance in global socio-economic processes are reflected in its relationship to the CSR model.

The European experience in terms of promoting ESG is noteworthy. It can reveal new opportunities and various risks in the process of promoting ESG strategy, which is a decisive stage on the path to a green economy. Researches give reason to say that this experience is of interest in the following areas: companies that better adapt to ESG principles are considered more attractive places to work in the current and near-term labor market; Significant expansion of the opportunities for these companies to gain or further strengthen their positions in the relevant market segments; opportunities for reducing carbon dioxide and greenhouse gas emissions in general, companies with higher results in realizing these opportunities are considered more competitive in the relevant market segments; higher assessment of the investment attractiveness of companies with a successful ESG strategy and pursuing a more successful policy towards the implementation of this strategy. There are many differences in the practice of adapting to ESG principles in individual European countries. Let's say that in the Netherlands,

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<sup>1</sup> Huseynli, J., Huseynov, Yu., Kovalenko, O., Guliyev, M., & Huseynova, L. (2024). Assessment of the impact of COP decisions on biodiversity and ecosystems. *Scientific Horizons*, 27(4), 128-140. <https://doi.org/10.48077/scihor4.2024.128>, s.128-140

compared to other developed countries in Europe, lower quotas for carbon emissions and higher fines have a positive impact on the customer base of chemical industry products in that country. The dynamics of investors' investments in developed countries of Europe, potential economic powerhouses such as the USA and Japan, or rather, in business entities of various sizes operating here, showed that the emphasis on CSR and ESG criteria is not accidental.<sup>2</sup>

In the German socially responsible investment market, where mainly private companies (BonVenture, BMW Stiftung Herbert Quandt, etc.) participate, the preferred directions are environmental, social development and charity. The assessment of the results achieved by companies operating in different countries of the world in the implementation of CSR and ESG strategies significantly depends on the level of Big Data formation. The concept of Creating Shared Values (CSV) is considered as a special type within the framework of Nestle's corporate strategy. A significant number of employees believe that CSR has made their work more meaningful and now the addition of CSV allows them to contribute more to their society. Through CSV, Nestle has successfully linked corporate strategy with the concept of social contribution.

In the second chapter, **dedicated to the assessment of the current state of CSR and ESG implementation in the business processes of companies in Azerbaijan**, the research process analyzed the dynamics of social and corporate governance activities related to environmental protection in the national economy, revealed the specific features of the development of environmentally oriented corporate social responsibility in the country, and determined the main provisions of its concept.

Our analyses, surveys and interviews show that one of the important aspects of the development of environmental corporate social responsibility is the financing of environmental protection measures. Considering this point, it can be noted that activity in this area in the Republic of Azerbaijan is still at the stage of formation,

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<sup>2</sup> Kabir L.S. (2017). Socially Responsible Investing: a Trend or a Temporary Phenomenon? *Ekonomika. Nalogi. Pravo - Economics. Taxes. Law*, vol. 4, pp. 35-41

and with the exception of many business structures, large companies, some state enterprises (for example, the State Oil Company, SOCAR, BP, etc.), most large business structures, enterprises and organizations operating in both the public and private sectors do not take into account items related to environmental costs and environmental protection costs in their expenses, and do not allocate financial resources to this area. In general, in most cases, capital investments in this area are made at the expense of state funds.

This chapter also includes an econometric assessment of the current state of environmentally-oriented corporate social responsibility activities of companies in Azerbaijan and its impact on the country's green economic growth, and forecast models have been built.

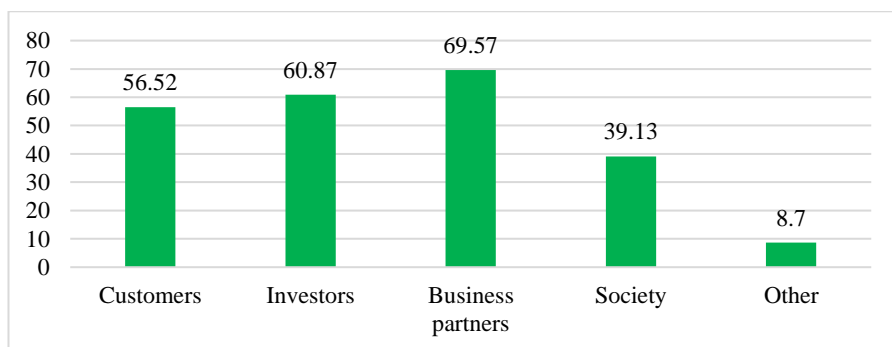
In order to qualitatively assess the current state of environmentally-oriented corporate social responsibility of enterprises and organizations, companies, regardless of the type of ownership, in Azerbaijan, it is necessary to use social research methods to study public opinion. In this regard, first of all, in order to determine the attitude of enterprises operating in the field of extraction and processing of natural resources, that is, in areas that can cause the most damage to the environment, a survey was conducted among Azerbaijani companies during the study.

In the survey conducted by the “Commission on Research Business Environment and International Ratings”, which plays an important role in the effective and environmentally and socially responsible activities of companies in Azerbaijan, the level of awareness of respondents about ESG principles (in percent) is determined, while the levels of full understanding of the principles or just being aware are distinguished. From the survey materials, it is clear that only 20 of 278 respondents (i.e. 7 percent) stated that they were aware of or fully understood the three components of ESG principles mentioned. Of the 10 business entities that fully understood the ESG principles, or rather the three main components, one reported that trust in the company had increased, two reported that corporate culture had improved, two reported that staff efficiency had increased, etc. Finally, let us state once again that 20 of the 278 respondents are fully aware of the ESG principles, 10

entities apply these principles, and 4 submit relevant reports.<sup>3</sup>

According to the results of the survey, the implementation of CSR and ESG principles in companies operating in the country is unsatisfactory. However, the level of non-financial accountability of the business entities in question is lower. Therefore, the issues of revising the incentive system for the implementation of CSR and ESG principles in companies and increasing the level of accountability, and improving the institutional support for socially and environmentally responsible business activities should always be on the agenda.

In general, the questions in the survey conducted by us cover general, business and management experience, CSR, ESG practice, CSR, ESG reporting and measurement practice. The survey was aimed at participants in the following economic sectors: financial services, insurance services, retail, manufacturing (food, metal, plastic, construction materials, glass, paper and cardboard, textiles, non-oil raw materials), technology, transport, agribusiness, mining and quarrying, and development of labor standards. Based on the results of the Survey, it can be said that there are few cases of stakeholder involvement in CSR-related decisions, the most involved stakeholders are business partners, and the opinions of society and customers are almost not taken into account in CSR-related decisions (Graph 1).



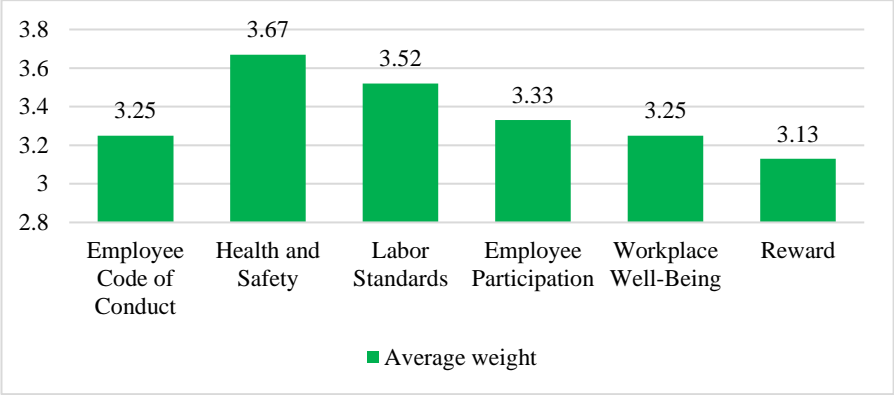
**Graph 1. Stakeholder involvement in CSR decisions**

*Source: Compiled by the author based on survey materials.*

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<sup>3</sup> Survey of the level of awareness of ESG principles in Azerbaijan. Baku, 2023  
<https://azranking.az/public/images/ESG%20NEW%2002.11.2023.pdf>

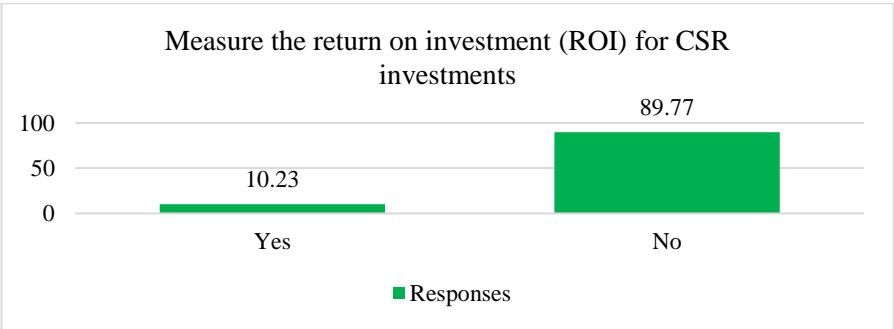
At the same time, the lack of a fully developed code of conduct in the formation of a healthy work environment has a negative impact on the division of responsibilities, but since HSE and other factors are under the state's attention, more importance is given to these areas. Rating scale (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) (graph 2).



**Graph 2. Work environment**

*Source: Compiled by the author based on survey materials.*

In addition, the ROI of CSR investments is not measured because CSR projects in the market are more charitable and most of them are non-profit projects, such projects can be viewed as donations (Graph.3).

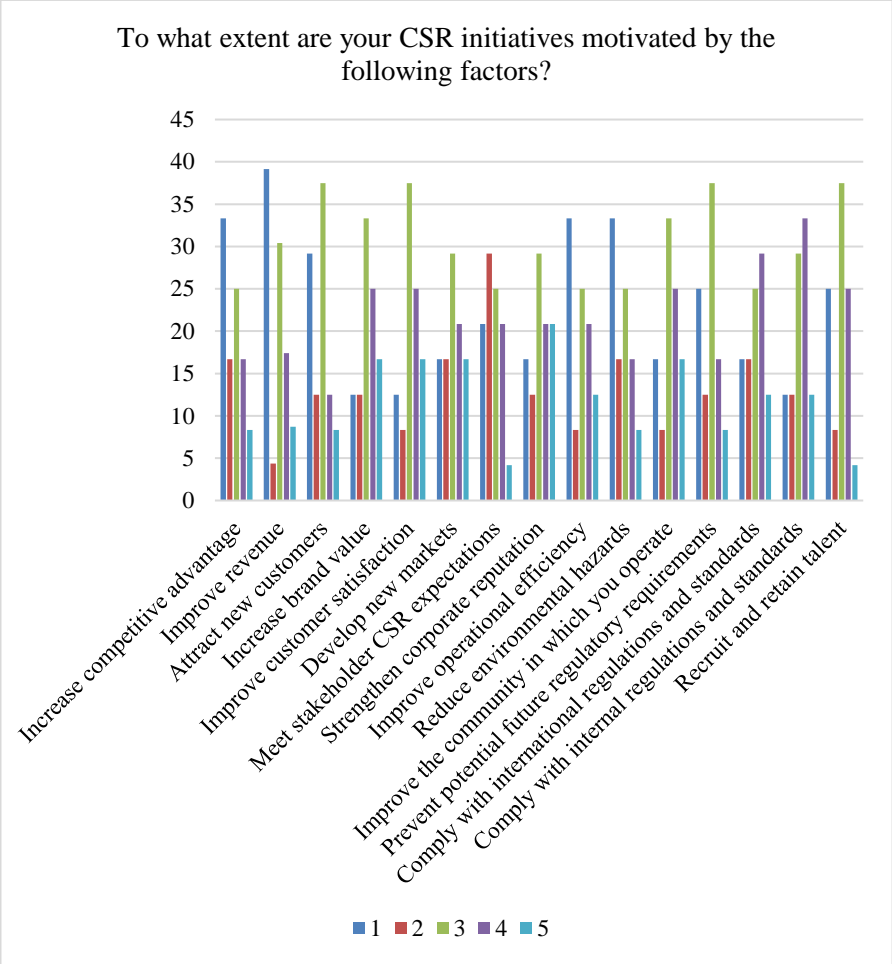


**Graph 3. Return on investment for CSR investments**

*Source: Compiled by the author based on survey materials.*



The graph below shows the factors that motivate CSR initiatives and to what extent.



**Graph 4. Factors influencing your CSR initiatives**  
*Source: Compiled by the author based on survey materials.*

As can be seen from Graph 4, one of the reasons for the low assessment is the lack of full knowledge of what CSR is in the market and the lack of awareness. This graph in itself can lead to the

development of great potential places and long-term strategies can be formed. Rating scale (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree).

In our research, examples of the application of ESG principles in terms of stimulating innovation and sustainable development of companies operating in different sectors, including the agricultural sector, were evaluated. We believe that the opportunities for attracting investment in sustainable agricultural sector, ecological and socially responsible activities in our country will depend on the state of compliance with CSR and ESG principles.

The development of environmentally oriented corporate social responsibility in our country, the application of environmentally friendly technologies and the impact of environmental protection on the socio-economic development of Azerbaijan in the future, and the conduct of a forecast assessment using empirical methods will form the basis for the formation of the provisions emerging in the research process.

The following equation (1) of the regression model was proposed using the least squares method to determine the impact of environmental protection expenditures on the GDP of the Republic of Azerbaijan:

$$\text{LOG(GDP)} = \text{C(1)*LOG(CEMMX(-N))} + \text{C(2)} \quad (1)$$

Here, LOG(GDP)-Natural logarithm of GDP of the country; LOG(CEMMX)-Natural logarithm of total expenditures on environmental protection;

C(1) and C(2) are the parameters of the equation, C(1)-Elasticity coefficient, and C(2) is a constant coefficient characterizing the factors not taken into account; N-Denotes the year of lag effect.

Based on the data given in Table 1, the parameters of the regression equation of model (1) were estimated in the Eviews application package and the following result was obtained:

$$\text{LOG(GDP)} = 0.300400735694 * \text{LOG(CEMMX(-10))} + 7.71861729277$$

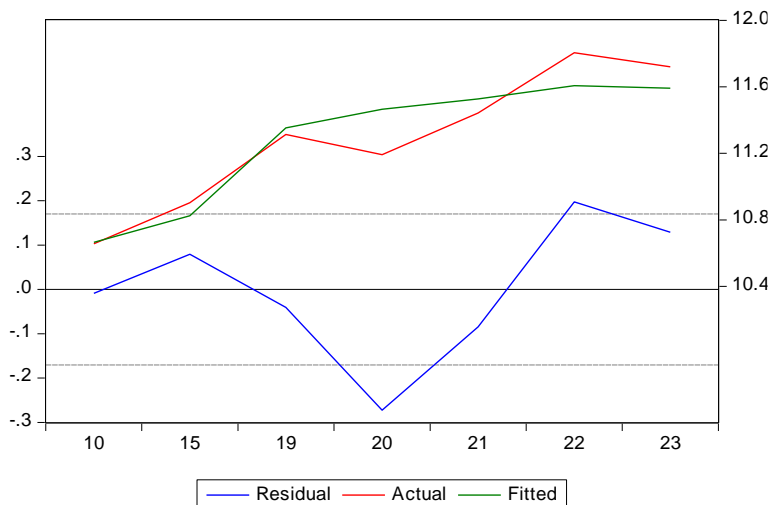
Table

Dynamics of GDP, Green GDP and environmental protection expenditures in Azerbaijan

İllər	log(green GDP per capita)	Wastes from extraction, mining, quarrying, physical and chemical processing of minerals	Environmental protection expenses (thousand manat): Total	including:							Expenditures per thousand manat GDP, manat	Gross domestic product - total
				Current expenses incurred for environmental protection measures	of the main production funds for environmental protection as a share	maintenance of reserves and national parks, protection and reproduction of wild animals and fish	forestry operations	Funds directed to fixed capital for environmental protection and efficient use of natural resources	emmrscx	mqscx	emmrscx	
2006	9.953815011	-	-	-	-	-	-	-	-	-	-	18746.2
2007	10.14118023	-	-	-	-	-	-	-	-	-	-	28360.5
2008	10.2970157	-	-	-	-	-	-	-	-	-	-	40137.2
2009	10.93293445	-	179986.3	59550.6	2301.6	3705.5	9141.3	105287.3	7.06	105287.3	7.06	35601.5
2010	10.81386194	3.2	260673.8	52817.3	4793.6	3902.7	9153.0	190007.2	5.39	190007.2	5.39	42465
2011	10.50541082	-	320253.5	61511.2	4849.4	4553.7	10064.0	239275.2	11.95	239275.2	11.95	52082
2012	10.71574489	-	419317.9	59429.5	4268.2	4855.0	10893.1	339872.1	15.31	339872.1	15.31	54743.7
2013	10.61193311	-	398187.5	73298.6	3675.6	5611.8	11002.1	304599.4	13.74	304599.4	13.74	58182
2014	10.54399553	-	283414.6	44 802.3	2 697.1	6 151.9	12 829.4	216 933.9	9.51	216 933.9	9.51	59014.1
2015	10.55502993	1.3	136208.3	32258.4	1605.0	5949.8	11530.7	84864.4	2.50	84864.4	2.50	54380
2016	10.63984459	-	155817.2	26324.0	1043.4	6777.6	12126.2	109546.0	5.34	109546.0	5.34	60425.2
2017	10.81809575	29.7	189044.1	30525.3	5123.6	6895.9	13112.3	133387.0	6.47	133387.0	6.47	70337.8
2018	10.63067433	4.2	319256.1	47896.3	3395.1	6807.5	13245.0	247912.2	10.77	247912.2	10.77	80092
2019	10.31534711	4.7	387680.4	59222.8	971.6	6837.4	10793.0	309855.6	7.06	309855.6	7.06	81896.2
2020	10.56101336	5	239764.5	49727.3	1920.1	6206.0	11702.4	170208.7	4.56	170208.7	4.56	72578.1
2021	10.88599457	4.8	141342.7	50589.6	1028.8	6785.9	11609	71329.4	2.54	71329.4	2.54	93203.2
2022	-	3.5	231193.6	46410.1	2079.2	7682.0	14479.5	160542.8	3.98	160542.8	3.98	133972.7
2023	-	3.4	677423.7	55489.2	841.6	8439.8	17661.7	594991.4	11.52	594991.4	11.52	123128.4

Source: <https://www.stat.gov.az> and compiled by the author based on Green Horizons: Assessing Environmental Sustainability and Renewable Energy's Role in Achieving the Goals—A Case Study of Azerbaijan.

Thus, model (1) concludes that a 1% increase in environmental protection spending in Azerbaijan increases the country's GDP by 0.3%, starting from the current year and increasing steadily from 0.12% to its highest level 10 years later (graph 5).



**Graph 5. Adequacy graph of Equation (1)**

The relevant tests conducted confirmed the adequacy of model (1) and showed that Equation (1) can be used for forecasting purposes.

The dissertation analyzed the interdependence of economic indicators on “Green GDP” and environmental protection in Azerbaijan. From this aspect, by conducting an econometric assessment of the impact of environmental protection expenditures on the increase of green GDP, the directions of scientific substantiation and practical application of the research methodology for calculating the impact of environmental factors on economic development indicators of society were determined. The assessment will be important in determining the priority directions and methodology of future research in this direction.

The following regression equation was proposed to determine the dependence of green GDP growth on environmental protection expenditures:

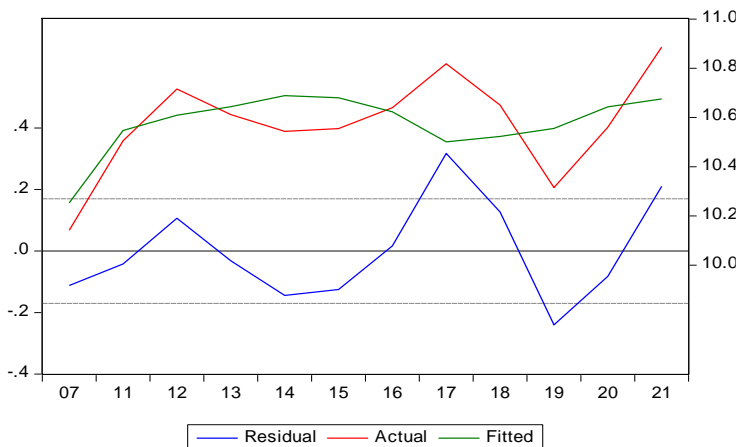
$$\text{LOG}(\text{GREEN-GDP-PER-CAPITAL}) = \text{C}(1) * \text{LOG}(\text{CEMMX}(-N)) + \text{C}(2) + \text{U} \quad (2)$$

Here,  $\text{LOG}(\text{GREEN-GDP-PER-CAPITAL})$ -the natural logarithm of green GDP per capita;  $\text{LOG}(\text{CEMMX}(-N))$ -the natural logarithm of total environmental protection expenditures; C(1) and C(2) are the parameters of the equation. C(1) is the elasticity coefficient, and C(2) is a constant coefficient characterizing the factors that are not taken into account; N- indicates the year of the lag effect; U- is the random deviation.

Based on the data given in Table, the parameters of equation (2) were evaluated in the Eviews application software package and the following result was obtained:

$$\text{LOG}(\text{GREEN-GDP-PER-CAPITAL}) = 0.167036709851 * \text{LOG}(\text{CEMMX}(-2)) + 8.52618676927 \quad (2)$$

The following result was obtained from model (2) that a 1% increase in environmental protection expenditures in Azerbaijan increases the volume of green GDP per capita of the country by 0.17% with a lag of 2 years (graph 6).



**Graph 6. Adequacy graph of Equation (2)**

The statistical characteristics of Equation (2) and the relevant tests performed have shown that Equation (2) is adequate and can be used

for forecasting purposes.

The following can be noted as priority areas for regulating the application of CSR and ESG principles at each stage. Mobilization of efforts and activities on ESG at the state level should be the first step of the initial stage. The next step should be the development of an approach and methodology for the application of CSR and ESG principles, and at that step the priorities of regulatory measures should be taken into account. Otherwise, the likelihood of conflicting points in subsequent stages may increase. At the initial stage of implementing an ESG initiative, an initiative plan and a detailed (detailed) work plan should be prepared.

At the third stage of implementing ESG initiatives, a sustainable development strategy is developed, the priorities of its implementation policy and ways of their implementation are selected. Within the framework of this stage, ESG is included in general development strategies and adapted to sectoral plans. The next stage of the implementation of initiatives to promote social responsibility in sustainable activities includes the integration of criteria for assessing the effectiveness of the transition to ESG. At this stage, the issues of adapting ESG criteria to national legislation, policy priorities, regulations, technological and other operations, as well as the implementation of ESG projects in one or another area are covered. As the final stage of the implementation of ESG initiatives, it involves monitoring, measuring and ensuring accountability.

At the end of the chapter, approaches are characterized in terms of regulating the application of CSR and ESG principles. Priority areas in terms of regulating the application of CSR and ESG principles are identified: determining the comprehensively justified sequence and vectors of the principles discussed, taking into account the specifics of the company and its operating environment; increasing the role of companies in integrating activities in accordance with CSR and ESG principles in order to increase the trust of partners and customers; Increasing transparency and eliminating information asymmetry in the processes of regulating activities in accordance with CSR and ESG principles; ensuring a higher level of non-financial

accountability by taking advantage of the advantages of the digital environment for companies; increasing green social investments in human capital and improving their structure according to CSR and ESG criteria; creating a system for promoting CSR and ESG adaptation of business processes, ensuring the participation of all stakeholders in multilateral discussions on the use of climate finance.

**The third chapter, dedicated to the integration of CSR and ESG principles into business processes in Azerbaijani companies and prospective development directions,** identifies the directions for achieving compliance with ESG and CSR management principles in business processes and regulating that compliance. The need and ways to implement education and training for Azerbaijani companies to operate in accordance with global ESG and CSR principles are indicated. The priorities and prospects for improving decision-making in the application of CSR and ESG principles in companies' business processes are identified.

As a direction for regulating the adequacy of ESG and CSR management principles in companies' business processes, it is advisable to comply with the requirements in the financing of investments in sustainable development, especially in the lending system: regardless of the amount of the loan, all clients should be informed that their activities must comply with relevant local laws and regulations, in particular health protection, environmental protection, labor conditions and applicable safety regulations (HSE). Banks should provide annual reporting on their activities in accordance with corporate environmental and social responsibility requirements, both domestically and mainly to local groups, in the format of relevant projects, with documents covering the necessary obligations.

The possibilities of integrating CSR and ESG principles into business processes in companies operating in Azerbaijan depend to a decisive extent on the institutional provision of adaptation of the dynamically developing national economy to these principles. As is known, digital transformations expand the possibilities of determining the quantitative characteristics of the relationships of business entities with each other, with customers and other partners. The increased sensitivity to innovations conditioned by the digital

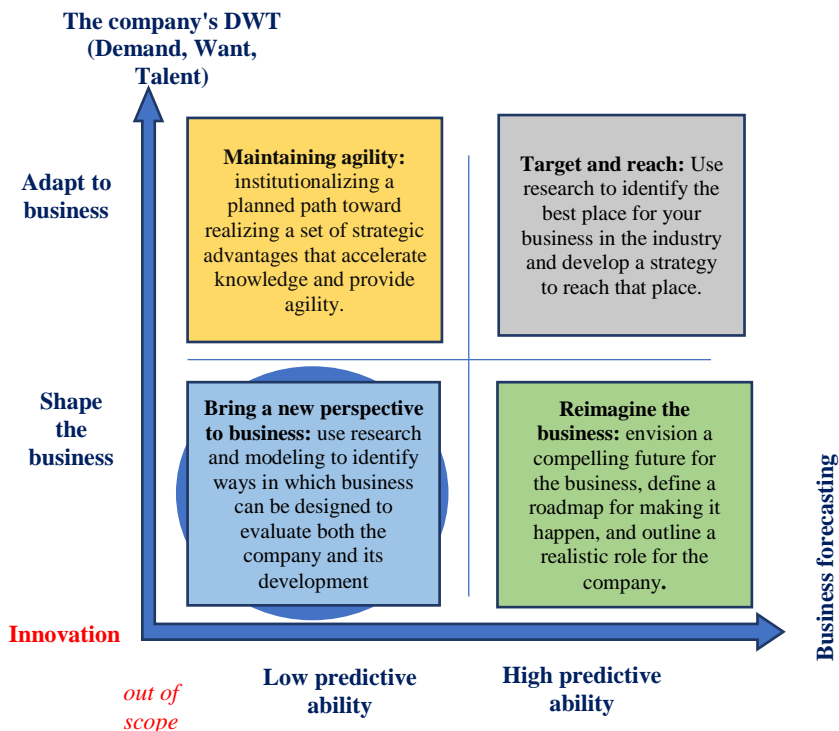
environment reveals the need for a unified approach to economic-technological and economic institutional modernization in current and prospective economic activity.

The role of educational work in creating a normative-legal and regulatory platform is increasing. Strengthening the use of digital tools and technologies in strengthening the result-oriented nature of educational activities in sustainable and innovative business is considered a promising direction. The use of these tools and technologies, as experience shows, expands the possibilities of applying the principles of social and environmental responsibility in the multifunctional activities of companies. Adaptation to ESG and CSR principles requires a reconsideration of the further transparency of non-financial reporting of companies. This implies the regular and more comprehensive holding of educational events. Of course, the need for more active application of ESG principles is possible due to the expansion of incentive measures and the improvement of the relevant mechanism, especially in digital format.

Our research has shown that the views of various interest groups on the activities of companies in the field of CSR differ and, in particular, vary depending on the intentions of CSR managers. Also, the analysis has shown that the decision-making processes of any company in the field of CSR largely depend on factors determined by their geographical location.

In this regard, in the study, we have proposed the systematization of decision-making processes in companies in order to develop more sound and sustainable planning strategies for CSR in the future. This model is indicated as the “Corporate Social Responsibility Decision-Making Model” (CSR - DMM). This model consists of two dimensions and four approaches. The CSR - DMM model, described in detail below, covers the ethical and business principles of CSR, as well as micro- and macro-indicators. In general, not all companies have the Demand, Will and Talent (DW) necessary to have a significant impact on the development trajectory of the field as a whole. Combining companies' TSI as a way to adapt to circumstances and exert predictable influence, four different strategic approaches to CSR can be seen in Figure 1:





**Figure 1. Corporate Social Responsibility Decision Making Model (CSR)**

*Source: Compiled by the author.*

As a means of conveniently developing long-term strategies, companies develop adaptation tactics designed for areas with both high and low levels of predictability. It should be borne in mind that the levels of predictability can differ significantly depending on the area and time.

**As a result,** the new scientific approaches, results, proposals and recommendations obtained by studying and generalizing the impact of CSR (corporate social responsibility) and ESG (environmental, social, corporate governance) principles on the business processes of companies can be mainly expressed as follows:

- In the future, in order to achieve the main goals set out in the National Priorities for Socio-Economic Development of Azerbaijan

2030, the implementation of advanced principles of corporate social governance aimed at environmental protection at the level of companies operating in individual areas will allow achieving the goals set for the national economy as a whole in the future.

- There are still no mechanisms and tools for the state to support and stimulate ecological social responsibility at the legislative level. The introduction of articles in the tax legislation of Azerbaijan on the establishment of tax incentives for enterprises and organizations that actively implement environmentally friendly corporate social responsibility measures at the legislative level will lead to the development of the environmental aspect of corporate social responsibility in business structures.

- It is necessary to develop a comprehensive state program for the development of small and medium-sized businesses in the country, as well as for the implementation of reforms in the financial and tax spheres to increase the environmentally friendly corporate social responsibility of such business structures. The basis of this program should be the concept of modern environmentally friendly corporate social responsibility of Azerbaijani business. In order to realize the aspect of national priorities related to "Green economic growth", conceptual foundations for the formation and development of environmental social responsibility of modern Azerbaijani society should be developed in our country at the present time.

- The creation of a fair and competitive environment, the application of more environmentally friendly technologies in order to overcome their competitors in the market will also give impetus to the development of environmentally friendly activities of entrepreneurship and business structures in the economy.

- The development of environmentally-oriented corporate social responsibility in our country, the application of environmentally friendly technologies and the impact of environmental protection on the socio-economic development of Azerbaijan in the future, and the conduct of forecast assessment using empirical methods formed the basis for the formation of the provisions that emerged in the research process. The dissertation work analyzed the interdependence of economic indicators on "Green GDP" and

environmental protection in Azerbaijan.

- One of the important aspects of the development of ecological corporate social responsibility is the financing of environmental protection measures. From this point of view, it can be noted that the activity in this area in the Republic of Azerbaijan is still at the stage of formation and, with the exception of many business structures, large companies, some state enterprises (for example, the State Oil Company, SOCAR, BP, etc.), most large business structures, enterprises and organizations operating in both the public and private sectors do not take into account items related to environmental costs and environmental protection costs in their expenses, and do not allocate financial resources to this area. Overall, in most cases, capital investments in this sector are made at the expense of state funds.

In general, the following proposals and recommendations for the development of CSR and ESG are given in the work: adoption of the CSR-GMP model in any type of company and its integration into internal decision-making processes; implementation of joint projects, events and other educational activities by private and public enterprises by increasing awareness; creation of CSR and environmental friendly projects in the programs that the State-Private Partnership programs of the Republic of Azerbaijan, such as SIF and SME, which stimulate the economy, will implement with private enterprises; Another point is the provision of tax privileges, inclusion of benefits for the implementation of green projects and environmentally friendly programs; establishment of close relations with private and public banks in the development of the Central Bank's Environmental and Social Management Systems, implementation of projects such as technical cooperation on personnel training; Financing environmentally friendly projects/financing renewable energy projects - development of Green Finance; Most importantly, development of the Environmental and Social Management System in banks.

**Scientific works reflecting the main results of the dissertation have been published in the following publications:**

1. Guseynli J. Kazimagomedov A.A., “Comparative analysis of methods used by commercial banks to assess credit risks” // – Makhachkala: Journal “Regional Problems of Economic Transformation”, 2014, No. 3 – pp. 105-110
2. Huseynli J.I. “Economy and sustainable development” //– Bakı: AMEA-nın Xəbərləri. İqtisadiyyat seriyası, 2016, № 3 – s. 86-91.
3. Huseynli J.I. “Financial condition and development trends of the banking system of Azerbaijan” // – Makhachkala: Economy and banking system: theory and practice, Materials of the correspondence international scientific and practical conference, 11-12.05.2016. – pp. 145-148.
4. Huseynli C.I. “The role of economic growth in sustainable development” // – Baku: Heydar Aliyev and the National Strategy of Azerbaijan, Scientific and Practical Conference of Doctoral and Dissertation Students, 13.07.2018. – pp. 116-121.
5. Huseynli J.I. “CSR (Corporate Social Responsibility) as a part of the Sustainable Development” // – Bakı: Dövlət idarəçiliyi: nəzəriyyə və təcrübə, 2018 № 2 (62) – s. 241-252.
6. Huseynli J.I. “Responsible Behaviour of Business: Approaches to understand cooperation between the private and public sector” // – Prague: Department of Strategic Development and Coordination of Public Administration Municipality of Pardubice-The Pardubice Region / Public Administration 2018/ Proceedings of the 12th international Scientific Conference, 24.5.2018. – s. 72-81
7. Huseynli J.I. “Corporate Social Responsibility (CSR)” // – Vianna: Global Capability Tezis Journal European Science Review, Economy section, 2018 №3-4, – s. 332-334.
8. Huseynli C.I. “Economic growth, economic development and sustainable development: distinctive features” // – Baku: Republican Scientific and Practical Conference on “Modern directions in regional development management in Azerbaijan”, April 22, 2019. – pp. 152-156.

9. Huseynli J.I. “CSR integration processes” // – Bakı: AMEA-nın Xəbərləri. İqtisadiyyat seriyası, Bakı 2020 № 5. – s. 142-147
10. Huseynli J.I. “CSR Decision Making Model” // – Bakı: AMEA-nın Xəbərləri. İqtisadiyyat seriyası, Bakı 2020 № 6. – s. 207-211
11. Huseynli C.I. “Corporate social responsibility strategies of transnational companies in Azerbaijan in the context of sustainable development” // – Baku: ANAS News. Economics series, 2021 No. 1. – pp. 198-206.
12. Huseynli C.I. “Driving factors of corporate social responsibility (CSR)” // – Ganja: “Innovative economy and management” journal, 2021 No. 1(5) – pp. 37-43.
13. Huseynli J.I., Huseynov, Yu., Kovalenko, O., Guliyev, M., & Huseynova, L. “Assessment of the impact of COP decisions on biodiversity and ecosystems” // – Ukraine: Scientific Horizons, 2024 27(4) – s. 128-140.
14. Huseynli J.I., Huseynov, Yu., Totubaeva, N., Guliyev, M., & Azizova, G. “The role of ESG in the adaptation of the agro-industrial sector to climate change”. // – Ukraine: Scientific Horizons, 2024 27(5) – s. 131-142.
15. Huseynli J.I., Huseynov, Yu., Huseynli, J., Totubaeva, N., Guliyev, M., & Mustafazada, Sh. “Implementation of ESG criteria: Integration of environmental, social and governance criteria of companies in water management” // – Ukraine: Scientific Horizons, 2024 27 (7) – s. 118-126.





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