

An Empirical Study of the Impact of the Banking System on the Sustainable Development of the National Economy

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ABSTRACT: The purpose of the study is to assess the degree of influence of systemically important banks on the stability of the financial system of Kazakhstan, which determines the level of development and stability of the national economy as a whole, based on indicators proposed by the International Monetary Fund. Methodology: Among the research methods used, one can single out the method of analysis, comparison, generalization, as well as the method of statistical analysis and classification.. The originality of the research is due to the fact that at present, in the context of globalization, the importance of issues related to the development of the national economy of the country, ensuring its sustainability and efficiency is increasing. The results of the study: The main research directions are due to the lack of theoretical and methodological elaboration of this issue and its increasing practical significance. The results of the study suggest that Kazakhstan's large banking institutions have a significant impact on the country's financial stability indicators. Also, based on the analysis of publications by other scientists on the research topic, their own conclusions and conclusions were formed. The materials of the article are of practical value and can be used in the development of modern methods for strengthening the financial stability of the country.

Keywords: systemically important banks, sustainable development, performance criteria, financial stability of the country.

I. INTRODUCTION

According to the modern world order, sustainable development is an integral part of the life of society. The Republic of Kazakhstan takes an active part in sustainable development initiatives and takes them into account in its national projects directly related to the successful functioning of the state and the quality of life of its citizens [1]. For the effective implementation of the Sustainable Development Goals (SDGs) until 2030, it is necessary to take into account the social, environmental and financial and economic aspects in a comprehensive manner. For example, in the new UN Global report in 2022, the Republic of Kazakhstan scored 71.65 points out of 100 on a general scale, China – 72.01, Russia – 73.79, Turkey – 70.8, UAE-69.7, bypassing the 49th out of 166 opportunities. Our country should not only achieve high rates of economic growth in the near future, but also make significant progress in ensuring environmental safety in the social sphere and through improving the socially responsible activities of economic entities [2].

To achieve a sustainable future on the basis of a new social contract, there is an urgent need to create and apply new socially oriented tools and technologies capable of reorienting resources to solve vital problems, which primarily justifies the introduction of effective corporate governance models that use digital tools, sovereign information and technological platforms to support managerial decision-making. language

models and artificial intelligence should take into account the changed nature of interaction of the Republic of Kazakhstan with international organizations that form the infrastructure of sustainable development. All this should, in practice, ensure a balance between national interests and the application of international principles and practices.

The search for effective tools to solve the above problems is of great importance, involves the consolidation of the efforts of a wide range of stakeholders (stakeholders) throughout the country to achieve an equal participation of the Republic of Kazakhstan in world markets, determines the relevance and importance of monographic research. The results of research on Sustainable Development and socially responsible practices are widely presented in foreign literature. However, most such studies were carried out in countries with significant differences in economic, social and political contexts compared to the Republic of Kazakhstan. The relevance, inadequacy of the theoretical and methodological elaboration of these problems, the debatable nature of asking individual questions predetermined the choice of the topic, goals and objectives of the study.

II. LITERATURE REVIEW

The implementation of human economic activities, the provision of food to the population of the Earth and other relevant aspects of human life have led to the need for the formation and implementation of the concept of Sustainable Development a program for the development of modern civilization that ensures a balanced state of economic, environmental and social factors of development.

The concept of sustainable development would not have become so relevant if there were no relevant prerequisites both in the foundations of traditional economic science and in society [1]. The main premise was the changes that took place in the world in the middle of the twentieth century. If earlier the platform for economic growth was several developed countries, now, taking into account globalization, the whole world is attracted to the world economy. The development model used by developed and developing countries in the middle of the twentieth century is aimed at achieving economic efficiency [1]. It was believed that only the effectiveness of the economic system is able to pave the way for universal prosperity and eliminate inequality both within one country and on a global scale [2]. The effectiveness of the economic system of developed countries based on disproportionately high costs of Natural Resources has been repeatedly observed [3]. At that time, due to the lack of any foundations, issues of sustainable human development were not yet discussed, but the world community was called upon to join forces for the survival of mankind. By the decision of the Stockholm conference, the UN Environmental Protection Program (UNEP) was created [4]. UNEP is a universally recognized official platform authorized to develop and formulate coordinated actions of the world community to prevent the environmental crisis.

In 1967, the Italian scientist A. Peccei initiated the creation of the "club of Rome" a non-governmental organization that unites entrepreneurs, prominent politicians and scientists concerned about the possibility of a global crisis of humanity in the context of continuing economic development without long-term planning. As part of the work of the club of Rome, a group of scientists made a systematic report "growth threshold" [5], containing a forecast of the development of the world community, based on real statistics of the main world trends: population growth, use of Natural Resources, growth of industry and agriculture, environmental pollution. According to the results of the study, for several decades, humanity was threatened by the global crisis due to overpopulation, production volumes exceeding the possibilities of the natural environment for recovery, and excessive pollution of ecosystems. Mentioned in the first half of the XXI century. there may be depletion of the most important natural resources, dangerous environmental pollution, hunger, diseases and social explosions.

The most important prerequisites for the formation of the concept of sustainable development were the concept of dynamic growth, discussed in the works of the club of Rome [6], the concept of organic growth, the concept of dynamic equilibrium [7, 8]. The fact that all these concepts have in common is that the comparison of the global economic system with a living organism is especially evident in the concept of organic growth.

The concept of sustainable development inherited a fundamental difference from the documents developed within the framework of the club of Rome, primarily from the concept of continuous economic growth that dominates traditional economic science [9, 10]. In essence, the concept of Sustainable Development has become a qualitatively new approach to issues that were not previously observed or recognized as important, or considered irrelevant to the field of economic science [11, 12].

In the 80s of the XX century, the market economy of many countries of the world entered the next stage of development, and the need for strengthening public administration of the economy, planning, ensuring social guarantees and individual rights was increasingly felt. If in the 1970s only the reorientation of the economy and public life to long-term goals began in the west, taking into account the preservation of social stability and environmental well-being, then already in the 1980s it was achieved to reduce the level of environmental pollution, ensure environmental safety, solve many environmental problems related to the revival of previously affected nature [13, 14]. Environmental legislation has been improved, which describes in detail the principles and norms of economic activity introduced earlier. Gradually, a whole system of organizational, economic and educational measures was formed, the so-called "Environmental Policy". In 1980, the UN General Assembly adopted a resolution "on the historical responsibility of states to preserve the nature of the Earth for present and future generations", and in 1982, at the 37th Session of the UN General Assembly, the world nature Charter was adopted-a set of rules reflecting the basic principles of human relations with the environment [15].

At the next 38th UN General Assembly, it was decided to create a special International Commission on the environment and development, which began to work in 1983. The tasks of the commission included the study of the problem of interaction between the environment and human society, the environmental consequences of anthropogenic impact on the biosphere and ways to normalize these effects. Since then, the term "sustainable development" (TV) has appeared in the media. The commission's report proposes the definition: "sustainable development is development that meets the needs of the present, but does not compromise the ability of future generations to meet their own needs" [16]. The analysis of the options for interpreting the concept of "sustainable development of the enterprise" conducted by a.m. Shilova predetermined the main types of definitions used in the formulation of the term. Among the most demanded types, groups of definitions can be distinguished, which indicate: an integrated approach; an economic approach; an environmental approach. The results of the study show that specialists often point to local sustainability factors. It was found that part of the authors interprets sustainable development as the stability of the economic trend of enterprise development economic approach.

Other authors stand in the position of the "ecological" basis (ecological approach) for ensuring sustainable development. An integrated approach corresponding to the international concept of this term is characterized by the integrity and unity of sustainable development factors. The concepts of the concept of "sustainable development of the enterprise" proposed by Kolosova T. V. [17], Koryakov A. G. [18], Khudyakova T. A. [19] (Table 2) in most cases use an economic approach based on increasing economic potential, increasing economic indicators of the enterprise. The definitions of the term were edited by Sisina N. N. [20], Ursula A.D. [21] who uses an environmental approach that focuses on the need to preserve the environment during development. The disadvantage of the approaches is the inconsistency of the concept of sustainable development with the foundation principle-the balance of factors of sustainable development. The definitions of the term developed by Kucheroва E. N. [22], Karpova O. K. [23], Melnik T. E. [24], Khomyachenkova N. A. [25] use an integrated approach, which consists in ensuring the triad of economic (increasing the well-being of the population), environmental (interaction with the surrounding natural environment in the context of reducing consumption) and social (stabilization and increasing the level of social security) of the aspect of sustainable development. Most of the developed definitions using the classical approach do not take into account the dynamics of sustainable development processes. In other words, the definitions do not reflect the need for progressive development as a process of change, which is a necessary condition for monitoring and evaluating the sustainable development of enterprises. In addition, the task of enterprises to form sources of financing for social and environmental projects is "not registered".

Based on the author's version of the concept of "sustainable development of enterprises", a classical approach was used. According to the authors, sustainable development of an enterprise is a type of

enterprise development characterized by a triad of areas of economic, social and environmental development, which makes it possible to link the concept of the global, national and enterprise level for the implementation of final planning and control of sustainable development programs. Along with the relevant environmental and social indicators, the economic indicators of Sustainable Development Monitoring, which fulfill the role of indicators of the transition process to sustainable development, play a dual role as the economic goal (orientation) of development, as well as a means (source) of financing social and environmental projects.

III. MATERIALS AND METHODS

In this article, the methodological approach is based on the analysis of systemically important banks in Kazakhstan in the context of the process of ensuring financial stability. The methodology is based on a systematic approach to the problem under study, a fundamental consideration of indicators of the financial stability of the country and systemically important banks. An important area of research is also the formation of an integrated approach that will contribute to the further modernization of the financial and banking system as a whole. Since there are no actual data available on some indicators of financial stability, some errors described in the analysis are possible. We also used only indicators that are directly related to banks as deposit institutions. A mixed methods approach was employed to combine quantitative analysis of financial stability indicators with qualitative interpretation of systemic risks in Kazakhstan's banking sector. This design was appropriate due to limited data availability and the need for a comprehensive understanding that neither method alone could provide. For some positions of the indicators, banks cannot provide open data, and therefore they were not considered in the analysis. The method of analysis and the method of theoretical generalization were also used as research methods. These methods were used in order to study in detail the process of modernization of the existing financial and banking system. The theoretical basis of this article is based on the results of research conducted by a number of European specialists, who were aimed at studying the problems associated with the definition of systemically important banks as financial organizations that are fundamental in ensuring the financial stability of the country, the formation and integrated development of the modern national economy of Kazakhstan. The article attempts to assess the importance and effectiveness of systemically important banks in Kazakhstan by using appropriate criteria. The results of the influence of systemically important banks on the stability of the financial system of Kazakhstan revealed during the study have both theoretical and practical significance in managing the financial stability of the country. Using the above methods, the importance of systemic banks in both the financial and banking system and the economy as a whole was determined in the article. Using the example of Kazakhstan, it was confirmed that in modern conditions, systemically important banks are of the greatest importance for the financial stability of countries.

In the post-crisis period, the most important task for the economy of any country is to ensure the stability and sustainable development of the banking sector, especially systemically important banks, as well as support for financial and banking services. In the context of globalization, there are many problems and threats in the financial and banking sector. Of course, it is necessary to understand the importance of certain decisions to improve the level of risk management and to correctly assess the difficulties of financial and banking orientation [26]. One of the features of large systemic banks is their versatility, as they affect both financial stability and the economy as a whole. Therefore, it is necessary to strengthen government support for these banks and form a more adaptive financial and banking policy. In other words, for the sustainable development of the entire financial and banking industry and the economy as a whole, it is necessary to ensure the sustainable development of banks, which is of systemic importance.

Banks' activities over the past twenty years have been significantly affected by the global financial crisis of 2008 [27]. As you know, this was accompanied by the collapse of several major global financial institutions, which had a significant impact on the entire international banking market. This financial crisis has significantly worsened macroeconomic indicators both in Kazakhstan and around the world. Many States, including the Republic of Kazakhstan, have suffered not only direct losses in the form of losses, but also additional costs associated with the need for additional support for credit institutions. As a result, both the

global and Kazakh banking communities have concluded, in particular, that it is necessary to transform approaches to assessing financial stability and apply a modernized approach to regulating banks in order to avoid such a scenario in the future.

An objective analysis of the role of SSS in the financial market is important. In Kazakhstan, every large system Bank should have several scenarios in crisis situations, as well as develop innovative banking services and markets with flexible maneuvering of banking resources. Banks should provide all the necessary opportunities to create new sources of financing through the development of bank branches throughout the country, promote the expansion of the financial market, and provide wide access to loans. Banks should expand opportunities for additional stimulation of innovative economic activity both in large cities and in remote regions. Thus, using the potential of systematically important banks, it is possible to ensure financial stability.

Features of identification of systemic banks in Kazakhstan are determined by the resolution of the Board of the National Bank of the Republic of Kazakhstan dated December 23, 2019 No. 240 [27]. Thus, the criteria for systematically important banks are: the size of the bank; the relationship of the bank with the participants in the financial market; the interchangeability of the bank; the complexity (complexity) of the operations carried out by the bank. At the same time, several groups of indicators are distinguished, on the basis of which the share of the banking organization is determined. Thus, the banking sector is of high importance in ensuring the financial stability of the country. This is evidenced by the indicators of the banking sector of Kazakhstan Figure 1.

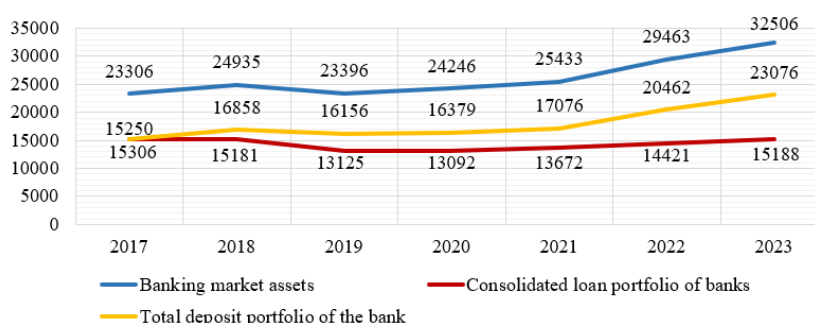


FIGURE 1. Indicators of the banking sector, billion. Tenge.

As of 01.01.2024, 21 commercial banks, 260 branches and 1,378 additional premises operate on the territory of the Republic of Kazakhstan (bank branches have the right to have premises located at several addresses within one region), including 11 banks with foreign participation (including eight subsidiaries) and two banks with 100% participation with state participation. In addition, there are 19 representative offices of foreign banks in the country, and four representative offices of banks of the Republic of Kazakhstan abroad Table 1.

Table 1. Institutional structure of the financial sector.

Number	2022	2023	2024
Banks	22	21	21
Insurance organizations	27	26	25
Piffs	27	29	30
Microfinance organizations	239	230	232
Pawnshops	599	525	518
Credit partnerships	218	213	209
Mortgage organizations	2	2	2
Organizations engaged in certain types of banking services	3	3	3

total	1 137	1 049	1 037
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Note – https://raexpert.ru/researches/banks_kz_2024/ compiled by the Author according to the data.

The organizations carrying out certain types of banking operations are JSC "Agrarian Credit Corporation" (specialized Development Institute), JSC "Kazagrofinance" (owned by JSC "agrarian Credit Corporation") and JSC "Kazpost" (operator of the Kazakhstan national postal network). In addition, in addition to the 21 existing second-tier banks mentioned, there are nine other banks whose licenses were revoked from 2007 to 2021 in the liquidation process since 2007. In the Republic of Kazakhstan, there are 12 banking conglomerates that unite as participants: banks; insurance organizations; organizations engaged in activities in the securities market; organizations that acquire doubtful and hopeless assets of the parent bank; other non-financial organizations.

As of 01.10.2023, the largest banking conglomerates of the country are the holding group of ALMEX JSC (Halyk Savings Bank of Kazakhstan JSC), JSC Kaspi.kz and JSC "Bank CenterCredit". About 91% of the assets of conglomerates are represented by the banking sector, 3.2% belongs to insurance services, 1.6% to activities in the securities market and 4.7% to the non-financial sector.

In 2022, Russian Alfa-Bank and Sberbank sold their Kazakhstani subsidiaries to Bank CenterCredit JSC and the Government of Kazakhstan in the form of Baiterek national managing Holding, respectively. After the acquisition of the former Alfa-Bank JSC, it was renamed ECO BANK and joined Bank CenterCredit JSC in September 2022. Currently, the Russian subsidiary bank "VTB" continues to operate in the Republic of Kazakhstan. The total assets of the banking sector at the end of 2023 amounted to 51.4 trillion tenge (доллар 113 billion), an increase of 15% against the level of a year earlier. Capital grew at an advanced pace (+31%): from 5.2 to 6.9 trillion tenge (from 11 to 15 billion dollars). The main share of assets is formed by loans to clients (53%) and investments in securities (23%) Table 2.

Table 2. Accumulated balance.

Accumulated balance	2022		2023		2024	
	billion. tenge	billion. tenge	billion. tenge	billion. tenge	billion. tenge	billion. tenge
Assets	37 624	87	44 562	96	51 441	113
Liquid assets	3 786	8,8	4 956	10,7	4 123	9,1
Funds in credit organizations	4 608	10,7	5 240	11,3	5 560	12,2
Investments and other securities	9 508	22,0	9 953	21,5	11 611	25,5
Loans to customers	17 599	40,8	21 997	47,5	27 163	59,8
Fixed assets	618	1,4	688	1,5	720	1,6
Other assets	1 505	3,5	1 728	3,7	2 264	5,0
Passives	37 624	87	44 562	96	51 441	113
Customer funds	26 247	60,8	32 043	69,3	35 919	79,0
Funds of financial organizations	725	1,7	1 153	2,5	873	1,9
Issued securities	1 613	3,7	1 604	3,5	2 196	4,8
Regulated debt obligations	634	1,5	637	1,4	634	1,4
Other obligations	3 867	9,0	3 898	8,4	4 957	10,9
Capital	4 538	10,5	5 227	11,3	6 862	15,1

Note – https://raexpert.ru/researches/banks_kz_2024/ compiled by the Author according to the data.

The current liquidity ratio for the banking system was k4 (ratio of highly liquid assets to required liabilities) on 01.01.2024 at a regulatory minimum of 30% was 148%. Since 2016, the banking system of Kazakhstan has developed a surplus of liquidity, which the system still cannot fully direct to finance business projects Figure 2.

As of 01.01.2024, the main source of funding for the banking sector is the funds of customers, which account for 70% of liabilities. Client funds are distributed in practically equal proportions between individuals and legal entities, however, since 2022, there is a gradual advantage in favor of public funds, the share of which has increased from 52 to 58%. Weighted average interest rates on attracted funds from corporate and retail clients in 2022 showed significant growth and stabilized in 2023. The share of client funds in current accounts and pre - demand deposits in 2023 decreased from 35 to 27% against the background of a 16% reduction in their balances, while maintaining an upward trend in term deposits.

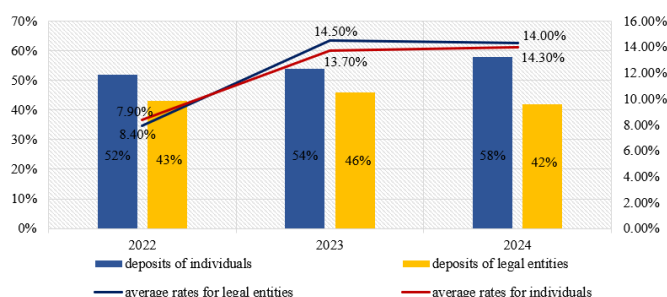


FIGURE 2. The structure of client tools.

The bank's capital for 01.01.2022 - 01.01.2024 showed an increase of 50% with an increase in the share in liabilities from 12.1 to 13.3%. The fixed capital adequacy ratio (k_1) was 19.2% when the regulatory minimum was 5.5%, and the equity adequacy ratio (k_2) was 21.5% when the regulatory minimum was 8%. The minimum amount of equity for banks of the Republic of Kazakhstan is set at 10 billion tenge Table 3.

Table 3. Aggregated income statement.

Accumulated profit and loss	2022		2023		2024	
	billion. tenge	billion. tenge	billion. tenge	billion. tenge	billion. tenge	billion. tenge
Net interest income	1 542	3,6	2 080	4,5	2 728	6,0
Net commission income	597	1,4	603	1,3	727	1,6
Net other income	59	0,1	172	0,5	428	1,0
Formation of reserves	-108	-0,2	-456	-0,1	-529	-1,2
Operating costs	-600	-1,4	-672	-1,5	-845	-1,9
Income tax	-198	-0,5	-261	-0,6	-323	-0,7
Net profit	1 292	3,0	1 466	3,2	2 186	4,8

Експерт – https://raexpert.ru/researches/banks_kz_2024/ compiled by the author according to the data

Last year, the banking system received a net profit of 2.2 trillion tenge (4.8 billion dollars), which is about 50% more than the financial result in 2022, which was affected by the losses of a number of banks: Bereke Bank JSC, VTB Bank JSC (Kazakhstan) and subsidiary Bank JSC Kazakhstan-cemetery International Bank (there are no unprofitable banks in 2023). The main component of the financial result is net interest income, which showed an increase of 30% in 2023 Figure 3.

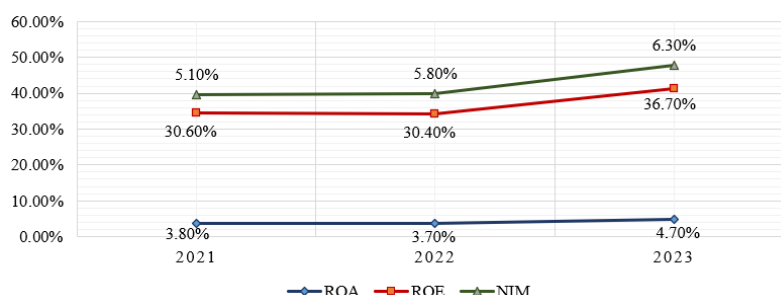


FIGURE 3. Performance indicators of the banking sector.

There is a significant increase in net other income, which has more than doubled. The dynamics of formed reserves and operating expenses is characterized by an average level (+16 and +26%, respectively). The return on assets of the banking sector (Roa) at the end of 2023 was 4.7% (at the end of 2022-3.7%), and the return on capital (Roe) 37% (at the end of 2022 – 30%). The net interest margin in 2023 increased from 5.8% to 6.3%.

The main share of loans to customers historically belongs to consumer loans, which in the period from 01.01.2022 to 01.01.2024 increased from 29 to 35%. The growth of consumer loans in 2023 was facilitated by the popularization of installment and term shares of large banks. In this regard, the Parliament and society have repeatedly raised the issue of lending to the population and developed a corresponding draft law on tightening lending conditions.

In corporate lending, the main volume falls on the industrial sector, while its share in the total loan portfolio has decreased from 21 to 17% over the past two years. The remaining segments do not reflect significant changes in the structure of the loan portfolio as a whole. In the period from 01.01.2022 to 01.01.2023, the rates on Le lending were lower than on IE, but as of 01.01.2024 they were practically equalized. The share of foreign currency loans after a slight decline in 2022 01.01.2024 (01.01.2022 – 13%, 01.01.2023 – 8%) 10% - 2022).

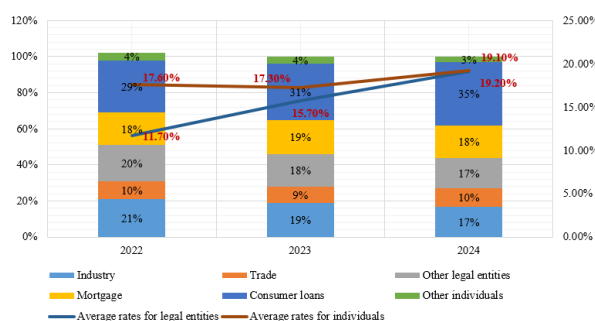


FIGURE 4. Structure of the total loan portfolio.

In 2023, the growth of problem debt slowed down and amounted to +6 against +22% a year earlier. Against the background of an increase in the total loan portfolio by 23%, the share of the specified problem debt decreased from 3.4 to 2.9%. Reserves for late loans for a period of more than 90 days are permanently maintained at the level of about 76%. The main part of problem loans (about 67% of the portfolio) belongs to loans from individuals whose overdue debt for more than 90 days increased by 16% (overdue Le debt for more than 90 days decreased by 10%) Figure 5.

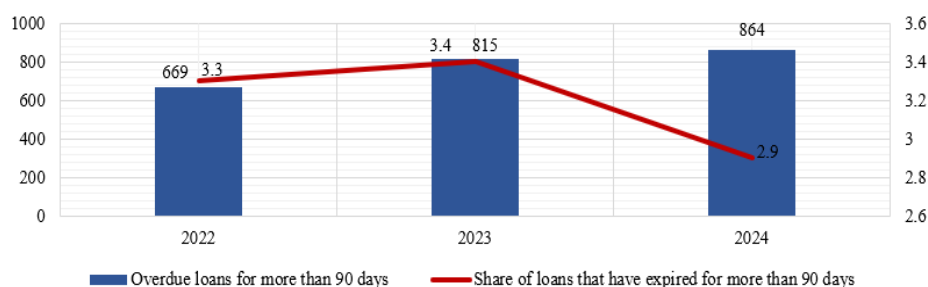
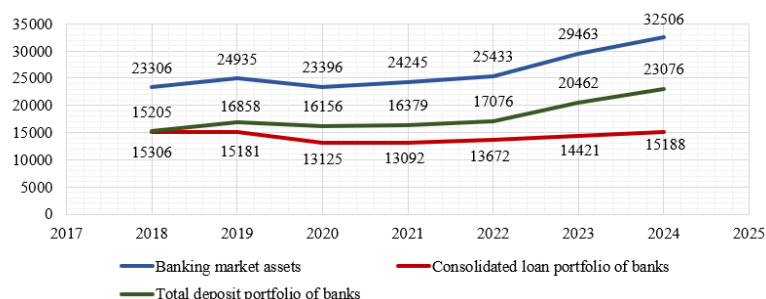


FIGURE 5. Structure of the total loan portfolio.

In March 2024, the S&P rating agency revised the prices of five commercial banks of the Republic of Kazakhstan due to improved asset quality and regulatory supervision. As part of the report, the agency noted that the Kazakh banking sector, despite the aggravation of geopolitical risks, has shown resistance to macroeconomic challenges in recent years. To ensure financial stability in the country, it is necessary to qualitatively assess the role of systematically important banks, the relationship between financial markets and the banking system, determine the level of influence of such banks, and modernize certain mechanisms. Thus, an additional resource is formed to increase the positive impact of the financial and banking system on the market of such services. Systemically important banks (PMBs) can influence micro-and macroeconomic stability, and the dynamics of markets as a whole. Thus, the real sector of the economy is steadily financed at the expense of bank capital, which, in turn, means the stability of the financial market.

An objective analysis of the role of SSS in the financial market is important. In Kazakhstan, every large system Bank should have several scenarios in crisis situations, as well as develop innovative banking services and markets with flexible maneuvering of banking resources. Banks should provide all the necessary opportunities to create new sources of financing through the development of bank branches throughout the country, promote the expansion of the financial market, and provide wide access to loans. Banks should expand opportunities for additional stimulation of innovative economic activity both in large cities and in remote regions. Thus, using the potential of systematically important banks, it is possible to ensure financial stability.

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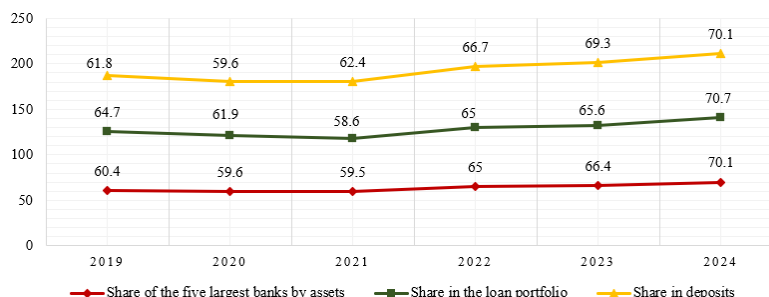


Note - Compiled by the author [28] based on the source.

FIGURE 6. Indicators of the banking sector, billion tenge.

As can be seen from the presented data, despite the decrease in the number of banks, since January 2020, the volume of their assets, deposit and loan portfolios has a real upward trend. For a quantitative assessment of the level of systemic significance of the bank in Kazakhstan, a generalized indicator is calculated on the basis of eleven quantitative indicators. The main elements of the generalization indicator are presented as follows: the size of the Bank is 40%; interchangeability, interconnection with other participants in the financial market, the complexity of operations carried out is 20% [27]. This means that banks with a generalized indicator of 8% or more can be called systemically significant, while banks with an indicator of up to 8% are potentially systemic. In Kazakhstan, the list and calculation of the systemic significance of such banks are not publicly disclosed.

The results of the calculations show that the PPE includes Halyk Bank JSC, Kaspi Bank JSC and Bank CenterCredit JSC. Among the most important are the following banks: JSC" Forte Bank", JSC" Bereke Bank", JSC" first Heartland Jusan Bank", JSC" housing construction savings bank" Otbasy Bank", JSC" Eurasian Bank", JSC" Bank RBK "and JSC" Citibank Kazakhstan". To assess the role of system banks in ensuring financial stability, it is necessary to consider the importance of bank deposits in this matter. Bank deposits remain the main source of funding for the entire banking sector of Kazakhstan. Similarly, indicators of the share of assets of large banks and their loan portfolio also emphasize their importance in the financial market of Kazakhstan Figure 7.



Note - Compiled by the author [28] based on the source.

FIGURE 7. Consolidation of the banking sector of Kazakhstan.

Based on the available data, such banks as Halyk Bank JSC, Bereke Bank JSC, Kaspi Bank JSC, first Heartland Jýsan Bank JSC, Forte Bank JSC have been constantly increasing their market share since 2019. In the period from 2019 to 2023, it was these banks that were able to increase the share in assets, loan portfolios and deposits. And the exclusion of problem loans from the balance sheet of the banking system led to a decrease in the share of these five large banks in the total volume it decreased from 29.8% in 2019 to 47.9%. At the beginning of 2023, these 5 banks borrow more than 70% in assets, loan portfolios and deposits. The above - mentioned ten banks account for about 85% of the total assets of the entire banking sector of Kazakhstan. This shows the importance of CPF (protective bank funds) and potential CPF in the stability of the banking sector and the country as a whole.

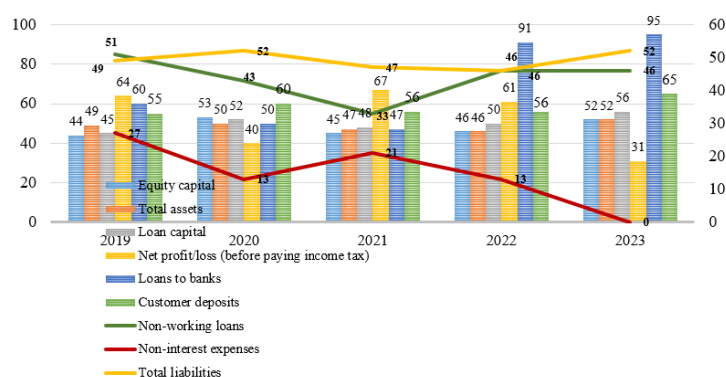
In order to further analyze and assess the degree of influence of the NKB and potential systemically significant banks on the financial stability of Kazakhstan, it is necessary to consider the system of financial stability indicators developed by the IMF by sector. IMF financial stability indicators are a system of indicators aimed at assessing the level of stability of the country's financial system in contact with other sectors of the economy. The assessment of indicators is carried out in accordance with the recommendations of the International Monetary Fund. Analyzing the contribution of PPE and individual potential PPE to the system of financial stability indicators of Kazakhstan, one can also assess the degree of their impact. According to the indicators of financial stability of Kazakhstan, over the past 5 years, there has been an improvement in indicators for all basic indicators.

In 2022, the loan portfolio of banks increased by 27.9% and amounted to 20.2 trillion at the beginning of 2023. tenge. In general, the ratio of loans issued by banks to GDP increased to 24.9% in 2022. For comparison,

in 2021 this figure was 22.4%. There is a steady trend towards a decrease in the debt indicator for 25 large loans/contingent liabilities to capital. For example, in 2023, compared to 2019, it decreased by 1.6 times. Similarly, by the indicator of the ratio of non-working loans and loans to total total loans. Their share fell from 8.39% in 2019 to 3.37% in 2023. In addition, according to the indicators, there is an increase in the ratio of interest to gross income and the rate of profit on equity and assets.

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Considering the importance of PPE in ensuring the financial stability of Kazakhstan, we determine their contribution to the country's financial stability indicators. For this purpose, the ratio of the relevant indicators of the NKB (Halyk Bank JSC, Kaspi Bank JSC and Bank CenterCredit JSC) to the general indicators of financial stability for the banking sector as a whole was evaluated Figure 8.

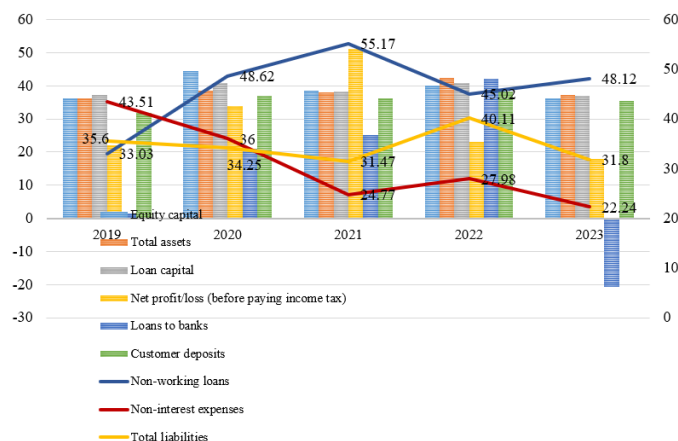


Note - Compiled by the author based on calculations.

FIGURE 8. The impact of FIU indicators on financial stability indicators of Kazakhstan, %.

If we consider such indicators as equity, total assets, loan portfolio, net profit, debts of banks and deposits of customers, then according to the data, the degree of influence of PPE on financial stability indicators is quite high. For example, in 2019, the share of three PPE accounted for 44% of equity in the aggregate indicator, and in 2023-52%. In 2019, the share of PPE in the indicator amounted to 49 % (almost half) of the total assets, and in 2023, the contribution of PPE to the indicator of the assets of deposit institutions increased to 52%. The loan portfolio of three banks of the NKZB in 2019 amounted to 45%, in 2023 this figure was 56%. In the same way on customer deposits. In 2019, PPE accounted for 60% of all deposits, and in 2023 - 95%. The situation is similar with the rest of the indicators.

All of the above indicators reflect the weight of the CPC indicators in general indicators of financial stability of Kazakhstan. In addition, as of 2022, there is an increase in the contribution of FIU to financial stability indicators. Consider the impact of potential FIU on financial stability indicators in Kazakhstan Figure 9.

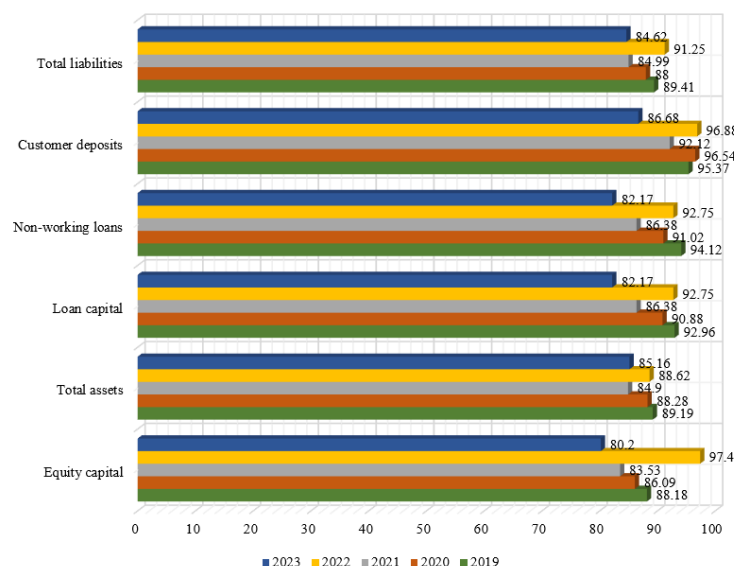


Note - Compiled by the author based on calculations.

FIGURE 9. The impact of potential FIU indicators on financial stability indicators of Kazakhstan, %.

According to the indicators under consideration, the following can be noted. In 2019, potential PPE contributed 36.2% to the total capital of the indicator for deposit institutions of the country, and in 2023 – 36.18%. The greatest value was observed in 2020, when the share was 44.4%. The share of potential PPE in the indicator for total assets in 2019 was 36.16 %, and in 2023 – 37.19%. The contribution of potential PPE to the indicator in the loan portfolio was 37.17% in 2019 and 36.96% in 2023, on customer deposits-31.6% in 2019 and 35.37% in 2023. It should be noted that most of the banks subject to potential PPE do not have debts to other banks, which significantly reduced the indicators. In addition, in 2022, JSC " Jusan Bank " observed negative values of the indicator, which showed a negative result in the aggregate.

If we pay attention to the indicators of financial stability in the aggregate share of CSA and potential CSA, it can be noted that they account for more than 80% of all indicators included in the indicators throughout Kazakhstan Figure 10.



Note - Compiled by the author based on calculations.

FIGURE 10. Total impact of PSA and potential FIU on financial stability indicators in Kazakhstan.

The data of Figure 6 show that the impact of CRP and potential SBB on financial stability indicators is significant. The results of the analysis show that simultaneously with a positive effect, PPE is exposed to serious risks on non-working loans, as they also have a significant impact on financial stability indicators. Thus, in 2019, the share of PPE accounted for 46% of non-working loans in Kazakhstan, in 2020 – 43%, in 2021-33% and over the past 2 years - 46%. Such a serious impact poses a significant threat to financial stability, since a default on such assets can lead to a systemic crisis in the banking system.

In modern banking practice, the opinion has been stable that systemic, large banks are the most stable element of the financial system and their collapse is an unlikely fact. Initially, large banks were perceived as more profitable in comparison with competitors due to the scale of their activities, the ability to reduce the risks of activities through widespread diversification of assets. All this, in turn, leads to large banks R. According to Ray, it made it possible to create a sufficient "security fund" in the context of the implementation of negative factors of a financial and economic nature.

A fundamental analysis of the importance of system banks in the financial market, forecasting their further effectiveness is the most important stage in financial and banking activities. At the same time, it was noted that increased attention is paid to a radical analysis of existing problems in the financial and banking sector, the search for methods for their solution, and the modernization of practical tools. M. Frigerio noted that a comprehensive analysis and correct assessment of the interaction of banks with the financial market can give much better results in such cases [29]. In accordance with the specifics of the financial market, systemic large banks should adapt their domestic policy and existing interest rates to the level of material security of market participants, available financial resources, and at the same time provide a fast and high-quality wide range of banking services.

Thus, based on the foregoing, the influence of systematically important banks on the financial stability of Kazakhstan is obvious. To determine them, it is not enough to rely only on quantitative indicators. They should also be supplemented with qualitative characteristics, assessment by specialists, objective judgment. With a simple analysis of quantitative indicators, it is impossible to understand many of the qualitative features of banks. Therefore, this must be taken into account when classifying a bank as a specific group based on its systemic significance.

V. RESULTS

Traditional statistical indicators, such as "net assets" (R1) and "operating profit" (R2), which meet Kazakhstan accounting standards, as well as analytical indicators, were used to empirically verify the dependence of the results of companies' activities on corporate governance factors: (i) EBITDA, calculated in accordance with International Financial Reporting Standards; (ii) Indicator "economic efficiency" (EE), developed by the authors of the study. EBITDA is a generally accepted indicator of effectiveness in international practice, which is actively used for a comparative analysis of the market value and investment attractiveness of companies in various industries and countries with different tax burdens

In turn, when compiling the indicator of economic efficiency - EE (economic efficiency), the authors proceeded from the fact that it is a set of statistically controlled indicators: profit from the main (operating) activities; profit before tax; the amount of payment for the payment of dividends: net profit (table 4), their specific weight is determined using the It should be noted that the indicators of profit for the payment of dividends and the amount of payments refer to the main indicators of efficiency when assessing the results of the activities of various organizational and legal forms of Economic companies.

Table 4. Indicator economic efficiency (EE).

Variance, % Primary indicators	54 Indicator weight in composite factor, %
The amount of profit from the main activity	32,86
Amount of profit before tax	32,32
Number of payments for the payment of dividends	23,91
Net profit size	10,91

Empirical verification of the dependence of individual indicators and analytical indicators of the effectiveness of companies on the factors of the institution of corporate governance characterizing its elements, such as the activities of management and control bodies and information disclosure, involves the creation of an appropriate econometric model. We are talking about regression analysis using the "integrated model of panel data" (Pooled model), which, firstly, shows the influence of corporate management factors on individual indicators of the results of statistically controlled activities: R1 – the indicator "net assets"; R2 – the indicator "operating profit", and secondly, the influence of factors on the analytical indicators of the companies. The regression model has the following type:

$$R_n = \sum \lambda_{jn} f_{jn}, \quad (1)$$

$$EBITDA = \sum \beta_j f_j, \quad (2)$$

$$EE = \sum \gamma_j f_j, \quad (3)$$

where $n \in [1, 2]$, $j \in [1, 4]$; corporate governance factors: "structure of the Board of Directors" (f_1), "quality of work of management bodies" (f_2), "disclosure of financial statements" (f_3), "disclosure of corporate documents" (f_4); λ_j , β_j , γ_j – FJ linear dependence parameters characterizing the contribution of each corporate governance factor to the relevant indicators of the effectiveness of RN companies; EBITDA, EE. The regression coefficients obtained as a result of the calculations are presented in Table 5.

Table 5. Coefficients in regression equations for indicators characterizing the effectiveness of second-tier banks (Pooled model).

Regressors	R1	R2	EE	EBIDTA
Permanent	0,987	0,902	0,79	0,915
Structure of the PC (f_1)	-	-	-	-
Quality of work of management bodies (f_2)	0,262*	0,035*	0,220*	0,072*
Disclosure of financial statements (f_3)	-	-	-	-
Disclosure of corporate reporting (f_4)	-	-	-	-
R ²	0,045	0,038	0,046	0,059
R2 corrected	0,043	0,036	0,044	0,057
F- statistics	19,967	16,801	20,071	25,198
Probability (F-Statistic)	0,000	0,000	0,000	0,000
Number of observations	426	422	416	404

* Significance at the level of 1%; no significant dependence on " – " has been identified.

The table shows that the results obtained when assessing the impact of factors reflecting the quality of the combined elements of the Institute of corporate governance on the performance indicators of companies are of a mixed nature. The calculations performed confirm that Composite factors characterizing the element "activities of management and control bodies" have different effects on the effectiveness of companies' activities.

First of all, it should be noted that the factor "quality of work of management bodies" (f_2) has a positive effect on all indicators and performance indicators of companies at the level of 1% significance. This result corresponds to expectations, since the presence of a risk management system, the relationship of material incentives with the results of activities, as well as the presence of a professional personnel Reserve (Table 2) contribute to the optimization of managerial decisions and, as a result, an increase in the financial and economic indicators of the company. A direct positive relationship between F_2 and net profit indicators, EBITDA, as well as the EE indicator confirms that an effective management and control system is not only a necessary condition, but also an important component of the organization's financial success.

At the same time, no significant impact (either positive or negative) of the "structure of the board of directors" (f_1) factor on the performance and performance of companies was found. According to the classical agency theory of corporate governance, the board of directors should represent the interests of shareholders before management, develop a strategy and exercise control, which suggests that the results of the company's activities should depend on the quality of the council's work. As we have already noted, a significant part of foreign and domestic empirical research is devoted to the study of the influence of the Board of Directors on the effectiveness of companies. However, these studies do not give a clear conclusion about the impact of the composition and structure of the Board of Directors on the results of the company's activities. In a number of fundamental works, such as the research of Yu.I. Dulyak [13], mixed results are associated with difficulties in creating databases on the composition of the Board of Directors for empirical research.

In our opinion, the absence of dependence between the "structure of the Board of Directors" (f_1) factor and indicators (indicators) of the effectiveness of the activities of Kazakhstani companies may be due to the fact that the activities of the Board of directors are aimed not at directly improving financial results, but at achieving strategic goals and ensuring sustainable development. It should also be noted that the work of specialized committees of the Board of Directors is often of a formal nature Table 19, which leads to their limited influence on management processes and key decision-making. This urgent problem of the work of the board of Directors is actively discussed in modern domestic scientific works [13].

The results of the calculations performed showed that the composite factors "disclosure of financial statements" (f_3) and "disclosure of corporate documents" (F_4), which characterize the "disclosure" element, do not affect all indicators and indicators of the effectiveness of companies' activities. An analysis of the correlation relationships of composite factors reflecting such elements of corporate governance as "activities of management and control bodies" and "disclosure" with aggregate indicators of the activities of companies allows us to draw several conclusions. As mentioned above, a hypothesis was put forward about the absence of dependence between the quality of the work of management bodies and the results of the activities of companies. This conclusion is based on empirical calculations that show the influence of the factor "quality of work of management bodies" only on the indicator "operational profit" (at the level of 10%, the significant regression coefficient was 0.039). However, the most unexpected result was the negative impact of the "structure of the Board of Directors" factor on the "net assets" indicator (the significant regression coefficient at the level of 10% was 0.031), as well as on the EBITDA analytical indicator (the significant regression coefficient at the level of 1% was 0.052) [21]. The empirical analysis we carried out did not confirm this hypothesis.

One of the main results of this study is to determine the positive impact of the corporate governance factor "quality of work of management bodies" on all studied indicators and indicators of high importance. This result does not refute the hypothesis about the imbalance of individual elements of corporate governance and the inconsistency of the introduced market institution with the specifics of the Kazakhstan institutional environment [21]; however, it confirms that even in modern conditions, the corporate governance system has significant potential to improve the performance of companies.

Based on empirical calculations, it can be concluded that the hypothesis of the negative impact of the "structure of the board of directors" factor (reflecting the quality of work of its main committees) on the results of financial and economic activities of companies [21] has not been confirmed. However, the lack of influence of this factor on performance indicators and indicators may indicate the low efficiency of the reviewed committees of the board of Directors, as well as the formal nature of their organization.

VI. DISCUSSION

Despite the expansion of the research model and the increase in the temporal series of observations, the statistically significant effect of composite factors characterizing "disclosure" on the performance indicators and performance indicators of Kazakhstan's second-tier banks has not been established. This confirms that "disclosure", being a key element in the functioning of the financial market, remains an important channel for transmitting data on the current state and future prospects of the company. The level of disclosure determines the transparency of the company, forms its image and contributes to strengthening investor confidence [14]. Thus, these factors help reduce risks for investors, and therefore increase the investment attractiveness of companies.

In our opinion, the lack of influence of "disclosure" factors is mainly due to the predominance of a concentrated property structure characteristic of Kazakhstani banks. This assumes the presence of majority shareholders and investors who are actively involved in the strategic and operational management of companies. In such cases, they do not need information of a financial and corporate Nature published in official sources, as they can access it at the decision-making stage. The absence of the need for disclosure is also explained by the limited development of the Kazakhstan Stock Market, which, in turn, leads to the fact that part of the companies is interested in issuing and listing securities. Thus, the results obtained can be explained by the peculiarities of the institutional environment of the economy of Kazakhstan, where "the influence of the institutional environment on the functioning of the institution of corporate governance" plays an important role [15].

The results of the conducted empirical study allow us to draw conclusions about the inadequacy of their effectiveness in the context of the impact of the considered aggregated elements of the Institute of corporate governance on the results of companies' activities. The uncertainty of the obtained indicates the presence of problems and dysfunctions in the field of corporate governance, the solution of which requires improving the existing institutional environment and the practice of state regulation.

VII. CONCLUSION

The conclusion of the conducted study was the development of practical recommendations and methodological provisions for the use and development of effective tools based on the principles of ESG and domestic advanced information technologies to achieve SDGs in the Republic of Kazakhstan. The analysis made it possible to identify various approaches to achieving the Sustainable Development Goals, as well as using the role of socially responsible behavior and ESG-principles for the implementation of fundamental documents in the field of responsible management of CSR, soy and banking, socio-environmental safety and financial and economic stability. The ESG system represents today's expectations of stakeholders and should be considered as a system for regulating relations between the state, business and society in the process of achieving the SDGs.

The analysis of global trends in the development of sustainable development systems and ESG was carried out. At present, it has been established that there are different approaches to the application of ESG principles in international corporate governance practice. Despite the fact that the Republic of Kazakhstan supports initiatives in the field of sustainable development, until now, domestic socially responsible practices have not been properly applied and have no systematic basis.

Product innovations consist in the introduction of goods and products manufactured using new or significantly improved materials with technical, consumer characteristics. Innovative products (services) must be new or improved for business structures [29]. The principles, rules and conditions for the formation of the domestic ESG ecosystem have been developed. This makes it possible to choose alternatives for making managerial decisions in favor of socially responsible processes, taking into account the balance of aspects of ESG. The introduction of domestic systems of socially responsible practices using ESG tools with a high degree of reliability could form principles, principles and conditions for the functioning of corporate process management systems that contribute to the timely achievement of Sustainable Development Goals, the highest efficiency, risk optimization, transformation of socio-economic, social and environmental

systems. Environmental safety, no damage to reputation, the formation of a positive image and obtaining public support.

To achieve the integration of the activities of the main formal and informal institutions into the processes of achieving sustainable development of the state and improving the safety and quality of life of the population, a universal model of Sustainable Development Management based on the creation of an ESG ecosystem has been developed. The tasks and functions of the main groups of its participants, algorithms for their interaction based on modern technologies are determined.

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Author contribution

All authors have read and agreed to the published version of the manuscript. All authors made an equal contribution to the development and planning of the study.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data is available from the authors upon request.

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