

**DOI: <https://doi.org/10.53486/cike2022.44>
CZU: [005.584.1:336.71.078.3](478):061.1EU**

IMPROVEMENT OF BANK RATING PRUDENTIAL SUPERVISION IN THE REPUBLIC OF MOLDOVA THROUGH EUROPEAN UNION BEST PRACTICES

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Abstract: *The main purpose of the rating is to increase the information transparency of the bank, to facilitate the arrangement of entities in the field of activity according to key success factors.*

The rating points assigned to the bank is identified with its competitive position in the banking system, which undoubtedly affects the image and trust of customers and investors. Therefore, assigning a specific rating to a bank affects its competitive position in the economy.

The banking supervision function is aimed at ensuring the smooth functioning of the financial system based on a strong and competitive banking sector, focused on market relations and risk prevention. In this context, in prudential supervision, various rating systems are applied, their purpose is to monitor and analyze the financial condition of banks.

In writing the article, the following scientific and methodological support was used: methods of analysis and synthesis, a monographic method, a comparison method, classification, methods of induction and deduction, methods of statistics and mathematical analysis, as well as a method of generalization.

The purpose of the article is to deepen the study of bank rating as a consolidation tool for prudential supervision, as well as from the importance of this activity for ensuring the stability of the banking system in particular and of the financial system in general.

Key words: *banking system, bank rating, prudential supervision, competitive position, CAMEL, Basel Committee on Banking Supervision, corporate governance etc.*

JEL Classification: **E5, E58, E7, G21.**

1. Introduction

The main objective of the bank is to obtain the maximum possible profit, it is important to pay significant attention to the implementation of its operations with the minimum possible risk. In order to avoid the risk of bankruptcy, to achieve a long-term preservation of a stable position in the market, banks need to develop and actively apply effective ratings and offer tools for the most performant prudential supervision.

The main purpose of the rating is to increase the information transparency of the bank, to facilitate the arrangement of entities in the field of activity according to key success factors. However, the ideal option is vulnerable, because it requires complete information on many aspects of activity, which in real life does not happen. The main difficulty in working with a rating is that it is necessary to ensure information transparency of a particular area of the bank's activities in conditions where some of the necessary information is not available.

Rating means classifying a bank as a class or category. Banks with the same rating are not necessarily ranked for any reason. Just their position is the same. Rating - this is a comprehensive assessment of the state of the subject, which uses a combination of many indicators that are not always formalized. In prudential supervision, ratings are used largely to determine the ability of an operating bank to fulfill its obligations and operate in accordance with established standards. Thus, ratings perform an informative function, help develop a long-term strategy. And, just as importantly, ratings are taught to work openly and transparently.

The rating points assigned to the bank is identified with its competitive position in the banking system, which undoubtedly affects the image and trust of customers and investors. The banking sector is an integral element of the country's monetary policy. Therefore, assigning a specific rating to a bank affects its competitive position in the economy.

The banking supervision function is aimed at ensuring the smooth functioning of the financial system based on a strong and competitive banking sector, focused on market relations and risk prevention. In this context, in prudential supervision, various rating systems are applied, their purpose is to monitor and analyze the financial condition of banks. Ratings are compiled on the basis of reports submitted by banks.

In writing the article, the following scientific and methodological support was used: methods of analysis and synthesis, a monographic method, a comparison method, classification, methods of induction and deduction, methods of statistics and mathematical analysis, as well as a method of generalization.

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2. EU principles of bank rating in prudential supervision

Specific conditions for the development of the world and national economies in recent years have determined the growing interest of various persons and organizations associated with the activities of commercial banks in issues of assessing the quality of banking management. This topic turned out to be in demand both by state authorities, and by banking supervision and regulation bodies, and by the internal organizational structures of banks, and by their customers.

High-quality, competent, efficient and adequate banking management can not only resist the negative macro- and microeconomic factors that could potentially lead to bankruptcy, the collapse of a bank with poor-quality management, and not only neutralize them, but often even use them for their own purposes. Therefore, the presence of quality management in the bank is the main condition and a guarantee of its stability and efficient operation. In this connection, it becomes necessary to evaluate management, and, accordingly, a system of evaluation parameters and indicators. Management itself is an integral component of the assessment of banks in a number of rating systems.

Many assessment criteria, while being applied, are individual and exclusive, as the interests and tasks of appraisers can be exclusive.

Basel Committee on Banking Supervision defined 29 core principles that are needed for a supervisory system to be effective. Those principles are broadly categorised into two groups: the

first group (Principles 1 to 13) focus on powers, responsibilities and functions of supervisors, while the second group (Principles 14 to 29) focus on prudential regulations and requirements for banks. The original Principle 1 has been divided into three separate Principles, while new Principles related to corporate governance, and disclosure and transparency, have been added. This accounts for the increase from 25 to 29 Principles.

The primary purpose of uniform rating system is to help identify those institutions whose compliance with consumer protection and civil rights statutes and regulations displays weaknesses requiring special supervisory attention and which are cause for more than a normal degree of supervisory concern. To accomplish this objective, the rating system identifies an initial category of institutions that have compliance deficiencies that warrant more than normal supervision concern. These institutions are not deemed to present a significant risk of financial or other harm to consumers but do require a higher than normal level of supervisory attention.

The uniform identification of banks giving cause for more than a normal degree of supervisory concern will help ensure that:

- The degree of supervisory attention and the type of supervisory response are based on the severity and nature of bank’s problem;
- Supervisory attention and action are, to the extent possible, administered uniformly and consistently, regardless of the type of institution or the identity of the regulatory agency;
- Appropriate supervisory action is taken with respect to those banks whose compliance problems entail the greatest potential for financial or other harm to consumers.

3. Elaboration of methodology for assessing the rating of banks used in prudential supervision

Recently, controversy has arisen around the rating analysis of banking activities. Numerous discussions are underway regarding which indicators should be included in a particular methodology, what specific weight should be assigned to each of them in the final rating, and whether this rating should be calculated at all. Some experts even suggest over time to completely abandon coefficient analysis, explaining their position by the low accuracy of existing methods and the negative impact of the analysis on the public consciousness (ratings - these are effective tools for both advertising and anti-advertising). Some analytical services take the opposite position and try to compensate for the inaccuracy of individual methods by attracting as many of them as possible. But both of them agree on one thing - it is necessary to significantly reform the rating methods to make them more accurate and objective. An analysis of the methods currently used in the Republic of Moldova demonstrates their methodological limitations: when issuing a comprehensive assessment, many factors affecting the work of a bank are not taken into account, one or another analysis method is incorrectly and unreasonably used, controversial conclusions are given when interpreting one or another indicator.

In the following table are represented some shortcomings and its solutions for the Moldavian methodology for assessing the rating of commercial banks:

Table 1. Shortcomings and its solutions for the Moldavian methodology for assessing the rating of commercial banks

Shortcoming	Solution
<p>Lack of reliable information (The key conditions for conducting an effective analysis of the financial condition of the bank are the completeness, reliability and accuracy of the information used in the analysis. Moreover, each bank is directly interested in providing such information, since otherwise its rating will be deliberately lower than that of more open credit institutions.)</p>	<p>The urgency of the problem is due to the fact that the lack of reliable data leads to an underestimation of the problems of banks and can have dangerous consequences for the development of the situation. The reliability of the reports submitted by banks, as well as the adequacy of the risk assessment they take on themselves, should be checked both in the process of documentary supervision and in the course of inspection inspections, and the results should be used as an important source of information in the analysis.</p>
<p>The complexity of forming the optimal scorecard (Currently, there are several hundred indicators that are used to conduct the analysis. Therefore, the compilers of bank ratings have a difficult task to select from them several of the most significant ratios, which together allow a comprehensive assessment of the financial condition of the bank and obtain a final rating. As a rule, the indicators included in the final rating are chosen intuitively, without providing a sufficient scientific basis for this choice. Weights of indicators are also determined on the basis of subjective assessments, and therefore the result can not always be considered correct.)</p>	<p>To overcome this drawback, it is necessary to use the means of economic mathematics. Factor analysis allows you to identify which factors have a significant impact on a particular statistic, and which should be discarded as insignificant. At the same time, within the framework of factor analysis, the problem of calculating the weight coefficient for each of the indicators included in the formula for calculating the final rating is solved.</p>
<p>Construction of forecast values (Whatever technology the bank analyzes, its purpose remains to assess the condition of the credit institution not at the time of receipt of the source data, but in the future. Therefore, along with static information for a certain date, it is necessary to consider dynamic characteristics, which are designed to show in which direction the bank selected for research is developing.)</p>	<p>For this can be used the technique in which two final ratings are calculated, one of which is an assessment of the current state of the bank, and the second, calculated independently of the first, is a long-term assessment of its condition, expected in the future. The main advantage of this method of analysis is the ability to predict risk based on a study of the dynamics of both internal and external factors, which ensures high accuracy and validity of the result.</p>
<p>Application of an adequate grouping of banks (Distribute banks into separate groups within which it is planned to rank using the rating.)</p>	<p>A promising solution for an adequate grouping is the use of cluster analysis based on selected factors. In this case, banks are automatically combined into homogeneous groups, which are significantly different from each other.</p>
<p>The bulkiness of the calculations</p>	<p>It should be noted that the construction of individual ratings requires the maintenance of a powerful apparatus for collecting information and conducting continuous monitoring of the studied population, which increases the costs of rating compilation (population clustering with the number of objects exceeding several hundred). This approach seems quite promising for an in-depth analysis of the banking system.</p>

Source: Elaborated by the author

The problem of constructing adequate methods for ranking banks is currently relevant for Republic of Moldova. In developed countries, a system for assessing financial stability and the effectiveness of banks has evolved over several decades, and its use in practice requires a certain level of managerial skill. Using any technique, the results of the analysis are subjective to one degree or another. Obviously, there is no universal methodology, and differences in approaches to building a comprehensive rating will remain. But this should be due not so much to a different level of familiarity with the technology of expert evaluation, but to differences in the rating systems of the importance of the indicators used, on the basis of which these ratings are compiled. The higher the qualifications of economists or managers, the richer and more versatile their experience in banking, the more accurate the conclusions made by them when analyzing the activities of the bank. The main direction of advancement in the field of building bank ratings is an open discussion and comparative assessment of existing methods as an effective tool for creating an adequate picture of the state of the banking industry as a whole and individual credit institutions.

The positive effect of applying the rating in the analysis of banks is obvious. Bank ratings are a factor in influencing the formation of a bank management strategy. To ensure the effectiveness of applying the rating in a study of the functioning of banks, it is necessary to highlight indicators of the quality of banking management.

Indicators of monitoring the quality of banking management:

1) Financial sphere

- fuzzy wording or multiplicity of floating or changing rates;
- drop in dividends or their sharp increase;
- an offer to clients to postpone the term for returning deposits without renegotiating contracts and corresponding compensations;
- very frequent issue of additional issues of securities;
- both sharp jumps and unreasonable inhibition of changes in levels of changing interest rates.

2) Operational sphere

- inability to maneuver operational rooms and personnel in extreme periods;
- large loans to enterprises under state or criminal control;
- unavailability or lack of developed schemes for overcoming problematic situations with the active participation of the bank;
- inadequate technical equipment.

3) Information sphere

- excessive confidentiality, difficulties in obtaining at least minimal information about the state of affairs in the bank;
- lack of a phased disclosure system for customers closely connected with the bank;
- with sufficient transparency of information about the bank, some of its complexity, in some cases, distortion and modification;
- requirements from customers to supply information not related to the need for a particular banking product;

- a significant discrepancy between the declared specialization of the bank and its real activities.

4) Organizational sphere

- use of exclusive charity events for advertising purposes;
- unreasonable hobby for construction and acquisition of representative assets;
- frequent changes in the composition of the board and board of directors;
- conflicts of the requirements of banking supervision rules.

The purpose of working with indicators is to get a signal about a possible problem, about the need for a modern, focused, in-depth analysis with a preliminary clarification of the essence of the situation, and at the same time initiate and activate information channels. ³⁷

As one of the directions of rating a commercial bank, we suggest using a methodology according to which factors integrated into three groups influence the comprehensive rating (CR):

- REF environmental factors (“health” of the banking system, size of the bank, resistance to macroeconomic crises, country risks);
- internal factors of RIF (market position, management, capital adequacy, profitability, asset quality, liquidity);
- factors of external support for RFOS, reflecting the likelihood of support from the state or owners in case of deterioration of the financial situation of the bank.

After calculating the main indicators of all groups, the bank is assigned a category for each of the indicators based on a comparison of the calculated values with the standard ones. Depending on the results obtained, a rating is formed. The formula for calculating a comprehensive rating is the sum of the ratings for each group of factors, taking into account their weight.

$$CR = 0.25REF + 0.65RIF + 0.10 RFOS \quad (1)$$

Table 2. CR rating scale

Points	Mark	Economic characteristics of the evaluated bank
5	High rating	A bank that has received this rating has a high degree of stability and the ability to timely fulfill all obligations.
4	Good rating	The bank is quite stable, the degree of financial stability is high.
3	Middle rating	The ability to timely repay your obligations is adequate. In the long run, difficulties are possible.
2	Bad rating	The financial condition of the bank is assessed satisfactorily, however, in the absence of external intervention or specific corrective measures for financial recovery, the probability of bankruptcy is high.
1	Default	The bank will soon go bankrupt or is already in the liquidation phase.

Source: elaborated by author on the basis of information presented in the: КУНИЦЫНА, Н.Н., Методика комплексной рейтинговой оценки коммерческих банков. Банковское дело 2014. [online]. Available: <<https://cyberleninka.ru/article/n/metodika-kompleksnoy-reytingovoy-otsenki-kommercheskih-bankov/viewer>>

³⁷ Оценка деятельности банка, рейтинговые системы. [online]. [cited 20 March 2020]. Available: <<https://www.rea.ru/ru/org/c/Kafedra-Finansovye-ryнки/Documents/9.pdf>>.

Since the external environment is the economic space in which the bank operates, the following criteria are used to evaluate its factors:

- banking system health;
- relative pot size;
- economic risks of the country.

The health of the banking system is assessed by comparison with the reference indicators (in this capacity are the corresponding values of indicators in developed countries in crisis-free periods) of the following indicators:

- financing rate;
- inflation rate;
- GDP growth rate;
- percentage of liquidated banks in their total number
- dependence on other economies (defined as the ratio of external public debt to GDP).

The relative size of the bank is estimated by ranking domestic banks by quantitative indicators.

An assessment of a country's economic risks includes an assessment of capital outflows, a positive current balance, a decrease in foreign investment, and is determined based on an analysis of expert opinions according to which the country's risks grew in the period under review, which was associated with overcoming the consequences of the economic crisis. In conclusion, a composite rating of environmental factors is calculated - REF, which is an arithmetic average of the ratings of all indicators.

Internal factors can be divided into:

- 1) Quantitative financial
- 2) Qualitative non-financial

The financial indicators include standard indicators for the analysis of financial stability that characterize: bank capital adequacy, quality of its assets, profitability, liquidity.

Depending on the size of each indicator, it belongs to one of five groups, each of which is assigned a certain number of points (1-5). Ratings on indicators of capital adequacy and liquidity are assigned according to assessments of the level of mandatory ratios. An analysis of the quality of assets was carried out by comparing the volume of overdue assets to their total size.

To assess profitability, the following coefficients are used: ROE and ROA.

Qualitative indicators of the bank's activities include such basic characteristics as market positions, bank policy in the field of risk management.

For a rating assessment of a bank's market position, it is necessary to take into account market share and the development of a network of departments.

Assessment of the quality of risk management will depend on the magnitude of the various types of risks (according to the CAMELS methodology) in each of the analyzed periods

In conclusion, it is necessary to calculate the rating of internal factors - RIF, which is the arithmetic average of the ratings of all indicators.

The criteria for evaluating external support include:

- the amount of state funds held in bank accounts - funds from budgets of various levels;
- the share of funds invested in state financial instruments in income-generating assets;

- the share of funds received from counterparty banks in the form of interbank loans and deposits in attracted funds.

Thus, the proposed rating methodology allows you to calculate ratings taking into account environmental factors.

Ratings are a tool for timely diagnosis and analysis of the dynamics of the bank and contribute to:

- timely reduction of social and economic costs of crises;
- development of measures for their prevention and overcoming situations of instability;
- achieving and maintaining sustainability.³⁸

At present, Moldavian methods are sometimes far from perfect: often use controversial judgments about the quality of a particular indicator, the analytical apparatus is not correctly applied, in general, many methods have a number of significant drawbacks.

In this regard, further research and development of rating assessment methods are important elements of the banking sector management system. Ratings are valuable not only for internal users, but also for external users, allowing them to realize the degree of reliability, stability, and trust in the bank.

4. Conclusions

The article is related to improvement of bank rating prudential supervision of the Republic of Moldova through EU best practices. Shortcomings of the Moldavian methodology for assessing the rating of banks and directions for improvement of rating methods used in prudential supervision. The following conclusions are presented:

- Prudential supervision presents one of the most important mechanisms by which national authorities contribute to ensuring financial stability, implicitly the banking one. Mission of the supervisory is to prevent the manifestation of systemic risk through careful and efficient monitoring of banks, in order to ensure the stability and viability of the banking sector as a whole.
- Some principles of good rating system are derived: comprehensiveness, completeness, complexity, pod-definition, monotonicity, fineness, reliability, back-testing, informational efficiency, system development, data management, incentive compatibility, internal compliance, external compliance.
- Shortcomings for the Moldavian methodology for assessing the rating of banks: lack of reliable information, the complexity of forming the optimal scorecard, construction of forecast values, application of an adequate grouping of banks, the bulkiness of the calculations.
- To ensure the effectiveness of applying the rating in a study of the functioning of banks, it is necessary to highlight indicators of the quality of banking management (financial sphere, operational sphere, information sphere, organizational sphere). As one of the directions of rating a commercial bank, we suggest using a methodology according to which factors integrated into

³⁸ КУНИЦЫНА, Н.Н., Методика комплексной рейтинговой оценки коммерческих банков. Банковское дело. 2014. [online]. [cited 20 March 2020]. Available: <<https://cyberleninka.ru/article/n/metodika-kompleksnoy-reytingovoy-otsenki-kommercheskih-bankov/viewer>>.

three groups influence the comprehensive rating (CR): environmental factors, internal factors of and factors of external support.

Banking sector is one of the large sectors in the Republic of Moldova. Today's banking sector becoming more complex. Evaluating Moldavian banking sector was not an easy task. There are so many factors, which where need to be taken to differentiate banks.

One of the major objectives of a central bank is to prevent systemic risk by promoting efficient banking monitoring, which will contribute to achieving the stability and viability of the entire financial system. When applying the rating method, the supervisor uses information of a qualitative and quantitative nature to assign a rating to the bank, which will make it possible to predict the ability of the bank to fulfill its obligations in the future. It is necessary to solve the problem of ensuring the reliability and uniformity of the information used in determining the ratings of banks.

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