



DEVELOPMENT OF PROMISING INDUSTRY BASED ON SUSTAINABLE ENTREPRENEURSHIP THROUGH IMPROVING QUALITY OF MANAGEMENT

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ABSTRACT

Currently, the development of entrepreneurship is characterized by a continuously increasing in intensity and expanding spectrum of challenges, threats and risks. Increasingly important for the development of entrepreneurship are circumstances related not only to economic factors, but also to environmental and social ones, the integrated consideration of which is reflected in the concept of sustainable development. The concept of sustainable development, approved at the international level, is focused on the balance of environmental, social and economic processes, which ensures the development of sustainable entrepreneurship in the future. According to this concept, detailed for sustainable development, there is a continuous improvement of technologies and the establishment of more stringent environmental standards governing business processes. This fact changes the institutional structure of the economy, creates new conditions for the development of sustainable entrepreneurship. Also, the transition to a system of sustainable entrepreneurship requires a change in the existing economic relationships.

The method of bank capital management developed in the study using a “selective model” will make it possible to identify banks in need of support from the Central Bank at an early stage, prevent their bankruptcy and direct resources to the development of sustainable entrepreneurship in the regions.

Thus, the modern industry will receive the proper level of development. But the main emphasis should be placed on improving the management quality of services provided in regional banks, since it is they who mainly provide loans to medium and small businesses, which entails the development of the industry and launches a mechanism for sustainable entrepreneurship.



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1. INTRODUCTION

One of the problems in the functioning of domestic regional banks is the ambiguity of the implemented policy of the state and the Central Bank 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. Due to the special role of regional banks in the development of the banking system of the country and its economy, a special approach is needed to regulate the regional banks activities. The important role played by banking capital in the development of entrepreneurship is obvious.

Due to the special role of regional banks in the development of the regional economy, it is necessary to improve the implementation of a special approach to regulating the regional banks activities in order to develop entrepreneurship, which will have an effect both at the microeconomic and macro levels (Manuylenko et al., 2021a).

The study proposes to apply the selective approach developed by the authors to assess the capital of banks with the aim of timely additional capitalization, preventing bankruptcy and developing entrepreneurship. The category "approach" is understood as a fairly broad concept. When choosing an approach, the vector of further research is determined. For example, a selective approach allows the development of an appropriate specific selective research method. In other words, the approach acts as the foundation of the research, based on which the goals are achieved. The author's methodology for grouping indicators proposed in the study will allow the Central Bank to timely identify financially weakened banks in order to assist them in replenishing capital, thereby launching a mechanism for developing entrepreneurship. This approach will be of particular importance in the development and functioning of regional banks. The implementation of the results of this study will improve the of management, thereby implementing a more intensive level of development of sustainable entrepreneurship (Arsovski, 2023).

The introduction of the Basel III norms (Basel III Monitoring Report, 2020) into the practice of the domestic banking system strengthens the role of risks in the bank capital management, which requires the formation of a unified system for managing bank capital, taking into account the impact not only of the capital structure and assets, but also of current innovations in the field of banking business, micro and macro risks, as well as the efficiency of the bank, and the relationship between all of the above indicators.

So, for example, the tightening of regulation of commercial banks, as well as changes in the macroeconomic and geopolitical situation, led to the

fact that, for example, only two regional banks remained in Crimea by December 2021. This circumstance does not contribute to the development of sustainable entrepreneurship in the region, therefore, measures are needed to strengthen and support the capital base of banks.

As the issues and tasks raised are resolved, the development of entrepreneurship and industry in the regions will be carried out at a faster pace.

2. MATERIALS, METHODS AND OBJECTS OF RESEARCH

In the modern world, an important issue is the development of the environmental movement, that is, production based on resource-saving technologies and innovations. Banks should be ready to provide financial support for projects aimed at developing sustainable entrepreneurship. Therefore, capital adequacy ratios must be met and maintained at the required level. Regional banks play a special role in the effective development of sustainable entrepreneurship.

As a result of the study of scientific sources (Manuylenko et al., 2021b; Manuylenko et al., 2020; Gryzunova et al., 2019; Koniagina et al., 2019a; Koniagina et al., 2019b), as well as Russian and foreign practice, a definition of a regional bank is proposed, taking into account its key characteristics.

Of course, the primary criterion for determining a regional bank is the localization of its activities in a particular region, which fundamentally distinguishes it from federal banks. Nevertheless, given the significant difference in the development scale of the various regions economy of the Russian Federation, we consider it necessary to supplement the regional bank definition with the scale of its assets, and we also consider it necessary to take into account the specialization of the bank's activities, since this is what determines the specificity and significance of the regional banks role in the country's economy and, accordingly, the need to support them. The specificity of the regional banks activities lies mainly in the development of small businesses in the regions, which will create additional jobs, make tax payments, increasing the values of such macroeconomic indicators as GNP, GDP, national income, national product and reducing unemployment in the region and in the whole country.

At present, it should be noted that a significant increase in regulatory requirements for the commercial banks capital, designed to ensure the strengthening and further development of the banking system, leads to a reduction in the number of credit institutions, which in turn hinders the development of competition, creating prerequisites for the banking sector stagnation. In addition, it is obvious that it is most difficult for small regional banks to comply with these requirements. This

fact does not contribute to the development of effective entrepreneurship in the regions.

Based on the analysis of approaches to the bank capital regulation, a more complete classification was developed; it is proposed to consider the differentiation of capital requirements for banks as a separate criterion. It should be noted that the differentiation of capital requirements for commercial banks is usually aimed at developing competition in the banking system by easing the requirements for newly created banks, as well as small banks, in addition, systemic risks are reduced by differentiating requirements depending on the operations performed and the license category.

Currently, a whole range of approaches to assessing the capital adequacy of banks has been developed, including the current regulatory approach, one of the most famous foreign approaches, as well as well-known and original author's methods. Most of the currently used approaches take into account the risk level of commercial bank assets, as well as the structure of equity and/or liabilities (Posnaya et al., 2022).

It should be noted that when assessing the capital of a bank, it is extremely rarely proposed to take into account the specifics of the region's economy and the possibility of taking into account the level of the region banking system development has not been previously considered, which seems necessary from the point of view of developing competition in the domestic banking system not only at the federal, but also at the regional and local levels in order to strengthen the development of entrepreneurship in the regions.

Taking into account the foregoing, as well as the fact that when assessing capital, most methods do not take into account other financial indicators that have a significant impact on the sufficiency, adequacy and efficiency of the bank's capital (return on capital, the structure of liabilities in conjunction with assets, and so on), a new model for assessing bank capital is proposed, taking into account Russian and foreign experience in assessing bank capital, as well as the relationship between bank performance indicators (Posnaya et al., 2018a).

The model indicators are grouped into six main groups (Figure 1), which makes it possible to take into account changes in the macroeconomic situation, the introduction of innovations, as well as current and potential problems of the banking system, increasing or decreasing the significance of individual blocks by changing the corresponding coefficients and threshold values.

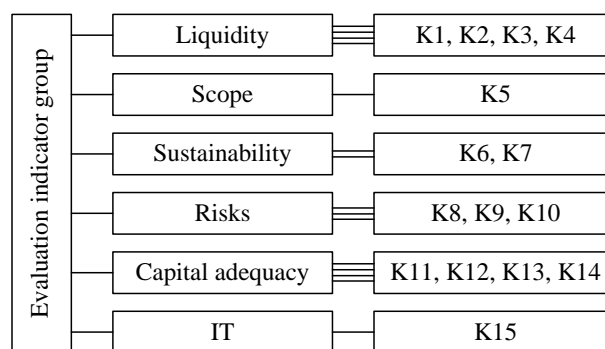


Figure 1. Model for predicting the bank state

Based on the obtained results of assessing the bank state, it is further proposed to use a selective approach that allows analyzing the influence of certain factors on the assessment of the bank's capital. This approach is proposed to be used for the first time in evaluating the bank's capital. The elements of a bank's capital assessment are presented below in Table 1.

Table 1. Elements of the model for assessing the state of the bank's capital

Code	Indicator group	Specification
K1	Liquidity	Instant
K2		Current
K3		Long term
K4		General
K5	Scope	Scope (bank role)
K6	Sustainability	Profitability
K7		Share of overdue debt in the loan portfolio
K8	Risks	Per 1 borrower or group of related (maximum)
K9		Large credit risk (maximum)
K10		Persons related to the bank (group of persons)
K11	Capital adequacy	Base
K12		Basic
K13		Own funds
K14		Own funds (when weighing assets taking into account 100% risk)
K15	IT	Application of modern information technologies

The bank's liquidity level, the scale of diversification of active and passive operations directly affect equity capital both in terms of volumes and in terms of its sufficiency. Thus, passive operations are aimed at increasing equity capital, for example, the formation of long-term liabilities based on borrowed capital does not directly increase the bank's equity capital, but reduces the requirements for its volume (in terms of maintaining liquidity). The impact of a bank's active operations on its capital adequacy is that the shorter its assets, the higher its liquidity, and, as a rule, the lower the level of risks, and, accordingly, the capital requirements are reduced in terms of ensuring its adequacy. The liquidity group indicators are determined based on the liquidity

ratios established by the RF Central Bank Instruction No. 199-I (instantaneous (N2), current (N3), long-term liquidity (N4) and total liquidity (N5) ratios, respectively).

All of the above affects the level of risks taken by the bank. Within the framework of this group of indicators, the level of risks is assessed in terms of the probability of invested funds loss, as well as the significance of these losses for the bank. The increase in risks increases the requirements for the capital adequacy parameter and necessitates an increase in its volume, as well as the formation of reserves for possible losses. On the other hand, high-risk operations tend to be more profitable, and the resulting additional profit can be used to increase the bank capitalization. In the block of indicators characterizing the risk level, we consider it necessary to include the risk amount per one and a group of related borrowers, large credit risks and persons associated with the bank. To assess the value of the risk in these areas, it is proposed to take the values of the standards established by the Russian Federation Central Bank instruction No. 199-I: the maximum risk per borrower or group of related borrowers (N6), the maximum size of large credit risks (N7) and the maximum risk per person or group of persons associated with the bank (N25), respectively.

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

Large structures are traditionally considered more sustainable due to the available margin of safety and the possibility of using economies of scope, 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 group being assessed, 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 may choose other segments of the financial market as specialization.

In a separate group, it is proposed to allocate indicators that directly characterize the capital adequacy of the bank, which depend on the previous groups of indicators, being associated with risk-weighted assets and the size of individual equity capital elements. Capital adequacy is proposed to be assessed on the basis of the mandatory standards for the adequacy of the basic (N1.1) and core (N1.2) capital, as well as the adequacy of the bank's own funds (capital) (N1.0) and the financial leverage ratio (N1.4), determined by the Russian Federation Central Bank instruction No. 199-I.

Of course, it is possible to single out a whole range of possibilities for using information technologies in the bank activities, but the problem of assessing and comparative analysis of this factor arises. At the initial stage of the selective approach development, it is proposed to focus on the assessment of a mobile application, since in modern conditions it is an integral element of a successful banking business, in addition, a comparative analysis with other banks can be carried out on this indicator.

The study proposes the indicator "capital factor" of the bank, which assesses the compliance of the bank's capital with the requirements of the Central Bank and the current situation in the banking system of the country and a particular region, which makes it possible to automate the assessment processes and make it easier, faster and more objective to make decisions of the Russian Federation Central Bank for each specific bank.

For a general assessment of the bank's capital, it is proposed to calculate the capital ratio K_0 , defined as the sum of the ratios of the absolute values of the credit institutions indicators deviations from the standard values (or the worst values in the group, if the standard is not set) to the standard values (or the worst values in the group, if the standard is not set), adjusted for the weight coefficients of the corresponding groups of indicators.

$$K_0 = \sum_{i=1}^{15} X_i \left| \frac{K_i}{K_{io}} - 1 \right|, \quad (1)$$

where X_i are the weight coefficients of the corresponding groups of indicators; K_i are indicators under consideration, $i = 1 \div 15$ ($K_1 \div K_{15}$ are presented in Table 1); K_{io} are reference values of the relevant indicators.

If the standard for this indicator was not set by the Central Bank, then the worst values in the group are taken instead, which allows taking into account the level of the banking system development in a particular region.

As a result of calculating the capital factor for the largest Russian banks, Alfa-Bank JSC has the highest indicator, which is due to the high value of return on equity, and the bank also has high results in terms of

large credit risks and the introduction of information technology.

To assess the homogeneity of the studied banks results, the dispersion and coefficient of variation were calculated, in addition, the median values of the indicators were determined, as well as the deviations from them of the worst. It should be noted that the highest value of the variation coefficient is observed in terms of scale, which is due to the key role of SBERBANK in almost all segments of the banking services market. There are also high values in terms of return on capital and stability of the loan portfolio, which is explained by significant differences in the credit policy of the banks under study. The smallest indicators spread is observed in the block of capital adequacy, which is also due to the disinterest of banks in excessive capitalization, as well as in the indicator of the risk amount per borrower, which is due to the fact that these banks are the largest in the country and, accordingly, have ample opportunities for diversifying their loan portfolio.

In modern conditions, the application of the same requirements for all banks does not seem to be entirely correct, therefore, given the heterogeneity of the economic situation in different regions of the Russian Federation, it seems appropriate not only to differentiate the requirements by types of bank licenses, but also to group banks into groups by region according to the assessment of the capital factor (as well as the allocation of regional banks into a separate subgroup), which allows taking into account the level of development of the banking system of the region.

A universal methodology for bank capital management based on a selective approach has also been developed, which makes it possible to separate banks that need state support in terms of additional capitalization from banks that must independently take measures to increase capitalization.

The study also developed and formalized an algorithm for evaluating banks using a selective methodology. After determining the role of the bank, the capital factor is assessed, and if the bank's capital factor is below the median value for the group and the bank was assigned to the regional group, then the bank's support is recognized as possible. Further evaluation is carried out in terms of key groups of indicators of the selective model. Primary is the further selection of banks in terms of liquidity indicators. If they correspond to the median values for the region, it is proposed not to apply penalties to the bank, otherwise further selection is carried out according to the criterion of compliance with capital adequacy indicators.

If the indicators meet the requirements of the regulator and the median values for the region, then we consider it necessary to provide state support in the form of

providing medium- and long-term credit resources on a concessional basis to equalize liquidity.

For the first time, the concept of a "safety zone" of the values of indicators for evaluating the capital of a bank is introduced, and a method for calculating its threshold values is proposed.

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

The economic situation is changing quite rapidly, and the banking sector is one of the most dynamic, therefore, when fixing the minimum indicators 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 the procedures for reviewing and approving new indicators, while banks will need prompt support or no less prompt measures will be required to eliminate them.

In some regions, a relatively small number of banks, especially regional ones. Accordingly, when using averages, there is a high probability of obtaining asymmetric data, which will not allow adequately identifying averages in the region using the arithmetic mean.

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

For further evaluation of the value of indicators using a selective methodology, the above concept of "safe zone" is defined as the interval between the threshold value of the deviation of a specific indicator from the median value for a given group of banks, at which the value of the indicator is assessed as sufficient and, in relation to the bank, no further verification of the remaining values of the indicators is carried out within the framework of the selective method.

At the same time, we consider it inappropriate to take as a threshold value the deviation of large banks from the median values in full, since such banks enjoy a higher confidence of economic entities and, accordingly, may be more stable in a crisis situation. We also consider it necessary to differentiate the relative deviation of indicators from the median values, taken as a threshold value, according to the indicators of the selective model. The proposed values may be further adjusted depending

on changes in the economic situation, the state of the banking system of the country or a particular region, or the revision of the mandatory standards of the regulator.

The use of a selective method will allow taking timely measures to avoid the risk of bank failure, thereby allowing the development of the effective functioning of sustainable entrepreneurship in the regions.

When assessing the scale of the bank's activities, it is proposed to take into account, at a minimum, its role in the lending market, as well as household deposits as implementation elements of the commercial banks main functions. We also consider it appropriate to take into account the volume of its assets, since the bank can choose other segments of the financial market as a specialization, for example, investments in the securities market, in the future, the role of the bank in these segments of the financial market can be included in the model (Posnaya et al., 2018b).

Some of the proposed indicators were taken into account in existing methods, but the advantage of the proposed approach is its complexity, as well as the inclusion of the modern information technologies use in the model, which is relevant in the context of the economy digital transformation; within the framework of this approach, the emphasis is placed precisely on the assessment of capital adequacy through the prism of other indicators of the bank's performance.

The main advantages of the proposed methodology are that it is suitable for any banks. The use of 15 indicators allows for an integrated approach, while the condition "necessary and sufficient" is observed; there is a possibility of adjustment; the relationship and the absence of indicators duplication are confirmed by correlation and regression analysis, a fragment of which is presented on the page of the handout. Approbation of the methodology on historical data confirmed the effectiveness of its application to identify potentially problematic banks.

The proposed model of bank capital management based on a selective approach is universal and makes it possible to assess the feasibility of supporting an individual bank, taking into account not only the current situation in it, but also the prerequisites that provoked it, so if the problem situation in the bank is due to a high risks level, then state support is not provided, this condition will become an additional incentive to adjust the policy of banks in the direction of reducing the risks taken. In addition, when evaluating certain groups of indicators, the bank liquidity is primarily considered, if the bank is able to pay its obligations on time, then it can continue to operate even if the value of the capital factor is below the threshold, which increases the proposed model flexibility.

To identify banks in need of state support or requiring liquidation, the concept of a "safe zone" was introduced, defined as the interval between the threshold value of a specific indicator deviation from the median for the corresponding banks group. If the bank indicators are within this interval, then their value is assessed as sufficient and further verification of the following indicators values within the selective method framework is not carried out (Posnaya et al., 2019).

When determining the safe zone threshold, it is proposed to focus on the worst indicators of the best Russian banks, which allows, on the one hand, to take into account the general situation in the country's banking sector, and, on the other hand, allows to ensure the sufficiency of the threshold value for the effective functioning of an individual bank and will contribute to the development of entrepreneurship and increase the stability of the country's banking system as a whole.

At present, the technological innovations introduction is an integral element of the bank's competitiveness, and since small regional banks do not have the opportunity to implement IT projects comparable to the capabilities of large federal banks, we consider it necessary to provide state support to all regional banks in the creation, development and security of IT structures. It is also proposed to differentiate the sources of the bank's capital equalization, depending on the nature of the problems, so we consider it appropriate for the Central Bank to participate in the additional capitalization of the bank if it is necessary to increase liquidity indicators by providing a loan, the participation of regional or local authorities is proposed in order to increase the bank's own capital by acquiring an additional issue of bank shares, which will also contribute to the bank's focus on solving regional problems.

Since the main goal of the bank's management as a whole, as well as its capital portfolio, is to fulfill the tasks set by the management subjects, we consider it necessary to separate the tasks of capital portfolio management from the stakeholders view point. It should be noted that, despite the differences in the main tasks, the efforts of both the Central Bank and the owners of the bank are ultimately aimed at developing the bank and minimizing risks, but the difference in the initial main tasks leaves an imprint on the approaches being implemented.

3. RESULTS AND DISCUSSION

If the standard for this indicator was not set by the Central Bank, then the worst values in the group are taken instead, which allows taking into account the level of the banking system development in a particular region.

As a result of calculating the capital factor for the largest Russian banks, Alfa-Bank JSC has the highest

indicator, which is due to the high value of return on equity, and the bank also has high results in terms of large credit risks and the introduction of information technology.

To assess the homogeneity of the studied banks results, the dispersion and coefficient of variation were calculated, in addition, the median values of the indicators were determined, as well as the deviations from them of the worst. It should be noted that the highest value of the variation coefficient is observed in terms of scale, which is due to the key role of SBERBANK in almost all segments of the banking services market. There are also high values in terms of return on capital and stability of the loan portfolio, which is explained by significant differences in the credit policy of the banks under study. The smallest indicators spread is observed in the block of capital adequacy, which is also due to the disinterest of banks in excessive capitalization, as well as in the indicator of the risk amount per borrower, which is due to the fact that these banks are the largest in the country and, accordingly, have ample opportunities for diversifying their loan portfolio.

In modern conditions, the application of the same requirements for all banks does not seem to be entirely correct, therefore, given the heterogeneity of the economic situation in different regions of the Russian Federation, it seems appropriate not only to differentiate the requirements by types of bank licenses, but also to group banks into groups by region according to the assessment of the capital factor (as well as the allocation of regional banks into a separate subgroup), which allows taking into account the level of development of the banking system of the region.

A universal methodology for bank capital management based on a selective approach has also been developed, which makes it possible to separate banks that need state support in terms of additional capitalization from banks that must independently take measures to increase capitalization.

The study also developed and formalized an algorithm for evaluating banks using a selective methodology. After determining the role of the bank, the capital factor is assessed, and if the bank's capital factor is below the median value for the group and the bank was assigned to the regional group, then the bank's support is recognized as possible. Further evaluation is carried out in terms of key groups of indicators of the selective model. Primary is the further selection of banks in terms of liquidity indicators. If they correspond to the median values for the region, it is proposed not to apply penalties to the bank, otherwise further selection is carried out according to the criterion of compliance with capital adequacy indicators.

If the indicators meet the requirements of the regulator and the median values for the region, then we consider it necessary to provide state support in the form of providing medium- and long-term credit resources on a concessional basis to equalize liquidity.

For the first time, the concept of a "safety zone" of the values of indicators for evaluating the capital of a bank is introduced, and a method for calculating its threshold values is proposed.

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

The economic situation is changing quite rapidly, and the banking sector is one of the most dynamic, therefore, when fixing the minimum indicators 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 the procedures for reviewing and approving new indicators, while banks will need prompt support or no less prompt measures will be required to eliminate them.

In some regions, a relatively small number of banks, especially regional ones. Accordingly, when using averages, there is a high probability of obtaining asymmetric data, which will not allow adequately identifying averages in the region using the arithmetic mean.

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

For further evaluation of the value of indicators using a selective methodology, the above concept of "safe zone" is defined as the interval between the threshold value of the deviation of a specific indicator from the median value for a given group of banks, at which the value of the indicator is assessed as sufficient and, in relation to the bank, no further verification of the remaining values of the indicators is carried out within the framework of the selective method.

At the same time, we consider it inappropriate to take as a threshold value the deviation of large banks from the median values in full, since such banks enjoy a higher confidence of economic entities and, accordingly, may be more stable in a crisis situation. We also consider it necessary to differentiate the relative deviation of

indicators from the median values, taken as a threshold value, according to the indicators of the selective model. The proposed values may be further adjusted depending on changes in the economic situation, the state of the banking system of the country or a particular region, or the revision of the mandatory standards of the regulator.

The use of a selective method will allow taking timely measures to avoid the risk of bank failure, thereby allowing the development of the effective functioning of sustainable entrepreneurship in the regions.

When assessing the scale of the bank's activities, it is proposed to take into account, at a minimum, its role in the lending market, as well as household deposits as implementation elements of the commercial banks main functions. We also consider it appropriate to take into account the volume of its assets, since the bank can choose other segments of the financial market as a specialization, for example, investments in the securities market, in the future, the role of the bank in these segments of the financial market can be included in the model (Posnaya et al., 2018b).

Some of the proposed indicators were taken into account in existing methods, but the advantage of the proposed approach is its complexity, as well as the inclusion of the modern information technologies use in the model, which is relevant in the context of the economy digital transformation; within the framework of this approach, the emphasis is placed precisely on the assessment of capital adequacy through the prism of other indicators of the bank's performance.

The main advantages of the proposed methodology are that it is suitable for any banks. The use of 15 indicators allows for an integrated approach, while the condition "necessary and sufficient" is observed; there is a possibility of adjustment; the relationship and the absence of indicators duplication are confirmed by correlation and regression analysis, a fragment of which is presented on the page of the handout. Approbation of the methodology on historical data confirmed the effectiveness of its application to identify potentially problematic banks.

The proposed model of bank capital management based on a selective approach is universal and makes it possible to assess the feasibility of supporting an individual bank, taking into account not only the current situation in it, but also the prerequisites that provoked it, so if the problem situation in the bank is due to a high risks level, then state support is not provided, this condition will become an additional incentive to adjust the policy of banks in the direction of reducing the risks taken. In addition, when evaluating certain groups of indicators, the bank liquidity is primarily considered, if the bank is able to pay its obligations on time, then it can continue to operate even if the value of the capital

factor is below the threshold, which increases the proposed model flexibility.

To identify banks in need of state support or requiring liquidation, the concept of a "safe zone" was introduced, defined as the interval between the threshold value of a specific indicator deviation from the median for the corresponding banks group. If the bank indicators are within this interval, then their value is assessed as sufficient and further verification of the following indicators values within the selective method framework is not carried out (Posnaya et al., 2019).

When determining the safe zone threshold, it is proposed to focus on the worst indicators of the best Russian banks, which allows, on the one hand, to take into account the general situation in the country's banking sector, and, on the other hand, allows to ensure the sufficiency of the threshold value for the effective functioning of an individual bank and will contribute to the development of entrepreneurship and increase the stability of the country's banking system as a whole.

At present, the technological innovations introduction is an integral element of the bank's competitiveness, and since small regional banks do not have the opportunity to implement IT projects comparable to the capabilities of large federal banks, we consider it necessary to provide state support to all regional banks in the creation, development and security of IT structures. It is also proposed to differentiate the sources of the bank's capital equalization, depending on the nature of the problems, so we consider it appropriate for the Central Bank to participate in the additional capitalization of the bank if it is necessary to increase liquidity indicators by providing a loan, the participation of regional or local authorities is proposed in order to increase the bank's own capital by acquiring an additional issue of bank shares, which will also contribute to the bank's focus on solving regional problems.

Since the main goal of the bank's management as a whole, as well as its capital portfolio, is to fulfill the tasks set by the management subjects, we consider it necessary to separate the tasks of capital portfolio management from the stakeholders view point. It should be noted that, despite the differences in the main tasks, the efforts of both the Central Bank and the owners of the bank are ultimately aimed at developing the bank and minimizing risks, but the difference in the initial main tasks leaves an imprint on the approaches being implemented.

There is a close relationship between mathematical modeling in the field of finance, the development of industrialization and sustainable entrepreneurship.

4. CONCLUSION

Thus, applying the results of this study in practice, the regulator is recommended to revise the policy of supporting regional banks in order to develop sustainable entrepreneurship in the regions, which will lead to macro and microeconomic effects, the development of the industry through lending. The application of the presented model will prevent the

bankruptcy procedure, therefore, there will be opportunities for the most effective investment in the direction of the development of sustainable entrepreneurship. Also, the application of the proposed model will significantly improve the quality of management, which will also have a positive impact on the development of the industry and sustainable entrepreneurship in the regions.

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