Journal of Innovations in Business and Industry

Vol. 02, No. 01 (2024) 45-54, doi: 10.61552/JIBI.2024.01.006 - http://jibi.aspur.rs

EFFECTIVE DEVELOPMENT OF INDUSTRY THROUGH USE OF NEW TOOLS AND MECHANISMS

Elena Posnaya[1]
Ekaterina Krichevets
Svetlana Pisaryuk
Boris Bukach

Received 08.09.2023.
Revised 02.10.2023.
Accepted 18.10.2023.

Keywords:

Industry, mechanism, tool, economy, bank, business, sustainable development.

Original research

A B S T R A C T

The development of the industry stimulates the functioning of environmental projects related to agriculture, renewable energy sources, and environmentally friendly industry. Improving the system of "green" lending in banks contributes to the development of the private sector on new terms, which implies maximum preservation of natural resources and receiving more profit than from traditional projects. When issuing loans for the development of sustainable entrepreneurship, the banking sector seeks to support clients in the transition to sustainable solutions, since the conservation of resources and the creation of energy-saving technologies determine the future capabilities of the state. Green loans are an effective and significant tool for the development of sustainable entrepreneurship in the industry. And the conditions and procedure for issuing them are the mechanism through which the industry develops. Green loans can also be issued for projects of large clients in support of the industry, which meets the requirements of the SEB system. By choosing a green loan to finance a project, the enterprise becomes part of a sustainable management system. The most relevant areas for obtaining "green" loans are: renewable energy (solar, wind, tidal energy, bioenergy; energy efficiency - in relation to district heating or cooling; clean transport - non-fossil fuels or hybrid transport solutions; waste management - energy from waste and methane capture projects, as well as projects to reduce waste through process improvement; emission reduction - reduction of emissions of particulate matter, heavy metals and dioxins through physical, chemical, mechanical means; sustainable forestry - forestry projects with a forest management certificate or equivalent scheme certification; water and wastewater treatment – drinking water production, wastewater treatment, water resources management.

1. INTRODUCTION

Raising funds that are necessary for the development of the green economic growth industry is mainly carried out from the private sector, which is accompanied by the development and implementation of functioning standards for doing business ("green" investment).

[1] Corresponding author: Elena Posnaya
Email: sntulena@mail.ru

Thus, there is a need to create an environment where increased environmental concerns and climate action are met with economic returns. The promotion of "green" technologies leads to a reduction in the level of environmental pollution and an increase in the efficiency of resource use (Miao et al., 2017). The growth of the state's economy will be greatly influenced by the achieved efficiency from rational environmental management and natural resource management and integration into the economic planning process (Pearce & Turner 1989). Natural resources are of decisive importance for the economic development of any state and are an important source of income. The best management of natural resources will lead to economic growth and social progress of the state (Manuylenko et al., 2022).

2. MATERIALS, METHODS AND OBJECTS OF RESEARCH

The main direction of sustainable development is the transition to a "green" economy, which is aimed at the efficient use of natural resources, preserving and increasing natural capital, reducing greenhouse gas emissions, preventing the loss of ecosystem services and biodiversity, increasing the quality and standard of citizens living (de Oliveira et al.,. 2013; Adamowicz, 2022). As a result, sustainable development directly depends on the green economy. Thus, the green economy can rightfully be considered the basis of economic growth (Schulz & Bailey, 2014). Consequently, mechanisms for sustainable, including "green" financing, which are focused on the principles of environmental, social and governance responsibility, are becoming increasingly widespread. The concept implementation of sustainable economic development of the state is associated with the need to develop and manage expensive investment projects of an environmental nature, which requires significant amounts of "green" investment (He et al., 2019). The formation and further development of "green" financing is considered as an integral part of the national development strategy. In this regard, it is necessary to solve a number of conceptual and practical problems that affect the formation and development of "green" financing and help reduce the impact of harmful factors on the environment through the modernization of the financial mechanism, an integral component of which are financial policy instruments.

"Green" loans directly affect the speed of circulation of money and the capital movement, the volume and structure of the money supply, the pace of production and turnover, and the conversion of cash savings into capital investments. Also, "green" loans significantly influence the development of economic ties between industries, as well as countries and regions. Due to their specificity, "green" loans conserve natural resources and introduce energy-intensive industries. A "green" loan makes it possible to purchase and launch energy-intensive technologies right now, while there is no price increase. Repayment of "green" loans is carried out at lower interest rates than conventional ones, which makes its importance extremely important for the economy and society. However, green loans must have special conditions and special guarantees for the borrower and the lender.

The growth of "green" loans issued by banks has a positive effect on the state's GDP. The availability of borrowed funds, namely "green" loans for business and the population, will create the opportunity to increase investment and consumer activity, which will significantly increase the scale of production and have a positive impact on the safety of resources.

An important issue is the development of "green" lending for the regions, as well as the development and operation of the maximum possible number of regional banks, since they are the ones who develop and finance small businesses, which ensures employment in the regions and an increase in the values of all macroeconomic indicators.

It should be noted that there is a need to theoretically substantiate the categories related to the assessment and management of bank capital, and to improve existing methods for assessing bank capital regarding the issuance of "green" loans to clients for the development of the industry.

To make decisions on the problem of supplementing banking legislation in terms of "green" loans, it is necessary to apply an integrated approach to theoretical issues related to the assessment of the regional bank capital, which will assist in solving the identified problems in managing the bank's capital and developing a methodological system for improving the capital management of the bank carrying out green lending operations.

It is necessary to place emphasis on the development of methodological provisions for the formation and implementation of a bank capital assessment system aimed at increasing the efficiency of the capital management system of a commercial bank issuing "green" loans.

To most effectively solve the research problem regarding the capital of banks involved in issuing "green" loans, it is necessary: to analyze theoretical studies on the activities of regional banks and bank capital management; clarify theoretical categories and definitions related to bank capital; analyze the regulatory framework that determines the formation and development of the bank's equity capital; conduct a comparative analysis of the capital base of the largest and regional banks, identify differences, problems and prospects, and also assess the level of development; develop a methodology for assessing bank capital in the bank's capital management system, based on an integrated approach that takes into account both the existing regulatory requirements of the regulator and additional criteria relevant for regional banks; justify the feasibility of using a selective method in bank capital management; develop a mathematical model that allows

for better management of bank capital; make calculations using the model proposed in the study to improve the banking management system in the field of capital; to test the methodology and develop recommendations for the implementation of an improved methodology for managing bank capital.

Research on bank capital dealing with issues of "green" lending and sustainable development should be carried out within the framework of the activities of Russian and foreign commercial banks at the regional level.

Therefore, in order to more effectively carry out the activities of banks in terms of "green" lending, it is necessary to develop an up-to-date system for the formation and management of bank capital of regional banks.

It is also necessary to develop and implement an appropriate theoretical and methodological basis for research using the works of various authors in the field of formation, assessment, management of bank capital; fundamental and applied areas of research in terms of finance of corporations and banking institutions are widely used, consideration of the banking management system as the main link of the banking system in general, as well as financial and economic relations that are present in the regulatory framework for regulating banking activities, reflected in documents published by supervisory authorities and other subjects of financial and economic relations.

It is also necessary to pay attention to research methods. The application of methods of economic and mathematical modeling, graphical methods, dialectical method, comparative economic and statistical method, systemic and financial analysis, deduction, induction, scientific abstraction, expert assessments, statistical analysis, scientific synthesis, comparison is relevant.

The significance of this study lies in the author's recommendations for improving the capital management of commercial banks that issue "green" loans and support sustainable development programs in order to increase the profit of each specific bank and the efficiency of the banking system as a whole.

It is proposed to clarify the definition of a regional bank engaged in "green" lending operations, to most fully and comprehensively identify the criteria for its identification among other credit institutions within the country's financial system; highlight and complement the advantages and disadvantages of regional banks; outline the importance of regional banks and the need for government support, including the creation of special conditions for the development of regional banks engaged in "green" lending in the direction of sustainable entrepreneurship.

It is also proposed to structure the evolution of the regulator's requirements for the capital of banks that issue "green" loans, which will allow us to assess trends in the development of bank capital regulation, as well as assess their impact on the development of the country's banking system.

Additionally, it is necessary to develop the most complete classification of existing indicators for assessing the capital of a bank that provides "green" loans, used in regulatory and proprietary methods for assessing bank capital, identifying their advantages and disadvantages. It is advisable to propose a methodology for selecting banks based on indicators for assessing bank capital, justify the criteria for selecting indicators taking into account existing approaches to assessing capital and the overall financial condition of credit institutions, regulatory requirements, as well as the relationship between bank performance indicators, which will ensure more effective development of "green" lending. We consider it possible to propose an indicator "capital factor" of a bank, which will assess the compliance of the bank's capital with the requirements of the current situation in the banking system of the country and a specific region, which will automate the assessment processes and make it simpler, more efficient and objective for the regulator to make decisions on each specific bank in order to additional capitalization for the development of a sustainable entrepreneurship system. It is necessary to develop a universal model for bank capital management based on a selective approach, allowing to separate banks that need state support in terms of additional capitalization from banks that must independently take measures to increase capitalization.

It is important to introduce the concept of a "safety zone" of the indicator values of the bank's capital assessment model and the method for calculating its threshold values.

An important stage is the formation and testing of an algorithm for selecting the structure of sources for increasing the bank's capital portfolio, taking into account the mechanisms of state support for regional banks, taking into account both the digital transformation of the banking business and the problem of insufficient capitalization of commercial banks, which will also have a positive impact on the development of "green" lending and sustainable entrepreneurship.

Within the framework of the developed methodology, a hierarchy of capital portfolio management tasks is proposed, based on the specific interests of stakeholders, taking into account the peculiarities of corporate governance and the specifics of the banking business with the goal of maximizing the possible number of issued "green" loans. Also important is the formation and formalization of an algorithm for selecting the structure of sources for increasing the bank's capital portfolio, structuring the advantages and disadvantages of methods for increasing the bank's equity capital, taking into account the limitations characteristic of regional banks, which will also increase the efficiency of issued "green" loans.

It is also necessary to deepen the theory in the field of bank capital management. It is proposed to develop a methodology for assessing bank capital, based on a selective approach, taking into account the influence of selected factors on the bank capital assessment, which will allow regulating the amount of capital in order to

minimize risks, as well as the growth of the resource base for the implementation of short-term and long-term plans. The proposed methodology and methodological provisions can serve to develop specific recommendations for improving the capital base of banks, taking into account the situation at the macroeconomic level.

Based on the main results of the study, it is possible to develop recommendations for banking management. At the regulator level, the methodology will allow us to differentiate requirements not only by types of bank licenses, but also by assessing the capital factor, which will allow us to distinguish regional banks into a separate subgroup and analyze the level of the region's banking system development. At the level of commercial banks, propose for the development of methodological tools and organizational techniques to ensure the effective functioning of the bank's capital management system, which will allow not only to competently plan the required volumes of bank capital, but also to automate the process and simplify the decision-making procedure for each bank in terms of additional capitalization in order to development of sustainable entrepreneurship and green lending processes.

Based on a study of regulatory and original approaches to assessing bank capital, indicators for assessing bank capital used in various methods for assessing bank capital were systematized, which made it possible to identify their advantages, as well as develop a selective approach that allows one to analyze the influence of certain factors on the bank capital assessment (Table 1).

Table 1. Approaches to assessing capital adequacy of banks

Criteria/Methodology (normative act/author)	Directive 4336-U	Directive 3277-U	CAMEL	Kromonov methodology	Tatarinova L.V.	Bobyl V.	Shvetsov Yu.G., Koreshkov V.G..
Capital structure accounting							
Accounting for equity structure	+	+	+		+/-		
Accounting for the share of equity capital in liabilities			+	+	+	+	
Asset accounting							
Taking into account the risk level of assets	+	+	+			+	+
Accounting for immobilization of assets			+	+	+		
Taking into account other parameters of the bank's financial stability							
Accounting for bank liquidity/solvency						+/-	+
Accounting for bank profitability				+/-			
Differentiation							
The inequality of different groups of indicators is taken into account				+			
Differentiation of approach taking into account the scale of the bank	+	+					
Taking into account the specifics of the regional economy							+
Easy calculation							
All indicators necessary for the calculation are published in open sources	+	+		+	+	+	
Simplicity and efficiency of calculation	+	+					

The results of the various methods analysis for assessing the capital of commercial banks showed that most methods (methods for assessing the economic situation of banks, methods for assessing the financial stability of a bank in order to recognize it as sufficient for participation in the deposit insurance system, the CAMELS rating system, Kromonov methodology, other proprietary methods) take into account the level of the bank's assets risk, which confirms the importance of the bank's capital protective function. Most methods (except regulatory ones) do not differentiate the approach to banks of different sizes; in addition, when assessing capital, other financial indicators that have a significant impact on the adequacy, adequacy and efficiency of using the bank's capital are not taken into account (return on capital, structure of liabilities in the interrelation with assets and so on).

A methodology for selecting banks is proposed on the basis of developed indicators for assessing bank capital, criteria for selecting indicators are substantiated taking into account existing approaches to assessing capital and, in general, the financial condition of credit institutions, regulatory requirements, as well as the relationship between bank performance indicators.

The methodology developed in the work is based on the fact that only a holistic approach makes it possible to effectively combine various fragments of assessing bank capital adequacy. The methodology for assessing equity

capital must take into account that the bank is a complex system and, accordingly, the assessment procedure must be a structured and hierarchical set of approaches and methods, interconnected both with the external environment and with each other. In addition, the system for assessing bank capital should be based on scientifically based principles, the key of which seems to be the principle of efficiency.

This approach is proposed to be used for the first time in assessing bank capital. Assessing bank capital may contain a wide range of techniques and methods, but a selective approach will allow you to select the "best" banks in terms of capital adequacy and prevent the bankruptcy of "weakened" banks in this parameter.

The main advantages of the proposed methodology are the following: 1) versatility (suitable for any banks); 2) integrated approach (15 indicators); 3) compliance with the condition "necessary and sufficient"; 4) the possibility of adjustment has been implemented; 5) interrelation and lack of indicators duplication (confirmed by correlation and regression analysis). Testing of the methodology confirmed its capabilities in terms of identifying "weakened" banks.

Some of the proposed indicators were taken into account in various methods, but the advantage of the proposed approach is its complexity, taking into account the mutual influence of the indicators under consideration, as well as the fact that within this approach the emphasis is placed specifically on assessing capital adequacy.

The developed selective approach to assessing bank capital allows us to focus on "signaling" issues of capital adequacy and involves calculating ratios in the areas of liquidity, risks, equity adequacy, sustainability, scale, and the introduction of information technology.

In turn, all of the above indicators affect the stability of the bank: for example, a high level of risks when attracting and placing funds reduces the level of stability of the bank, on the other hand, a high level of income, as a rule, can be ensured only with a sufficiently high level of risk of operations, while Profit growth ensures an increase in the bank's profitability, thus increasing its stability and creating opportunities for increasing capitalization. A decrease in a bank's liquidity leads to a decrease in its reliability, but can create prerequisites for increasing profitability, since a decrease in the period for attracting resources leads to a decrease in their cost. Increasing the share of equity capital in a bank's liabilities significantly increases its reliability, but, as a rule, increases the cost of capital. The sustainability block proposes to evaluate the bank's return on equity (ROE) and the share of overdue debt. This block does not use financial stability indicators that assess the ratio of equity capital to assets, since they will partially duplicate the indicators of the capital adequacy group.

Large structures are traditionally considered more stable due to the existing margin of safety and the possibility of using economies of scale, on the other hand, small organizations are more flexible. We consider it necessary to determine the scale of the bank's activities, focusing on its role in the lending market in the assessed group, as well as household deposits as elements of the commercial banks main functions implementation, and also take into account the volume of its assets, since the bank can choose other segments of the financial market as a specialization.

The concept of a "safety zone" of indicator values in a bank's capital assessment model is introduced and a method for calculating its threshold values is proposed.

Within the framework of the methodology, it is proposed to focus on the median indicators of the region (separately highlighting indicators for regional and federal banks), since, firstly, given the significant differences between the country regions and their banking systems, it does not seem advisable to establish a single system of indicators that applies to all banks countries, otherwise most of the regional banks will be identified as problematic.

Secondly, the economic situation is changing quite quickly, and the banking sector is one of the most dynamic, therefore, if the minimum indicators are fixed in absolute terms, there will be a need for their regular revision, which will require additional research and expert assessments, as well as time spent on revision and approval procedures new indicators, while banks will need prompt support or will require equally prompt measures to eliminate them.

Thirdly, in some regions there is a fairly small number of banks, especially regional ones. Accordingly, when using average values, there is a high probability of obtaining asymmetric data, which will not allow adequate identification of average indicators in the region using the arithmetic average.

To assess the significance and variability of banks' indicators deviations from the median indicators, we consider it necessary to focus on the deviations of the worst values of similar indicators of the largest banks from the median values.

The developed measures will make it possible to effectively form the capital base of banks, which will have a positive impact on the development of sustainable entrepreneurship and the provision of "green" loans by banks.

An urgent problem for domestic regional banks is the ambiguity of the implemented policy of the state and the regulator in relation to regional banks: on the one hand, the number of banks is significantly reduced, on the other hand, emphasis is placed on ensuring the stability of the country's banking system. In connection with the special role of regional banks in the development of the country's banking system and its economy, a special approach to regulating the activities of regional banks is required.

The "green" economy has a close connection with the technological security of the state. The development of a "green" economy is based mainly on the issuance of "green" loans and through the introduction of "green" technologies with a high level of knowledge intensity and progressiveness.

The technological aspect is clearly and strongly present in the development of the green economy and green finance. The development of "green" technologies makes the country protected from sanctions, contributes to the development of national innovation and has a positive effect on the international competitiveness of economy.

In this regard, it is necessary to reconsider the directions of the state's structural, regional, and investment policies, the priorities of industrial policy and scientific and technological progress.

Important socio-economic, scientific, technical, production and technological, environmental and other types of society transformation that have occurred recently are associated with risks and threats of a positive and negative nature. The presence of negative factors determined the development and implementation of the sustainable economic development concept focused on "green" financing. Sustainable development is based on the coordination of economic and social processes with the environment.

Attention should be paid to the relationship between the idea of implementing sustainable development and Noosphere genesis. The connection will be that in a future society the need for the survival of civilization will stimulate scientific inquiry and creativity; Also, the main mechanism for implementing the model of sustainable development is the collective human mind, since it is not possible to cope with the global threats that modern civilization has to deal with through the efforts of one person, one state.

Therefore, it is necessary to implement a model of sustainable Noo-development, namely the sphere of the mind. This idea is described in the works on Noo-economics by S.D. Bodrunova. The transition to this development trajectory will, of course, develop the domestic economy. But at the same time, it is necessary to develop and implement a system of sustainable development principles at the levels of the state, society and the individual, taking into account financial intermediaries, in this case, banks that will finance such implementations. Attention should be paid to the principles of: humanization; development of civil society institutions; family and child protection; indigenous peoples; combating depopulation and population degradation; legal culture; accelerated technology development; environmental quality assurance; legality; economic feasibility; rational use of natural resources; taking into account the interests of future generations.

Currently, alternative forms of lending are acquiring particular importance in the economic system. In the context of sustainable development of the financial system, we consider it appropriate to consider the role and significance of "green" loans in the economy.

Around the world, the mobilization of funds necessary to ensure economic growth, according to experts, will be attracted from the private sector, which will entail the reorganization of major parts of the financial system and the transition to new investment standards.

In order to attract capital in the required amount, it is necessary to create conditions where climate change-related activities are combined with sustainable economic returns (Hryhorak, 2020; Manuylenko et al., 2021; Manuylenko et al., 2021b).

In the system of sustainable entrepreneurship, a special role belongs to "green" loans. Sustainable entrepreneurship (entrepreneurship and innovation for sustainable development) is essentially social entrepreneurship and environmental entrepreneurship. Means and implies the application of creative business organization to solve problems related to sustainability in order to create social and economic impact as a strategy. That is, it is a business that turns problems into opportunities by introducing innovations in the field of sustainable development (Manuylenko et al., 2018a; Manuylenko et al., 2018b; Manuylenko et al., 2020; Tarkhanova, 2020).

The impact of the COVID-19 pandemic has affected the 17 Sustainable Development Goals, which were developed to be achieved by the United Nations (UN) General Assembly by 2030. The 2022 UN report on the Sustainable Development Goals assessed current progress, but today calls into question the achievement of the goals by 2030.

The object of the study is Sustainable Development Goal 13: taking urgent action to combat climate change and its consequences. The time when a global climate catastrophe can still be prevented is quickly running out. In the region, 25% of pledged climate change funds have not been mobilized. Hydrocarbon emissions related to the energy sector rose 6% in 2021 to an all-time high. Only an increase in natural disasters of medium and large scale is predicted (Posnaya et al., 2018a; Posnaya et al., 2020; Melnikova et al., 2020).

The way out of the critical situation must be ensured by widespread financing of environmental projects; the banks that finance the state's economy must take responsibility for this. Banks are expected to play a role in promoting a sustainable economy and the transition to a more sustainable financial system. With both short-term financing and tailored long-term solutions, banks are ready to use their extensive knowledge of lending, investment and smart advice to achieve sustainable development goals. Because of their key role in providing capital to all economic sectors, the activities of banks can either help or hinder the development of cleaner production.

In response to the deteriorating state of the environment, ESG criteria emerged: E – environment, S – social, G – governance. That is, ESG – environmental, social and corporate governance; refers to the three central factors in assessing the sustainability and social impact of an investment in a company or business. These criteria help to better determine the corporation's future financial performance.

The largest number of investors, especially in the West, take into account its impact on the environment and society when making decisions about investing in a particular company. It is planned to introduce

mandatory requirements for issuers to disclose financial information on climate risks and the level of greenhouse gas emissions, and it is also expected to introduce, following the example of some European countries, mandatory standardized development of ESG principles. Large businesses are also increasingly interested in the principles of responsible investment. The independent European rating agency RAEX–Europe has published an updated ESG ranking of Russian companies. As a result, the total number of ranking participants is 68; At the same time, the coverage of such industries as oil and gas, transport, chemical industry, retail, mechanical engineering, and financial industry has expanded.

The ten leaders of the integral ranking retained their positions, and the top 10 in «Governance» second place went to a new participant - the Moscow Exchange (11th place in the overall ranking). The Moscow Exchange has identified sustainable development as a company priority. The Exchange created a sustainable development sector in order to create conditions for issuers to attract capital to projects that are aimed at solving social and environmental problems. All over the world, an increasing number of investors are beginning to pay attention not only to dividends and profits, but also to the social and environmental responsibility of business. In Europe, more than half of assets are managed by investors who pay attention to non-financial factors. That is, the fact of responsibility to society is taken into account.

Green bonds also have a beneficial effect on the development of the industry. Their emergence is also associated with the spread of sustainable business development (ESG) principles. With the help of "green" bonds, the issuer attracts financing for projects related to labor protection and improvement of the environmental situation. Green bonds, like other bonds, are listed on the stock exchange. They can be purchased by investment companies and funds, banks and individuals. Private investors can buy green bonds with the help of a broker. But in some cases, securities may be sold on a specific site and not traded on an exchange. The key difference between green bonds and conventional ones is the use of raised funds. Funds from "green" bonds are used for the development of industrial projects such as the construction of solar or wind power plants, waste treatment plants, modernization of wastewater treatment plants, and the development of electric transport.

Today, responsible investors are expected to take these factors into account when constructing their portfolios. Companies' performance, along with their financial statements, is assessed by their investment in sustainable development. "Sberbank" has taken steps towards responsible financing. Its portfolio of financing transactions for green projects amounts to more than 200 billion rubles. The client base is differentiated depending on the level of environmental risk. For responsible financing products, the bank is ready to consider reducing the interest rate and providing preferential conditions. The Bank is actively financing projects in the field of renewable energy sources: with the participation of credit funds from "Sberbank", 8 solar power plants are being built; during the operation of the unified energy systems of the middle Volga region, Southern and Ural Federal Districts, 80 thousand tons of hydrocarbon emissions have already been reduced.

The rule of law must pay special attention to the provision of legal instruments. For example, the financial system of the Russian Federation is regulated by the Federal Law "On the Central Bank of the Russian Federation (Bank of Russia)" dated July 10, 2002 N 86-FZ and the Federal Law "On Banks and Banking Activities" dated December 2, 1990 N 395-1. At the moment, companies are guided by information messages from the Bank of Russia on the refinancing interest rate. However, these regulations do not consider tools for assessing and accounting for natural resources and calculating damage from air pollution. There are no separate comments and laws for financial management in the field of combating climate change.

Green finance includes environmental aspects, specifically biodiversity, and climate change related aspects: renewable energy, energy efficiency.

The classification of environmental risks is:

a) Physical risk associated with direct damage to property or disruption to trade;

b) Risk of liability (for consequences that will occur in the future and what this impact will be);

c) Financial risk associated with the transition/lack of transition to a low-carbon economy.

Methodology for identifying and mitigating these risks is under development. The ability to describe and measure these risks in a single taxonomy will provide a clearer understanding and thus mitigation of these risks. The current situation requires a systematic study to demonstrate the relationship between environmental and financial performance. The efforts of companies to achieve environmental performance must be modified and assessed, the overall assessment applied in financial terms. The developed risk factors of environmental and climate change must be integrated into the regulatory environment, and their spillover effects on the financial system and society must be assessed. Banks themselves will need to promote the integration of environmental change considerations and manage risks given their potential implications for credit (Posnaya et al., 2018b; Chaykina et al., 2022; Posnaya et al., 2023).

3. RESULTS AND DISCUSSION

The new financial law would become a key tool in regulating the provision of green loans, which would lead to a full-scale renewal of the production system and the launch of new energy-intensive industries. The question arises of enshrining in the law a provision that would establish an assessment of the finance sustainability based on its service to the needs of sustainable development throughout its entire life cycle.

Financial sustainability in environmental, economic and social aspects.

Banks should also explore the possibility of using digital technology as a lever for green finance in lending, based on its potential for raising awareness. Because of this, it is important that transactions and collaboration take place within a regulatory environment.

Nowadays, investors choose ESG products mainly for diversification purposes; they are perceived as riskier or worse in execution. The challenge for the Russian Federation is to change the financial system so that it is better aligned with environmental needs. Financing for sustainable development activities should be based on both private and public funding streams. There is a need for effective public-private collaboration and alignment of government strategies and policies with the needs of the private sector.

References:

Adamowicz, M. (2022). Green deal, green growth and green economy as a means of support for attaining the sustainable development goals. *Sustainability*, *14*(10), 5901.

Chaykina, E.; Posnaya, E. and Bukach, B. (2022). Assessment of Various Factors Impact on Cryptocurrency Functioning using Economic and Mathematical Modeling. In Proceedings of the 1st International Scientific Forum on Sustainable Development of Socio-economic Systems - WFSDS; SciTePress, pp 130-137. DOI: 10.5220/0010665000003223

de Oliveira, J. A. P., Doll, C. N., Balaban, O., Jiang, P., Dreyfus, M., Suwa, A., ... & Dirgahayani, P. (2013). Green economy and governance in cities: assessing good governance in key urban economic processes. *Journal of Cleaner Production*, *58*, 138-152.

He, L., Zhang, L., Zhong, Z., Wang, D., & Wang, F. (2019). Green credit, renewable energy investment and green economy development: Empirical analysis based on 150 listed companies of China. *Journal of cleaner production*, *208*, 363-372.

Hryhorak, M. Y., & Trushkina, N. V. (2020). Development of the logistics system of the economic region "Polissya" in the context of the green economy: ecological problems and perspectives. *Intellectualization of logistics and Supply Chain Management*, (4), 27-40.

Manuylenko, V.V., Loktionova, M.A., Lipchiu, N.V., Sobchenko, N.V., Sadovskaya, T.A. (2018a). Options simulation toolkit for strategic evaluation of corporations' financial potential. *Entrepreneurship and Sustainability Issues*, 6(2), 871–889.

Manuylenko, V.V., Loktionova, M.A., Bigday, O.B., Glaz, V.N., Drannikova, E.A. (2018b). Implementation of financial potential generation strategy based on unconventional method of assets and liabilities management in business corporations. *Journal of Applied Economic Sciences*, 13(3), 637–648.

Manuylenko, V., Ryzin, D., Koniagina, M., Lipchiu, N., Setchenkova, L. (2020). Development and implementation of alternative concept for expected and unexpected losses in corporations. *TEM Journal*, 2020, 9(3), 1116–1125.

Manuylenko, V. V., & Shebzukhova, M. A. (2021). Theory for financial controlling in corporations in the modern environment. *Universal Journal of Accounting and Finance*, *9*(4), 773-782.

Manuylenko, V.V., Borlakova, A.I., Milenkov, A.V., Drannikova, E.A., Lisitskaya, T.S. (2021b). Development and validation of a model for assessing potential strategic innovation risk in banks based on data mining-monte-carlo in the "open innovation" system. *Risks*, 9(6), 118.

Manuylenko, V.V., Ermakova, G.A., Gryzunova, N.V., Setchenkova, L.A., Ochkolda, I.I. (2022). Generation and Assessment of Intellectual and Informational Capital as a Foundation for Corporations' Digital Innovations in the "Open Innovation" System. *International Journal of Advanced Computer Science and Applicationsthis*, 13(9), 922–932

Melnikova, Y. V., Posnaya, E. A., Bukach, B. A., Shokhnekh, A. V., & Tarasenko, S. V. (2020). Defining key determinants of the strategic economic security of the agro-industrial complex in terms of stabilizing political course. In *E3S Web of Conferences* (Vol. 161, p. 01105). EDP Sciences.

Miao, C., Fang, D., Sun, L., & Luo, Q. (2017). Natural resources utilization efficiency under the influence of green technological innovation. *Resources, Conservation and Recycling*, *126*, 153-161.

Pearce, D. W., & Turner, R. K. (1989). *Economics of natural resources and the environment*. Johns Hopkins University Press.

Posnaya, E. A., Dobrolezha, E. V., Vorobyova, I. G., & Chubarova, G. P. (2018a). The economic capital model in bank's capital assessment. In Contemporary Issues in Business and Financial Management in Eastern Europe (Vol. 100, pp. 111-119). Emerald Publishing Limited.

Posnaya, E.A., Tarasenko, S.V., Vorobyova, I.G., Dobrolezha, E.V. (2018b). Methodology and results in bank capital assessment. *European Research Studies Journal*, 21(1), 518–524.

Posnaya, E. A., Ditsulenko, O. I., Kolesnikov, A. M., & Shokhnekh, A. V. (2020). Features and advantages of loaning of high technology corporations. *European Proceedings of Social and Behavioural Sciences*. DOI: 10.15405/epsbs.2020.10.03.45

Posnaya, E.; Alesina, N. and Shevtsov, A. (2023). Current Problems in Functioning of Russian Federation Banking Institutions during the Pandemic Period and Ways of their Solution. In Proceedings of the 2nd International Scientific and Practical Conference "COVID-19: Implementation of the Sustainable Development Goals" - RTCOV; ISBN 978-989-758-617-0, SciTePress, pages 227-231. DOI: 10.5220/0011118300003439.

Schulz, C., & Bailey, I. (2014). The green economy and post-growth regimes: opportunities and challenges for economic geography. *Geografiska Annaler: Series B, Human Geography*, *96*(3), 277-291.

Tarkhanova, E.A. (2020). Green financing: Global understandings and Russian practices review. *Journal of New Economy*. 21(4), 45-62.

Elena Posnaya
Sevastopol State University,
Sevastopol,
Russia
sntulena@mail.ru
ORCID: 0000-0002-7716-9117

Ekaterina Krichevets
Sevastopol State University,
Sevastopol,
Russia
e-krichevets@mail.ru

Svetlana Pisaryuk
Sevastopol State University,
Sevastopol,
Russia
marketyanka@mail.ru

Boris Bukach
Sevastopol State University,
Sevastopol,
Russia
babukach@mail.sevsu.ru