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## FINANCIAL SUSTAINABILITY OF THE BANKS: AN EXPERTS' ASSESSMENT

The rise of sustainable finance, which involves financial tools operating within the framework of environmental, social, and governance principles adopted by companies and financial institutions, is gaining traction in major global markets. According to the Global Alliance for Sustainable Investments, these approaches already account for 35.9% of total invested assets. This trend is driven by a new global reality where long-term development cannot take place without addressing deepening environmental and social contradictions. The article aims to assess the priority of ESG of the banks as sustainable finance factors for the development of the recommendations, as the assessment of the ESG principles in the banks of the country allows for the identification of further courses of sustainable finance development. Furthermore, the investigation of leading countries' experiences in environmentally and socially responsible investment and its role in the banking system reveals both common and specific features that could be effectively implemented in Kazakhstan. The research methodology entails experts' assessment from the middle management level of the banks of ESG impact of 9 factors by AHP method. The AHP method allows investors to systematically compare and prioritize used ESG factors, that relates to their significance as the indicators for assessment the state and prospects for the ESG principles implementation in the bank's activity in Kazakhstan. The obtained results allow to suggest that priority instruments for ESG promotion in the country are a legislative framework and the state program. The study illustrates that the integration of ESG factors into the strategy of sustainable development of banks contributes to the growth of their assets by increasing demand for sustainable products and attracting new customers. The findings have practical implications for banks related to sustainable finance and ESG criteria-based investing.

**Key words:** Sustainable finance, ESG, decarbonization, banks, experts' assessment.

**JEL Classification** G21 G28.

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### Банктердің қаржылық тұрақтылығы: сарапшылардың бағалауы

Әлемдік қаржы нарықтарында компаниялар мен қаржы институттары қабылдаған экологиялық, әлеуметтік және корпоративтік жауапкершілік қағидаттары аясында қаржы құралдарын пайдалануды көздейтін тұрақты қаржыландыру тұжырымдамасының танымалдығы артып келеді. Тұрақты инвестициялардың жаһандық Альянсының мәліметтері бойынша, мұндай тәсілдер инвестиция құйылған активтердің жалпы көлемінің 35,9% – қамтып отыр. Бұл үрдіс экологиялық және әлеуметтік қайшылықтарды шешпей ұзақ мерзімді дамуға бет алудың мүмкін еместігін түсіндіреді. Мақаланың мақсаты тұрақты қаржыландыру факторы ретінде банктердегі ESG принциптерінің басымдылығын бағалау. Сондай-ақ, тағы бір мақсат, еліміздің банктеріндегі ESG қағидаттарын бағалап, тұрақты қаржыны дамытудың одан әрі бағыттарын анықтауға мүмкіндік беретін тұшымды ұсынымдарды әзірлеу. Сонымен қатар, жетекші елдердің экологиялық және әлеуметтік жауапты инвестициялау саласындағы тәжірибесін және оның банк жүйесіндегі рөлін зерттейді және Қазақстан тәжірибесіне енгізуге болатын жалпы және ерекше белгілерін анықтайды. Зерттеу әдістемесі АНР (МИА) әдісі арқылы банк менеджментінің орта буын сарапшыларының 9 ESG факторының әсерін бағалалауға негізделген. Бұл әдіс инвесторларға Қазақстандағы банктердің қызметіне ESG қағидаттарын енгізгеннен кейін, оның жай-күйі мен перспективаларын бағалаудың индикаторы ретінде жүйелі түрде салыстырып отыруға және басымдық беруге мүмкіндік береді. Зерттеу нәтижесінде анықталғандай, ESG факторларын банктердің тұрақты даму стратегиясына енгізу тұрақты өнімге сұранысты арттырып және жаңа

ту арқылы олардың активтерінің өсуіне ықпал етеді. Алынған нәтижелер ESG шарттарына негізделген тұрақты қаржыландыру және инвестициялау аясында банктер үшін тәжірибелік мәні зор.

**Түйін сөздер:** тұрақты қаржыландыру, ESG, декарбондау, банктер, сарапшылар бағалауы.

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### Финансовая устойчивость банков: оценка экспертов

Развитие устойчивого финансирования, которое включает в себя финансовые инструменты, действующие в рамках экологических, социальных и управленческих принципов, принятых компаниями и финансовыми институтами, набирает обороты на основных мировых рынках. По данным Глобального альянса устойчивых инвестиций, на данные подходы приходится 35,9% от общего объема инвестированных активов. Данная тенденция обусловлена новой глобальной реальностью, в которой долгосрочное развитие не может осуществляться без решения углубляющихся экологических и социальных противоречий. Данная статья направлена на оценку приоритетности ESG принципов банков как фактора устойчивого финансирования с целью разработки рекомендаций, поскольку оценка принципов ESG в банках страны позволяет определить дальнейшие курсы развития устойчивых финансов. Более того, исследование опыта ведущих стран в области экологически и социально ответственного инвестирования и его роли в банковской системе выявляет как общие, так и специфические черты, которые могут быть эффективно реализованы в Казахстане. Методология исследования предполагает оценку экспертами среднего звена менеджмента банков влияния ESG 9 факторов методом АНР (МИА). Данный метод позволяет инвесторам систематически сравнивать и расставлять приоритеты по использованным ESG-факторам, связанных со значимостью в качестве индикаторов для оценки состояния и перспектив внедрения принципов ESG в деятельность банков в Казахстане. Исследование иллюстрирует, что интеграция ESG-факторов в стратегию устойчивого развития банков способствует росту их активов за счет увеличения спроса на устойчивые продукты и привлечения новых клиентов. Полученные результаты позволяют предположить, что приоритетными инструментами продвижения ESG в стране являются законодательная база и государственная программа. Результаты имеют практическое значение для банков, связанных с устойчивым финансированием и инвестированием на основе критериев ESG.

**Ключевые слова:** устойчивое финансирование, ESG, декарбонизация, банки, экспертная оценка.

## Introduction

The biological crisis, which led to the stagnation and decline of the world economies, both developing and developed countries, caused quite serious damage to humanity. The current situation on the world stage was deepened by the political crisis, and persistent climate-related catastrophes, which led the world economies into imminent economic and social crises. During these challenges, ESG has come under increased scrutiny from regulators globally. There is a growing demand for stricter disclosure of climate goals in environmental funds, and more attention on ESG investments. This intensified focus on ESG has both positive and negative implications for companies operating in the international investment landscape. ESG investments are being influenced by significant trends based on the risks of climate change and the zero emissions. Increasing attention is being paid to issues related to ecosystem decline, social inequality, regulatory changes and the

ongoing debate on the establishment of ESG criteria, which cover various aspects such as environmental sustainability, social accountability and corporate governance (MSCI ESG Research, 2024). These considerations encompass various aspects linked to climate change as carbon credit funds, emission insurance coverage, comprehensive exploration into achieving zero-emission targets, decarbonization strategies pertaining to industrial real estate.

Financial institutions must now use the stress tests related to climate change, and there are regulations concerning market access that are unrelated to deforestation. Investors have taken a proactive approach by reporting key indicators of adverse impacts ahead of potential mandatory requirements. ESG experts vigilantly observe supply chain challenges by examining potential for lab-created products, implementing blockchain technology to trace items, and recovering precious materials from electronic waste to transform the landscape of contentious raw material origins. The TCFD (Task

Force on Climate-related Financial Disclosure) identified reporting on climate targets as the most important area requiring improvement (Carney, 2017). Even though there are efforts for buildup uniform reporting standards across jurisdictions, differences still exist leading to inconsistencies in regulatory requirements for climate change targets resulting in data gaps which make it challenging to assess and compare corporate promises (Drago C. et al., 2024). An increasing number of authorities worldwide require financial institutions to conduct stress tests related to climate risks with several insights emerging from, the Bank of England, the European Central Bank and the Bank of Canada have used stress tests for assessment potential impact

Accurately modeling climate risks at the industry level and understanding the distribution of income and risks by sector or country, and emission intensity, continues to pose a significant challenge. Many banks evaluated by the ECB do not have enough predictive and detailed information about climate risks in their risk management processes Closing the gaps in data, specifically those related to category 3 emissions and the strategies of clients and contractors for adapting to climate change, is crucial for attaining a thorough comprehension of vulnerability to climate-related risks.

Challenges in developing and validating climate risk models arise from uncertainties surrounding the timing of climate-related risks and the limited availability of historical data. New regulations mandate banks to measure their balance sheets' exposure to climate change risks – regardless of zero-balance targets – highlighting deficiencies in data related to climate change which should be addressed through stress tests.

For gaining the objective of the article the structure consists from the Literature review section for investigating the main trends in the ESG studies and sustainable finance development in the different countries; the Methodology section for the implemented methods illustration; the Results and Discussion section for the obtained results discussion; and the Conclusion section for recommendations development for second-tier-banks in Kazakhstan integrated ESG principles as the element of the global sustainable system.

### Literature review

Investors need comparable, consistent, and meaningful information to make decisions.

Kazakhstan, like other countries around the world, has been deeply impacted by global financial

crises. These crises have manifested in various forms such as fluctuations and recessions across different sectors. A biological crisis ensued triggering an economic downturn which resulted in Kazakhstan's financial system experiencing its first recession in twenty years (Shirazi et al., 2021)

The financial system in the country primarily comprises the banking, with a smaller proportion represented by the insurance market and stock market. The number of banks within the sector has decreased significantly since its inception as an independent financial system, currently standing at 22. According to the National Bank of Kazakhstan, the second-tier-banks hold a total volume of assets amounting to 37,18 trillion tenge (nationalbank.kz).

Over the past decades, the banking industry has undoubtedly become a crucial component of the economy, serving as the foundation of the nation's financial framework., which makes a great contribution to economic growth and stability.

The country's financial institutions have successfully bounced back from a series of disruptions that have affected the economy since the onset of the worldwide economic downturn in 2008. They now exhibit strength and adaptability in coping with current challenges, such as the impact of COVID-19 and military operations in Ukraine.

Banks in Kazakhstan have achieved increased success in implementing fintech and digitalization, positioning the banking system as a leading sector of the country's economy when it comes to advancements in information technologies and innovations.

Nevertheless, despite the successful development, some indicators suggest that the banking sector still does not play a proper role in the economy – relative indicators such as the share of assets, loans, and deposits to GDP, allowing for international comparison, are still much lower than in developed and even in many developing countries.

The financial system and banking sector actual situation, the Global trend and necessity for turning the attention and development course for the sustainable and stable specter specifies further going on.

Banks, as middlemen, mainly employ the capital from their clients to conduct financial activities. It is essential for banks to carefully evaluate the cost-benefit outcome in order to safeguard their customers' funds. The efficient utilization of these resources by banks is a critical measure of their long-term sustainability. Although it is crucial for banks to integrate ESG measures, there is

insufficient research on whether they yield increased profits through the adoption of such programs and offsetting related expenses. Consequently, the impact of introducing and disclosing ESG initiatives on bank cost effectiveness remains uncertain (Chang Helen et al., 2021). The shift towards sustainable development necessitates prioritizing environmental factors for investment decision-making.

The issue stems from the fact that when enacting such investment choices, the anticipations of those involved in the procedure align with business principles, wherein profitability is sought after from green investment portfolios and at least breaking even from environmentally friendly business initiatives. However, this objective may not always be achievable. For resolving the issue, the United Nations Environment Program presented a concept of a “golden balance,” which assumes that financial intermediaries strive to maximize profits in their daily activities and considering long-term environmental sustainability goals (Khudyakova, L.S. 2018).

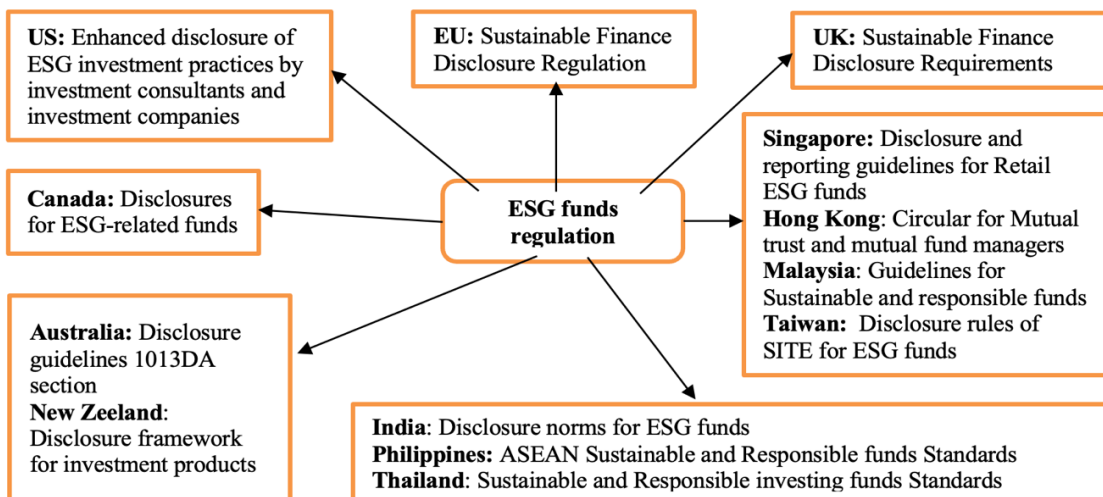
Clients and investors are increasingly interested in investing in companies that follow high standards of ethics and social responsibility, as these information and tools for assessment ESG criteria,

allow to make informed investment decisions (Volodina A.S et al., 2023).

Banks are facing increasing pressure to address ESG issues due to regulatory requirements, investor scrutiny, and consumer preferences for sustainability. Technological breakthroughs are crucial to facilitate ESG integration and drive growth. Companies that combine ESG innovation with technology are demonstrating rapid growth and attracting investment (Yadav R.A. et al., 2023).

As there are problems affecting daily living in today’s world, as poor air quality, new regulations for online businesses, and others, Investors are becoming more inclined to hold their companies’ boards accountable for addressing climate change, which involves scrutinizing data on climate risk management and strategies to minimize emissions in specific markets.

The ESG principles are one of the fast-developing area across the world, the state of the countries, companies and financial institutions turn their focus on the factors of the sustainable finance. Thus, there are jurisdictions that create and advance their legislative and regulation requirements and elaborate conditions for ESG principles implementation by companies and financial institutions.



**Figure 1** – ESG fund regulation in countries  
 Note – Compiled by the authors (Kuanova et al., 2023)

There is a noticeable trend towards increased regulation in ESG-focused funds. Regulatory authorities globally are showing greater concern about fund names and their responsibilities to reveal details about their categorization. The European Union’s Sustainable Finance Disclosure Regulation

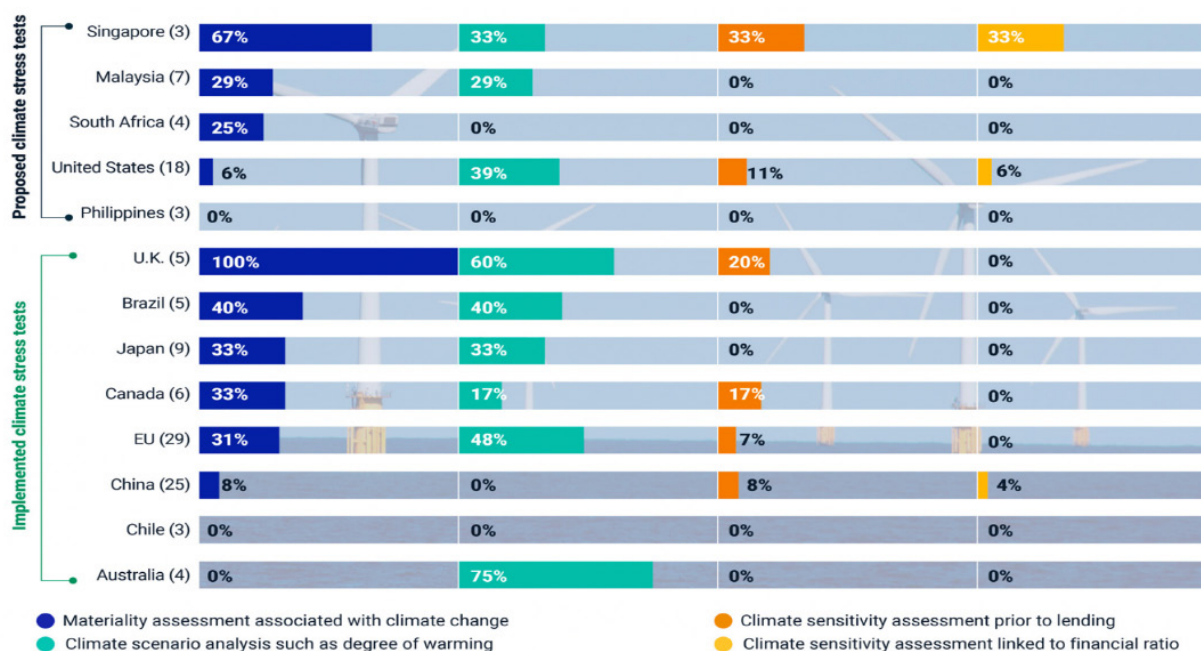
has led the way by requiring more open reporting for ESG funds, prompting other prominent market regulators to adopt similar measures.

The countries such as Australia, and Singapore, Hong Kong have proposed recommendations for ESG reporting standardization in investment



decision-making. The in the European Union and Canada have done an extra step for classification of the sustainable funds based on their ESG integration levels, which corresponds with varying disclosure

requirements. The United States has also initiated similar efforts – a significant development given its status as the world’s largest fund market handling over 60% of global fund investments.



**Figure 2** – Performance of the banks on climate risk indicators disclosure  
Note – Compiled by the authors (MSCI ESG Research, 2024)

Business lending is in decline, which was noted by the Head of State in his Address to the People of Kazakhstan in September 2023 (Kassym-Jomart Tokayev, 2023).

The reasons for the extremely low level of corporate lending and its constantly decreasing share in the loan portfolio of banks are related to the fundamental problems of our economy.

There are the main points of the banking sector development:

- The assets and debt grow at a lower rate than the economics of the country;
- The industry still has excess liquidity that is accumulating and being used, but it have not been effectively directed to credit business;
- The main problem of the sector is still one of the insufficient lending of the business;
- The state dominates the mortgage lending market;
- Consumer loans continue to grow steadily and exceed business lending;
- Companies’ funds are flowing into more profitable instruments;

- Deposits of the population are growing sluggishly;

- The dollarization of deposits has reached a historic low level for past 16 years;

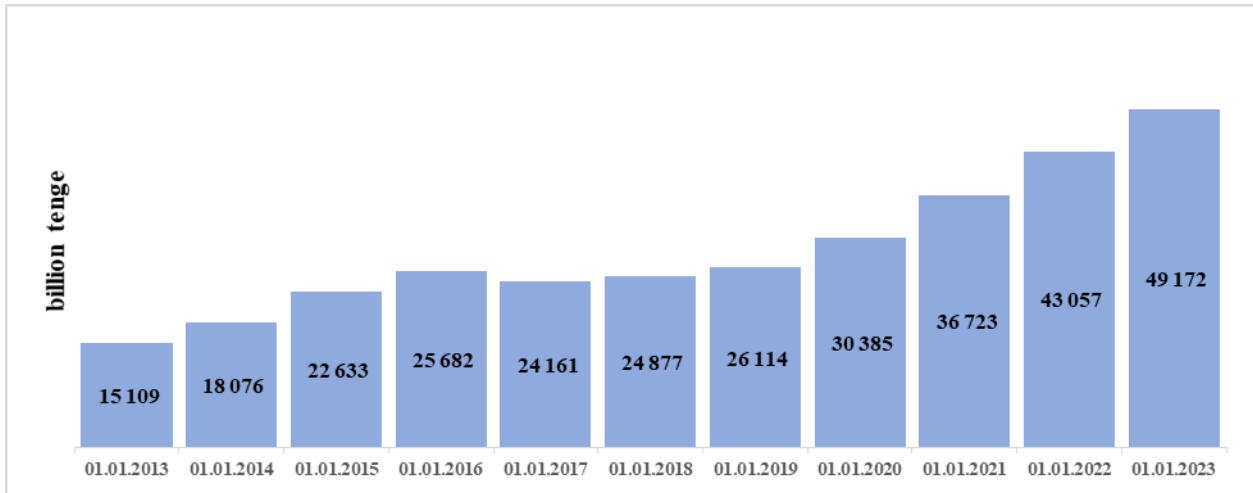
- The banking sector’s profits grow due to high interest margins and commission income is unstable and cyclical;

- Capital adequacy levels remain consistently high;

- The banking sector looks stable today against the background of the risks of secondary sanctions.

Kazakhstan’s banking sector is represented by 21 second-tier banks, including 11 banks with foreign participation, and 8 subsidiary banks. The total assets of the banking sector was 15,109 billion tenge in 2013, and this figure had increased to KZT 49,172 billion in 2023, there was a significant increase for approximately 3,25 times in assets of the banking sector over this time.

Annual changes the assets of banks over the past 10 years (the period from 01.12.2013 – 01.12.2023) are graphically shown in figure 3.



**Figure 3** – The STB assets of the Republic of Kazakhstan for 2013-2023  
 Note – Compiled by the authors (Finreg, 2024)

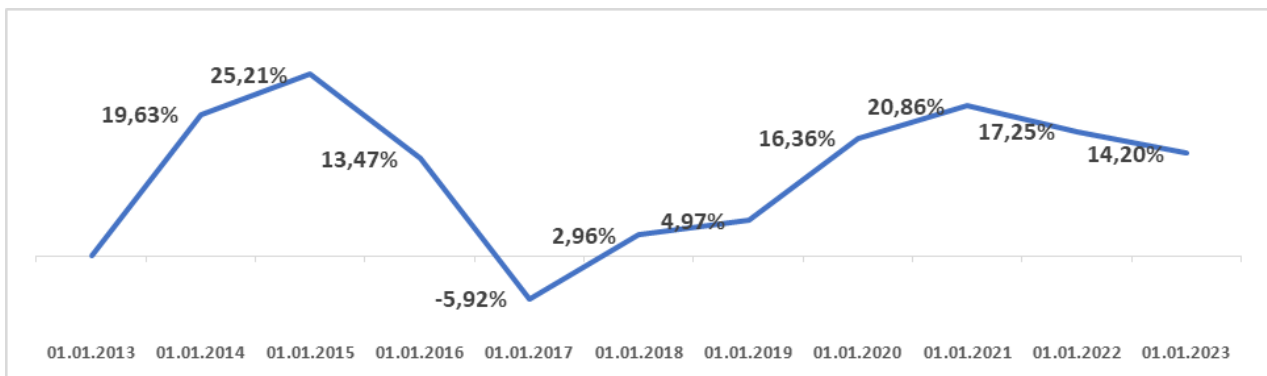
Based on the data from the National Bank’s summary reports of the, the authors analyzed the second-tier banks’ assets increase rates for the period from 01.12.2013 to 01.12.2023 (figure 4.), with the decline in 2017 at -5.92%.

The second-tier banks’ total assets average increase rate in Kazakhstan for the period from 2013 to 2023 is 12,9%, which is positive, indicating an increase in the sector.

With the growing awareness of environmental issues, social responsibility and effective management of the corporate sector, the demand for banking products and services that take these factors into account is increasing. Banks offering such

products can attract more customers and increase their assets.

The banking sector role in driving economic development has witnessed a decline for the recent years. This is evident from indicators such as asset-to-GDP ratio (38,4%) and bank loans-to-GDP ratio (20%), both comparatively low figures when compared to developed countries where this indicator often exceeds 100%. The problem loans accounted for approximately 20% of total loans extended by Kazakh banks. In these circumstances, there is a need to be involved in the international processes of the financial system and to meet the requirements of development as well as sustainability.



**Figure 4** – The STB assets dynamic of the Republic of Kazakhstan for 2013-2023  
 Note – Compiled by the authors (Finreg, 2024)

**Table 1** – The average growth rate of the total assets of the STB of the Republic of Kazakhstan for 2013-2023

Date, years	Total assets, billion tenge	The increase rate of assets, %	Average growth rate, %
01.12.2013	15 109	-	12,90
01.12.2014	18 076	19,63	
01.12.2015	22 633	25,21	
01.12.2016	25 681	13,47	
01.12.2017	24 161	-5,92	
01.12.2018	24 877	2,96	
01.12.2019	26 114	4,97	
01.12.2020	30 385	16,36	
01.12.2021	36 723	20,86	
01.12.2022	43 057	17,25	
01.12.2023	49 172	14,20	

Note – compiled by the author based on the source (Finreg, 2024)

The previous research indicates a lack of in-depth investigation into the analysis of ESG experiences within international and local organizations. Recent studies have mainly focused on limited aspects of ESG principles and their relation to financial sustainability. Despite this, very few studies have investigated the ESG principles integration in the banks' activity.

### Methodology

For assessing ESG effects on financial institutions sustainability the authors have chosen the AHP method, this method is reorganized as suitable for valuation unmeasurable criteria, such as social, environmental and governance effects on the local level for the country. The Analytical Hierarchy Process is a widely utilized method in academic research and various industries for multi-criteria decision-making. Developed by researcher Saaty in the 1970s, this approach offers a straightforward and effective problem-solving tool that does not necessitate expensive or complex software. With its hierarchical model, AHP allows decision-makers to analyze their professional experience, knowledge, and judgments using numerical data. In addition to facilitating decisions with multiple competing goals, it also serves as an evaluation tool for different network providers based on various Quality of Service criteria (Saaty, 1980) (Wu et al., 2017) (Kuanova, 2022).

The AHP involves breaking down the issue at hand by examining its factors and their relationships. The selected elements are then grouped into

hierarchical levels, forming a structured framework. Each element is compared to one another at each level, resulting in a judgment matrix being established. By calculating the maximum eigenvalue of the matrix and obtaining the corresponding orthogonal feature vector, the weights of these elements are determined. AHP proves to be a versatile and robust tool for assessment as it allows for evaluating results based on pairwise relative criteria and options. The relative significance of two criteria is assessed using a numerical scale ranging from 1 to 9. A score of 1 indicates the highest level of importance, while a score of 9 signifies that the first criterion is significantly more important than the second criterion.

To determine the values of the factors (A1, A2, ..., An) obtained from the mathematical matrix, each factor is assigned a corresponding positive number. The goal is to find the value for each factor Ak where k = 1, 2, ..., n.

Mathematical matrix AHP:

$$A = (a_{ij})(a_{1i} \dots a_{ni} \dots a_{1n} \dots a_{nn}) \quad (1)$$

where

$a_{ij}$  and  $a_{ji}$  – A matrix's elements;

$i$  – matrix row;

$j$  – matrix column.

The following task involves gathering the evaluations of the experts regarding the weightage of each criterion. The expert evaluates each criterion individually using a special scale called Relative Importance Scale, which assigns a specific assessment value to each criterion. These values

range from 1 to 9, with intermediate values such as 3, 5, and 7 in between.

The weights obtained are derived from the principal eigenvector of the decision matrix utilizing AHP methodology. The significance of eigenvalues becomes evident in various dynamic phenomena such as unstable oscillations and vibrations. Eigenvalues of a matrix determine the frequency of oscillations, while eigenvectors provide insight into their shape. Analyzing eigenvalues can be applied to evaluate ESG impacts on financial sustainability within banks.

$$(A)_{n \times m} X_n = (a_{11} x_1 \dots a_{1n} x_n \quad \vdots \quad a_{m1} \dots a_{mn} x_n) \quad (2)$$

where

X = (x1, ..., xn) – selected indicator vector;  
 n – selected ESG factors

The factors of the AHP matrix for the financial institutions ESG activity there have been used factors based on the inputs and outputs indicators for the Environmental, Social and Governance areas of the financial institutions. The following table illustrates factors and criteria for the AHP matrix (Gai et al., 2023):

**Table 2** – Factors for AHP of the banks' ESG activity

Environmental	Social	Governance
E – screening	Employee turnover	Disclosure of conflicts of interest
Financing of low-carbon and green projects	Gender wage gap	Transparency
Climate risk assessment	Employee satisfaction	Corruption and taken measures
Note – Authors' own		

Using the AHP method, we can weight and rank these factors and indicators based on their importance to financial institutions. This enables us to prioritize the development and implementation of ESG principles and make well-informed decisions.

E-screening plays a vital role for financial institutions in making decisions about financing projects. This process involves assessing the environmental impact of projects and ensuring compliance with sustainable development principles. By conducting e-screening, financial

institutions can identify potential risks associated with negative environmental impacts, preventing possible financial losses, and reducing reputational risks. Actively conducting e-screening enhances the reputation of financial institutions among clients, investors, and society, influencing consumer choices and fostering long-term partnerships. Integrating environmental aspects into their strategies through e-screening contributes to sustainable development and adherence to modern business standards.

Financing low-carbon and green projects presents new business development opportunities for financial institutions such as loans for renewable energy, energy-efficient technologies, sustainable agriculture, and other environmentally sustainable sectors. Supporting projects aimed at reducing carbon emissions and mitigating environmental impacts contributes to global efforts against climate change.

Climate risk assessment is increasingly important due to its potential effects on various aspects of financial institution activities; it has become a key element in strategic risk management. Anticipating threats related to climate events like floods or droughts enables the development of mitigation measures while also identifying innovative opportunities for creating products or services that address climate challenges.

Constant staff turnover can reduce the operational efficiency of financial institutions. Frequent staff changes result in additional costs for training new employees and may lead to the loss of valuable experience and knowledge. Clients and investors may perceive high staff turnover as a sign of instability, affecting trustworthiness. Team resilience is crucial for achieving long-term goals, as a team with constant turnover faces difficulties in innovating and introducing new ideas. A sustainable team contributes to more efficient work processes and innovation.

The elimination of the gender wage gap demonstrates social responsibility on behalf of the financial institution while supporting equality. Nowadays, clients and investors are increasingly concerned about social justice issues, including gender equality in remuneration and career opportunities. Addressing the wage gap promotes talent utilization leading to improved business processes. Gender equality fosters employee satisfaction, motivation, and creates a positive work environment essential for increased productivity.

Employee satisfaction plays a pivotal role in maintaining organizational health and achieving long-term objectives. Higher employee satisfaction



also correlates within creased productivity, enriched customer service, and diminished staff turnover. Salary levels, bonus programs, career prospects transparency, and professional development opportunities significantly impact employees' contentment. Attention to determinants influencing employee satisfaction has become tantamount to effective HR management strategy. Disclosing information regarding conflicts of interest is essential for financial institutions as it aligns with their transparency and ethical behavior strategy. Revealing such conflicts help mitigate situations that may jeopardize clients' interests. Ethical standards mandate that these institutes serve client best interests diligently while avoiding conflicts of interest making disclosure perquisites. Institutions which display transparent policies regarding conflicts of interest build stronger, long-lasting relationships with their clients and partners. These practices also boost reputation and reduced ethical violation ship risks.

Transparency in the operations of financial institutions builds trust with customers. Clear insight into how the institution functions and manages finances helps to cultivate strong relationships. This transparency also ensures compliance with relevant laws and regulations, mitigating legal issues and fines. Understanding financial transactions and investment strategies enables more effective risk management. Transparent reporting allows for better identification and assessment of potential risks. Investors and partners typically prefer working with institutions that provide accurate information about their activities, making transparency a key factor in deciding on collaboration opportunities. Additionally, it can drive innovation in product development by aligning offerings with customer needs and expectations.

In today's landscape, clients are increasingly factoring in an anti-corruption stance when selecting a financial partner. Institutions actively combatting corruption stand to attract more clients and investors as they reduce associated financial risks such as asset loss or expenses related to corrupt practices' aftermaths while upholding corporate governance principles—contributing positively towards sustainable societal development aligned with Corporate Social Responsibility principles.

The selection of the considered 9 factors relates to their significance as the indicators for assessment the state and prospects for the ESG principles implementation in the bank's activity in Kazakhstan. To address the primary inquiry, it is essential to simulate the environmental, social, and governance elements of considered nine banks in Kazakhstan, and will be discussed in the next section.

## Results and discussion

As has been explained the methodology of AHP for the effects, that are complicated measure in physical units and considering that ESG criteria implementation is essential for the country's financial system and financial sustainability of the organizations, the authors have analyzed experts' assessment. The method of AHP has been used to evaluate the ESG criteria effects in Kazakhstan on the level of second-tier-banks. There have been used 9 selected experts' (management of the banks) in finance from 9 different banks for receiving the index weight of ESG impact of 9 factors: for Environment – 3 factors, Social – 3 factors, and Governance – 3 factors. According to the obtained experts' assessment there has been developed the matrixes of the scales of priorities by 9 selected factors of ESG (table 3).

**Table 3** – Resulting priorities of ESG principles, 9 factors

	Factor	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank		
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6	Expert 7	Expert 8	Expert 9*									
1	E – screening	30,6	1	33,7	1	28,3	1	14,7	1	15,2	2	14,8	3	28,1	1	-	-		
2	Environmental risk information disclosure	20,0	2	17,7	3	18,7	3	13,6	2	23,8	1	22,5	1	21,7	2	26,0	2	-	-
3	Climate risk assessment	15,5	3	17,9	2	20,7	2	12,8	3	8,6	6	11,0	5	18,9	3	12,9	3	-	-
4	Employee turnover	5,8	7	7,8	5	7,9	5	12,0	4	14,3	3	11,3	4	17,1	4	9,2	5	-	-
5	Gender wage gap	9,2	4	8,1	4	8,8	4	10,8	5	10,4	5	15,6	2	5,5	5	9,5	4	-	-

Table continuation

	Factor	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank	Prior-ity%	Rank
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6	Expert 7	Expert 8	Expert 9*									
6	Employee satisfaction	6,2	6	6,1	6	5,0	6	9,9	6	13,6	4	10,0	7	3,0	6	5,6	6	-	-
7	Disclosure of conflicts of interest	7,1	5	3,8	7	4,8	7	9,4	7	8,1	7	10,0	6	2,6	7	3,6	8	-	-
8	Transparency	4,1	8	2,8	8	3,7	8	8,8	8	4,2	8	2,8	8	1,8	8	3,6	7	-	-
9	Corruption and actions take	1,4	9	2,0	9	2,1	9	8,0	9	1,8	9	1,8	9	1,4	9	2,4	9	-	-

Note-Calculated using the AHP Priority Calculator

Expert 9\* – Expert number 9 was excluded by the author due to the improbability of estimates of the ESG factors

Table 3 shows the obtained values of expert assessments on the priority of ESG principles, 9 factors calculated using the AHP calculator. Having

built the matrix according to the estimates, 9 experts calculated the eigenvector and the priority scale of 9 factors, ESG principles.

**Table 4** – Scale of priorities results for experts' assessment Matrixes

	Factor	Priority	Rank
1	E – screening	22,69%	1
2	Disclosure of Environmental risk information	20,53%	2
3	Climate risk assessment	15,16%	3
4	Employee turnover	10,86%	4
5	Gender wage gap	10,02%	5
6	Employee satisfaction	7,55%	6
7	Disclosure of conflicts of interest	6,49%	7
8	Transparency	4,06%	8
9	Corruption and actions take	2,63%	9

Note – Compiled by the authors

As we can see from Table 4, the first priority was given to the Electronic Screening factor with a value of 22,69%, the second priority was the Financing of low-carbon and green projects (20,53%), the third was the Climate Risk Assessment factor (15,16%), the fourth priority was Staff turnover (10,86%), the fifth was the Gender Wage gap factor salary (10,02%), the sixth priority of the factor is Employee satisfaction (7,55%), the seventh is Disclosure of information about conflicts of interest (6,49%), the eighth is Transparency (4,06%) and the ninth priority is Corruption and actions taken (2,63%).

The investigated ESG factors development in selected countries of the world could be the case for the further promotion in the field. Thus, the ESG principles implementation Road map for

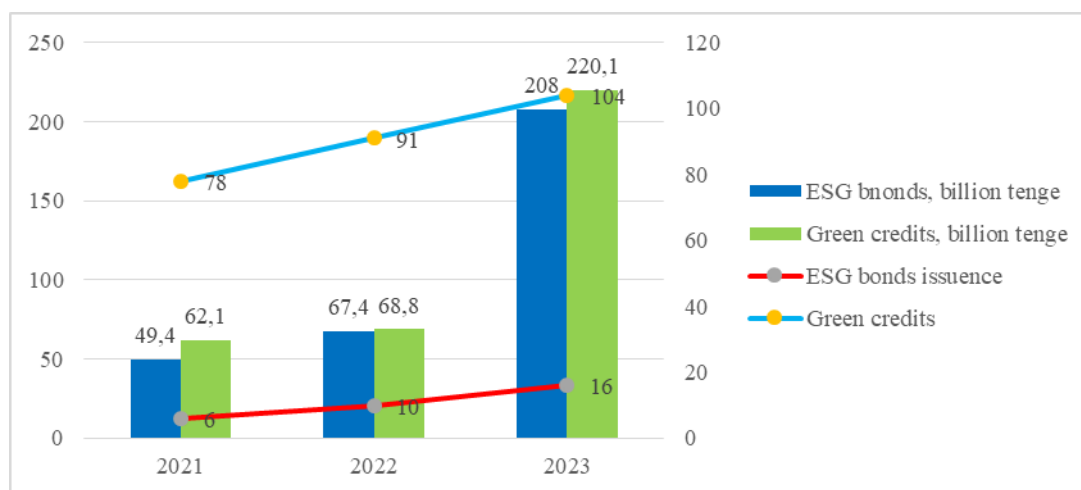
Kazakhstani financial sector has been launched in March 2023. There are step by step plans for the common 3 years. There are 5 main objectives of the financial market regulation of the ESG principles integration:

- the ESG risks exposure information Disclosure by financial institutions;
- the ESG risk management and the carbon footprint of the loan portfolio assessment;
- Implementation of ESG principles in the risk management system and corporate governance;
- the ESG risks monitoring and integration into the supervision system (Finreg, 2023)

Kazakhstan has set a national goal of achieving carbon neutrality in its economy by 2060. The strategy outlines comprehensive decarbonization

measures across various sectors and emphasizes the need to update production processes. An estimated investment amount of 10 billion US dollars is required by 2030, with the remaining 600 billion US dollars expected to be invested by 2060. Approximately

610 billion US dollars will be allocated towards low-carbon technologies as part of efforts to attain carbon neutrality. The strategy addresses key areas such as energy, industry, transportation, agriculture, and buildings to work towards a Net Zero future.



**Figure 5** – ESG bonds and Green credits in Kazakhstan, 2021-2023

Note – Compiled by the authors, source: [www.stat.gov.kz](http://www.stat.gov.kz)

The Agency for Regulation and Development of the Financial Market of Kazakhstan has approved a plan to gradually integrate ESG principles into the country's financial sector, starting in early 2023. This roadmap outlines phased strategies over the next three years. JSC "Development Bank of Kazakhstan" issued the first "green" bonds on the Kazakhstan Stock Exchange valued at 10 billion tenge in 2023. The European Bank for Reconstruction and Development allocated up to 150 million US dollars in financing to financial institutions involved in the GEF Kazakhstan II project, which is designated for lending to small and medium-sized enterprises and individuals aiming to develop green technologies, mitigate climate change risks, promote circular businesses, and foster gender equality.

Integrating ESG factors into risk analysis allows banks to better understand potential threats related to environmental, social, and managerial aspects while taking appropriate measures to reduce them. This enables banks to minimize losses and preserve their assets. Banks that actively engage in sustainable activities by integrating ESG factors into their strategy can attract more investors who prefer companies with high standards of management and social responsibility ultimately leading towards an

increase in investment volume as well as an increase in bank assets.

ESG factors are driver of development of new products aimed at addressing environmental issues, promoting social justice, and improving governance. These innovative products may attract new customers thereby increasing a bank's assets. The adoption of sustainable practices can effectively reduce costs related to solving environmental problems, increase energy efficiency and optimize management—ultimately resulting in increased income and asset growth. Regulators are increasingly requiring banks to demonstrate compliance with ESG standards. Banks that successfully meet these requirements gain advantage over competitors leading to an increase in assets.

## Conclusion

ESG factors contribute to the growth of banks' assets through increasing demand for sustainable products, reducing risks, attracting investments, stimulating innovation, improving efficiency and compliance with regulatory requirements.

The introduction of ESG factors into the strategy of banking sustainable development (STB) can contribute to an increase in the growth of banks'

assets. Banks need to develop products and services that consider ESG factors. These can be sustainable investments, green loans, socially responsible funds, etc. Supporting clients in their desire to invest in accordance with the principles of sustainable development will help to attract more funds and expand the bank's assets.

The expert's assessment demonstrates that the first priority is Environmental, the second priority is the Social, and the last is the Governmental as sustainable finance development factors. The obtained results allow to suggest that priority instruments for the ESG promotion in the country is legislative framework and the state program. The Decarbonization strategy with the Road map implementation started the process of environmentally sustainable development of the financial institutions, while other two factors under the recommendation characteristics from the regulator on the rudimentary period of implementation.

It is also necessary to implement an ESG risk management strategy. Develop systems and tools for assessing and managing risks associated with ESG factors. This includes the analysis of environmental, social, and managerial risks in making credit decisions, investments, and other operations. Minimizing such risks will help to preserve and increase the bank's assets.

Generally, financial institutions are encouraged to strengthen reporting on ESG factors by providing information on their sustainable development efforts, including specific indicators, achievements, and plans. Transparency about their ESG initiatives will help strengthen the trust of customers, investors, and the public, which in turn will lead to growth and efficiency of their activities.

The search for new opportunities in the field of green finance, energy conservation, sustainable construction, etc., as well as work on the development and implementation of effective sustainable development strategies, cooperation with various stakeholders will help identify new opportunities for growth and strengthen the position of financial institutions in the market.

The introduction of ESG factors into the sustainable development strategies of financial institutions not only contributes to the growth of their assets, but also improves their reputation, reduces risks, and creates long-term business value.

From the perspective of developing country potential for advancing sustainable finance in Kazakhstan, distributed stock market tools will play a crucial role in facilitating the effective allocation of environmentally friendly investments. This will enhance transparency in channeling these resources into the actual economy sector.

Given the unique raw material characteristics of national economy, along with the decline in air quality in major cities, growing water scarcity, and other environmental challenges, it is essential to develop a roadmap for sustainable finance that prioritizes key sectors and industries.

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### References

1. Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market. (2024). Current status banking sector the republic of Kazakhstan. Retrieved from <http://www.finreg.kz>
2. Aziz Durrani, Mastita Rosman, & Ulrich Foltz. (2020). The role of central banks in scaling up sustainable finance – what do the monetary authorities of the Asia-Pacific region think? *Sustainable Finance Magazine & Investments*, 10(2).
3. Carney, M. M. (2017). Recommendations of the Task Force on Climate-related Financial Disclosures. In *Letter from Michael R. Bloomberg*.
4. Chang, H. L. V., & Liu, Y. L. (2021). Using environmental, social, management (ESG) and financial indicators to measure the economic performance of banks in Asia. *Sustainable Development (Switzerland)*.
5. Drago, C., Di Nallo, L., & Russotto, M. L. (2024). Measuring and classifying the social sustainability of European banks: An analysis using interval-based composite indicators. *Environmental Impact Assessment Review*, 105, 10743.
6. Gai, L., Bellucci, M., Biggeri, M., Ferrone, L., & Ielasi, F. (2023). Banks' ESG disclosure: A new scoring model. *Finance Research Letters*, 57. <https://doi.org/10.1016/j.frl.2023.104199>
7. Kassym-Jomart Tokayev. (2023). State of the Nation Address "Economic course of a Just Kazakhstan."
8. Kuanova, L. (2022). Islamic social finance: Theory and practice. *Qazaq University*.

9. Kuanova, L., Sagiyeva, R., & Zaitenova, N. (2023). Analytical Review of Experience in the Development of Sustainable Finance and Prospects for Implementation in Kazakhstan. *Vol. 18, Issue 4*.
10. Khudyakova, L. S. (2018). Reform of global finance in the context of sustainable development. *World Economy and International Relations*, 62(7), 38-47.
11. MSCI ESG Research. (2024). ESG and Climate Trends to Watch for 2023. Retrieved from <http://www.cbr.ru/collection/colle>
12. Mishra, P., & Sant, T. G. (2024). Analysis of the level of disclosure of information on the environment, social sphere and management in the Sustainable Development Report – A study of the Indian Banking Sector. *International Journal of Innovation Science*, 16(2), 420-442.
13. Overview of the financial sector of the Republic of Kazakhstan 2013-2023. Retrieved from <https://www.gov.kz/memleket/entities/ardfm/documents/details/597346?lang=ru>
14. Volodina, A. S., Chukhnenko, I. A., & Adamovich, M. (2023). The development of ESG principles in the Russian economy. *Business and Design Review*, No. 2 (30), 17-24.
15. Yadav, R. A., Premalatha, K. P., & Patil, S. (2023). Developing sustainable banking and financial integration in India through ESG integration in the face of technological disruptions. *Public Practitioner*.
16. Saaty, T. L. (1980). *The Analytic Hierarchy Process*. McGraw-Hill.
17. Shirazi, N. S., Kuanova, L. A., & Zhuparova, A. S. (2021). Islamic Social Finance and the impact of the Covid-19 pandemic. *Economy: Strategy and Practice*, 16(1), 106–116. [https://doi.org/https://doi.org/10.51176/JESP/vol\\_16\\_issue\\_1\\_T11](https://doi.org/https://doi.org/10.51176/JESP/vol_16_issue_1_T11)
18. Summary reports of the National Bank of the Republic of Kazakhstan 2013-2023. Retrieved from <https://nationalbank.kz/ru/news/banks-reporting/rubrics/1918>
19. Official website of the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market. (2024). Retrieved from <http://www.finreg.kz>
20. Official website of the National Bank of the Republic of Kazakhstan. (2024). Retrieved from <https://nationalbank.kz/ru/news/banks-reporting/rubrics/1918>
21. Official website of the Bureau of National Statistics, Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. (2024). Retrieved from <https://stat.gov.kz/ru/industries/labor-and-income/stat-empt-unempl/>

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