



THEORETICAL AND METHODOLOGICAL APPROACHES TO THE FORMATION OF A MODERN SYSTEM OF NATIONAL AND INTERNATIONAL ENTERPRISES, ORGANIZATIONS AND INSTITUTIONS' DEVELOPMENT

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Violetta Kharabara¹ , Roman Greshko² , Olena Tretyakova³ 

DIRECTIONS OF PERFECTION OF MANAGEMENT BANK RISKS

ABSTRACT:

A bank risk is probability of that events, expected or unexpected, can have a negative influence on a capital and receipt of bank. Reliability and efficiency of control system by bank risks depends on ability of bank in good time to react on changing in an external and internal environment. Perfection of management bank risks consists the use of aggregate of methods, receptions and measures of the risks determination of their credible sizes and consequences directed on timely prognostication, with the purpose of prevention or minimization of the losses related to them.

INTRODUCTION.

The sphere of credit risk management of clients of commercial banks is constantly evolving, is in motion, which provides a positive financial result at the end of the year. There is a constant improvement of existing methods of credit risk management of customers, there are new approaches that allow more objective assessment of the risk of late fulfillment of obligations by customers, as well as to ensure an acceptable level of risk of relevant lending operations to corporate and retail customers.

The relevance of the study is to take into account difficult economic conditions. If previously ignoring the reserves to increase the efficiency of lending activities of commercial banks has led to some reduction in net income for the year, in the current environment, this could lead to bankruptcy. In recent years, there has been a frequent loss of financial stability by commercial banks, whose main activity is lending to individuals and corporate customers. To

¹ PhD in Economics, Associate Professor, Department of Finance and Credit
Yuriy Fedkovych Chernivtsi National University, Ukraine

² PhD in Economics, Associate Professor, Department of Finance and Credit
Yuriy Fedkovych Chernivtsi National University, Ukraine

³ PhD in Economics, Associate Professor, Department of Finance and Credit
Yuriy Fedkovych Chernivtsi National University, Ukraine

ensure the efficient and sustainable functioning of the domestic banking system, it is advisable to offer ways to improve the efficiency of credit risk management.

PRESENTING MAIN MATERIAL.

When assessing credit risk, it is important to consider not only the probability of non-repayment, but also the possible change in the value of the property used to secure the borrower's obligations. For example, in recent years there has been a significant fluctuation in the value of real estate in dollar terms. This means that even if the bank expected to repay its liabilities by selling the mortgaged property on the market, it will not be able to get the entire loan amount back.

For example, if the shares of a promising company are pledged, the value of such equity securities will fall sharply amid deteriorating market conditions. The fact is that the value of a corporate client is usually determined by its ability to generate a positive value of EBITDA. There are many methods of estimating the value of enterprises and their securities, but the most commonly used is the income approach, which defines the value of property as the ability to generate annual profits multiplied by a multiplier. Again, the conditions that allow or do not allow companies to make money are formed in Ukraine under the influence of the success of trade in international commodity markets.

Therefore, when assessing credit risk, determining the optimal tools to compensate for possible late repayment of the loan body and accrued interest, it is important to take into account not only the cash flows of the borrower, but also the dynamics of market prices for assets. on bail. It is important to take into account the risk of recurrence of fluctuations in the global energy market, which will lead to a massive decline in the value of various assets within the Ukrainian economy.

You should also pay attention to the tools of effective credit risk management when interacting with corporate clients. The financial condition of corporate clients and their level of creditworthiness depend on macroeconomic phenomena, such as demand for the industry's products. There are a large number of instruments on the stock market that are used to hedge risks. The basic asset in such futures, forwards, options and other derivatives is not only currency but also oil, grain and other natural resources.

Therefore, within the framework of credit risk management policy, the bank could buy futures contracts, thus ensuring a stable financial result.

For example, if an agricultural enterprise receives a loan and a bank buys a derivative with the enterprise's main product as the underlying asset, the bank will be able to exercise the right to sell the asset at a high price in the event of a sharp deterioration in the industry. If the price of the underlying asset does not decrease, the level of creditworthiness of the agricultural enterprise will remain high, ie liabilities will be repaid.

Thus, the relevance of the study increases with the development of a large number of financial instruments that can be used to compensate for credit risk within the entire industry group of corporate clients.

Another measure is the transformation of foreign currency loans into hryvnia. One of the most important proposals for optimizing the bank's lending activities in order to minimize credit risk is to transform foreign currency loans, which were issued in 2008-2009 in UAH. This measure corresponds to the current trends in the legal field of Ukraine. So on April 13, 2021. The Verkhovna Rada of Ukraine supported the law on forced currency restructuring.

Such changes are that those loans that were issued in 2008-2009 will be transformed into hryvnia. At the same time, banks will have the opportunity to take possession of property for which they are out of debt through litigation.

So in 2009. Ukrainian banks actively issued loans in US dollars and other currencies. They were cheaper. However, the resulting international crisis has led to a sharp increase in the debt burden on bank customers, and they have stopped servicing their existing obligations. During 2007-2008, commercial banks issued 44,000 foreign currency mortgages to Ukrainians, while, for example, in 2020, this figure was only 5.66 thousand mortgages.

Of course, in 2009 The regulator took into account this situation and banned the issuance of loans to individuals in foreign currency, but still retains a significant part of foreign currency loans to this group of bank customers.

During 2014-2015, a moratorium on the collection of collateral from customers was introduced. This was done to ensure the social protection of citizens in complex socio-economic processes. However, this had a negative impact on the financial position of credit institutions. Only in April 2021. this rule has been repealed, which will allow banks to solve the existing problem in this area. At the same time, clients will be able to continue financing loans, service existing obligations, which will allow them to keep the purchased housing.

This measure will significantly improve the financial position of banks and reduce their credit risk. After all, at the moment a significant part of the working capital of commercial banks is stuck in reserves, which is caused by a



significant amount of low-quality foreign currency loans in terms of credit risk of commercial banks.

In general, the change proposed in the law will have a significant impact on the financial situation of all participants in the process. Even those loans for which there are no problem situations and which are serviced on time, in accordance with the agreements of the bank and the individual, will be transferred from foreign currency to hryvnia. In general, this aspect is justified, despite the discussion in the media. However, it is important to understand that the fact that such loans are currently serviced does not mean that the borrower will be able to service them in the future, for example, after the next economic crisis. Therefore, to address the situation and minimize the likelihood of repeated extremely negative impact of the devaluation of the hryvnia on the credit risk of banks and the financial position of individuals, it is advisable to apply such a rule to all available foreign currency loans. The analysis showed that with a probability of 92.42% foreign currency loan will sooner or later be problematic. Therefore, it is advisable to use available tools now to ensure the recovery of banks' loan portfolio in terms of the current level of credit risk.

If banks used to negotiate with each individual client to restructure their obligations and resume debt service, in the current environment, banks will not have such negotiating flexibility, as they will be required to comply with new legislation.

As for the economic effect, the impact of such a measure on problem loans and the level of credit risk can be determined by comparing the current volume of foreign currency loans and the share that is not serviced. At present, individuals are unable to meet 95% of their existing liabilities. As for the amount of such bad debts, it is currently \$ 500 million. USA. [12].

Therefore, if such a proposal is implemented, the level of credit risk in value terms will be reduced by $500 * 27.3 * 0.95 = \text{UAH } 12.97$ billion. This makes it clear that if such a measure is implemented at the level of all Ukrainian banks, credit risk management will significantly improve, as the level of credit risk in terms of value will decrease from the current UAH 55.9 billion. up to UAH 42.9 billion. This value is obtained by subtracting from the current amount of credit risk among individuals the amount of impact of such a measure.

One of the most important stages of the credit risk management process is the actual assessment of credit risk for each individual enterprise or individual. In this case, talk about the scoring model. Banks are actively studying the reporting of loans to the company, but there are opportunities to further improve the effectiveness of the current approach.

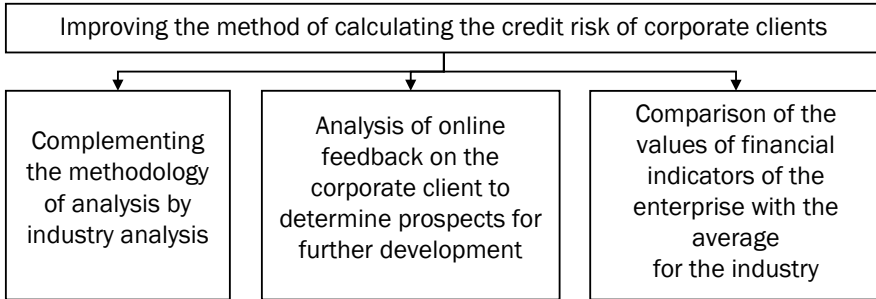


Fig. 2. Directions for improving the method of calculating credit risk of customers

Source: Created by the author on the basis of [4]

There are three main areas that should be used to achieve this goal:

1. Addition of the methodology to industry analysis.
2. Using a tool to monitor the tone of media reports about a particular company. This tool can be used as an element of marketing analysis.
3. To determine the competence of management should compare financial ratios with values that are specific to the industry in which the corporate client operates (Fig. 2).

Usually the bank assesses the internal position of the company, namely, analyzes the indicators of financial statements, court databases and other sources of information. However, each company operates in a specific environment that is unique. Even if the company is efficient, difficult industry conditions will not allow to achieve high creditworthiness. Conversely, if the company's management is not effective, but the company operates in a promising industry that has shown sustainable development in recent years, the prospects of such an enterprise are still good, and possible problems with timely repayment of loans will be offset by constant income growth companies. Therefore, the prospects of such a company should be assessed higher than companies with strong financial and economic performance, which operate in a currently complex industry.

For example, companies in the field of information technology are actively developing, because they operate in the international market. This means that productivity is higher because it meets the needs of companies that are able to compete in the international market.

Although the profitability of sales is an important factor that must be taken

into account in assessing the current state of the industry, no less important is the current liquidity ratio. This indicator indicates the ability of the medium-sized enterprise in the industry to meet its obligations to the bank and other creditors and suppliers of goods and services.

Ultimately, the integrated assessment of the creditworthiness of the industry is determined by comparing these indicators with the average in the economy. Each of the indicators has the same weight as a result. Depending on the current state of the industry according to this criterion, the company can get from minus 50 to +50 points. In this case, 0 means that the industry as a whole shows the same development trends as the average enterprise in the economy. 50 points means that the company belongs to the industry that demonstrates the most significant prospects and current indicators of financial stability.

Based on the above, we believe that in the course of assessing the creditworthiness of the enterprise should be an assessment of the creditworthiness of the industry.

The second measure is to track the tone of customer feedback about the company. Appropriate marketing tools should be used for this. The third area of improvement is the assessment of the competence of managers.

To explain the economic effect, it is advisable to evaluate a hypothetical enterprise. It is expected to have operated effectively in the market in previous years, but the quality of services has deteriorated over the past few weeks. This phenomenon can be associated with the dismissal of competent employees, their own company, attracting customers to competitors, active actions of enemies, etc. In any case, this leads to the fact that the level of sales is reduced, and this process impossible to detect by analyzing financial statements. Table 1 shows the assessment of the level of creditworthiness of the enterprise in the current conditions of using the standard methodology and in the case of implementation of the proposed measures to optimize the methodology of credit risk assessment.

The first indicator will be the same, as it shows the number of points on the indicators that were used before. The second indicator of management competence will be unchanged, which is due to the fact that the change of approach will not affect the assessment of the level of competence of managers. However, the change in market power and the deterioration of customer relations will have a significant impact. The use of the proposed system of monitoring the tone of feedback about the corporate client will reveal the deterioration of consumer relations and its services (Table 1).

Table 1

Assessment of the creditworthiness of an enterprise that has problems with the quality of services, points

Indicator	Sum of points	Sum of points
The number of points on constant indicators of credit risk	600	600
New or improved performance		
1. Competence of management	20	20
2. Market strength, level of competitiveness, quality of customer relations (tone of feedback)	0	-200
3. The impact of the industry on the level of creditworthiness	0	50
in all	620	470
Creditworthiness assessment	A good and quality borrower	Potentially unstable borrower

In addition, it will reveal an increase in the share of negative feedback. All this will lead to the fact that the third indicator of market power, the company will receive a negative assessment. As for the impact of the industry on the level of creditworthiness, it is assumed that the company operates in a promising industry, which will lead to some increase in the assessment of its creditworthiness.

As a result, the performance indicator indicates that the company belongs to the category of "potentially unstable borrowers". If the standard method of assessing the level of creditworthiness is used, the company will be assessed as a "good borrower", and the level of creditworthiness will be high. Thus, in a specific example, we can understand how this technique is more effective than the one currently used.

About a quarter of corporate bankruptcies are associated with lower sales [9, p.113]. Accordingly, we can assume that about a quarter of cases of write-off of corporate debt on loans is associated with a decrease in their sales. That is, the economic effect will be $0.25 * 364.1 = 91$ billion UAH. This is the amount of reduction of credit risk of banks in the area of lending to legal entities.

In the process of identifying ways to improve the credit risk management of the bank, the following conclusions and suggestions are formulated:

- the possibilities of optimizing the bank's credit activity in order to minimize credit risk are indicated. It is proposed in the process of credit risk assessment

to take into account not only the level of creditworthiness of individuals or legal entities, but also to conduct a detailed analysis of the value of collateral, including the implementation of various scenarios of economic development. For example, it is important that pledged securities do not depreciate due to the impact of the financial crisis. This will ensure more effective credit risk management in lending activities. In addition, it is important to use futures and other stock market instruments to lend more prudently to various sectors of the economy. It is stated that foreign currency loans of individuals should be transformed into hryvnia. This measure will reduce the cost of credit risk by UAH 12.97 billion, ie the total assessment of credit risk among individuals will decrease from UAH 55.9 billion. up to UAH 42.9 billion.

CONCLUSION.

Ways to improve the credit risk management process of Ukrainian banks have been formulated. It is necessary to expand the method of credit risk assessment with additional indicators that will increase the effectiveness of assessing the creditworthiness of the client-enterprise. First, it is advisable to use the assessment of prospects for the development of the industry, as each company depends not only on the effectiveness of internal solutions, but also on the actions of direct external factors, such as customers, suppliers, competitors. Secondly, it is proposed to assess the level of competence of management staff using financial indicators. If the financial performance of an enterprise is higher than the industry average, the management of such an enterprise makes effective management decisions. Also, a significant addition to the current methodology is the assessment of changes in market power and customer loyalty. This can be achieved by using modern tools to monitor the tone of customer feedback about the company. Thus, the bank may identify significant problems in the company, even if the changes occur only in the last few weeks, and the financial statements are ideal.

REFERENCES:

- [1] *Cost of loans according to the statistical reporting of Ukrainian banks (excluding overdraft)*. Retrieved from https://bank.gov.ua/files/Procentlastb_KR.xls [accessed: 25.03.2022]
- [2] *Economic standards and limits of open currency position*. Retrieved from https://bank.gov.ua/files/stat/Ratios_by_Banks_2020-11-01.xlsx [accessed: 25.03.2022]
- [3] Elfimova, I. F. (2016). Methodical approach to the study of credit risk management system of a commercial bank. *Society and economic thought in the XXI century: ways of development and innovation* (Pp. 313-316).

- [4] Kuznetsova, E. G. (2017). On the question of methods, methods and tools for managing credit risks of banks. *Vector of economy*, 12(18), 52-57.
- [5] Lycheva, I. M. (2018). Problems of credit risk management in a commercial bank. *Belgorod Economic Bulletin*, 1(89), 128-133.
- [6] *Accounting rate of the National Bank of Ukraine*. Retrieved from <https://bank.gov.ua/monetary/stages/archive-rish> [accessed: 25.03.2022].
- [7] *Turnover balance of banks*. Retrieved from https://bank.gov.ua/files/stat/OSB_bank_2021-04-01.xlsx [accessed: 25.03.2022].
- [8] *Resolution of the NBU Board "On approval of the Regulation on determining the amount of credit risk by banks of active banking operations" of 30.06.2016 № 351*. Retrieved from <https://zakon.rada.gov.ua/laws/show/v0351500-16#Text> [accessed: 25.03.2022].
- [9] *Decision of the NBU Board "On approval of the Methodology for calculating economic standards for regulating the activities of banks in Ukraine" dated 15.12.2017 № 803-rsh*. Retrieved from <https://zakon.rada.gov.ua/laws/show/vr803500-17#Text> [accessed: 25.03.2022].
- [10] *Distribution of loans granted to individuals and legal entities in national and foreign currencies and the amount of credit risk by debtor's classes in accordance with Regulation № 351*. Retrieved from https://bank.gov.ua/files/stat/Kred_class_2021-04-01.xlsx [accessed: 25.03.2022].
- [11] *Become a hryvnia: how deputies save foreign currency borrowers*. Retrieved from <https://www.althoughda.com.ua/publications/2021/04/15/673034/> [accessed: 25.03.2022].
- [12] *Financial stability indicators and reference data*. Retrieved from https://bank.gov.ua/files/fsi_table_1.xlsx [accessed: 25.03.2022].
- [13] Umarov, M. R. (2018). Problems of credit risk management in a commercial bank. *Innovative technologies in mechanical engineering, education and economics*, 14(7), 389-391.
- [14] ANSI/ASSE Z690.2-2011 *Risk Management Principles and Guidelines - ISO 31000*. Retrieved from <https://asq.org/quality-press/display-item?item=T868E> [accessed: 20.02.2022].
- [15] *Government Accountability Office, Report # GAO-06-91, December 2005*. Retrieved from <http://www.gao.gov/assets/160/157672.pdf> [accessed: 20.02.2022].
- [16] Rossi, C. (2014). *Fundamentals of risk management*. John Wiley & Sons.