

# The scientific heritage

Nº 47 Vol 7



#### No 47 (2020) P.7 The scientific heritage

(Budapest, Hungary)

The journal is registered and published in Hungary.

The journal publishes scientific studies, reports and reports about achievements in different scientific fields. Journal is published in English, Hungarian, Polish, Russian, Ukrainian, German and French.

Articles are accepted each month. Frequency: 12 issues per year.

Format - A4
ISSN 9215 — 0365

All articles are reviewed Free access to the electronic version of journal

Edition of journal does not carry responsibility for the materials published in a journal. Sending the article to the editorial the author confirms it's uniqueness and takes full responsibility for possible consequences for breaking copyright laws

**Chief editor:** Biro Krisztian **Managing editor:** Khavash Bernat

- Gridchina Olga Ph.D., Head of the Department of Industrial Management and Logistics (Moscow, Russian Federation)
- Singula Aleksandra Professor, Department of Organization and Management at the University of Zagreb (Zagreb, Croatia)
- Bogdanov Dmitrij Ph.D., candidate of pedagogical sciences, managing the laboratory (Kiev, Ukraine)
- Chukurov Valeriy Doctor of Biological Sciences, Head of the Department of Biochemistry of the Faculty of Physics, Mathematics and Natural Sciences (Minsk, Republic of Belarus)
- Torok Dezso Doctor of Chemistry, professor, Head of the Department of Organic Chemistry (Budapest, Hungary)
- Filipiak Pawel doctor of political sciences, pro-rector on a management by a property complex and to the public relations (Gdansk, Poland)
- Flater Karl Doctor of legal sciences, managing the department of theory and history of the state and legal (Koln, Germany)
- Yakushev Vasiliy Candidate of engineering sciences, associate professor of department of higher mathematics (Moscow, Russian Federation)
- Bence Orban Doctor of sociological sciences, professor of department of philosophy of religion and religious studies (Miskolc, Hungary)
- Feld Ella Doctor of historical sciences, managing the department of historical informatics, scientific leader of Center of economic history historical faculty (Dresden, Germany)
- Owczarek Zbigniew Doctor of philological sciences (Warsaw, Poland)
- Shashkov Oleg Candidate of economic sciences, associate professor of department (St. Petersburg, Russian Federation)

«The scientific heritage»
Editorial board address: Budapest, Kossuth Lajos utca 84,1204
E-mail: public@tsh-journal.com
Web: www.tsh-journal.com

## **CONTENT**

### **ECONOMIC SCIENCES**

Konopleva I.,K onopleva V. IMPROVING BUSINESS DEVELOPMENT EFFICIENCY BY AUTOMATING CUSTOMER RELATIONSHIP MANAGEMENT	Daurowa N., Tlekhurai-Berzegova L., Buller E., Vodozhdokova Z. FINANCIAL LITERACY OF THE POPULATION PROBLEMS AND PROSPECTS57
Lyskova I.  N.I. KAREEV AND I.I. YANZHUL ABOUT THE ESSENCE OF SELF-MANAGEMENT	Daurowa N., Tlekhurai-Berzegova L., Buller E., Vodozhdokova Z. PROSPECTS FOR THE DEVELOPMENT OF THE TOURISM INDUSTRY IN THE REPUBLIK OF ADYGEA60
Mashevska A.  ANALYSIS AND CHARACTERISTICS OF THE AVERAGE WAGES	<b>Podolianchuk O., Tomashuk I.</b> FORMATION OF FINANCIAL RESULTS OF ACTIVITIES OF AGRICULTURAL ENTERPRISES OF VINNITSA
	REGION63  Tomchuk O.  METHODOLOGY OF OPERATING COSTS ANALYSIS IN AGRIBUSINESS AND DIRECTIONS OF ITS
	IMPROVEMENT74 <b>Troian V.</b> FEATURES OF STAKEHOLDER INTERACTION
	MANAGEMENT IN CONSTRUCTION COMPANIES IN THE BRAND MANAGEMENT SYSTEM86  Feniak L.
	PROBLEMS OF EQUIVALENCE OF INTER-INDUSTRY EXCHANGE IN AGRICULTURAL INDUSTRY OF UKRAINE89
<b>Titov D.</b> CHARACTERISTICS OF ENTREPRENEURSHIP AND FEATURES OF ITS DEVELOPMENT IN RURAL AREAS53	Khaietska O. TOOLS OF FINANCIAL PLANNING AT THE ENTERPRISE97
	Yaremchuk N. GRAIN SUBCOMPLEX: PROBLEMS AND DEVELOPMENT PROSPECTS106

показать функцию молчания стиральной машины. С другой стороны, красочный журнал может быть использован для рекламной рекламной кампании. Тип сообщения также влияет на выбор носителя. Например, прямая рассылка или журнал могут быть более эффективными для сообщения, которое содержит сложную и подробную техническую информацию, но кампания по снижению цен может быть объявлена по радио или телевидению эффективно / эффективным способом. Медиапланер должен учитывать также стоимость различных носителей.

После выбора носителя, который выбран, медиапланер должен выбрать конкретный носитель. Например, если используется газета, следует решить, какая газета является общенациональной или местной. Если телевидение выбрано в качестве рекламного носителя, необходимо решить, какой канал и в какое время больше подходит для публикации рекламной кампании. Соответствие важно между целевой аудиторией и рекламируемым продуктом.

Оценка эффективности рекламы - последний шаг в разработке рекламной программы. Оценка рекламного эффекта важна. Коммуникационные эффекты рекламы, а также влияние рекламы на продажи и прибыль должны регулярно измеряться. Коммуникационные эффекты могут быть измерены с помощью теста отношений. Эти типы тестов показывают после рекламной кампании, изменилось ли поведение потребителей на продукт. Например, измеряется память о рекламе, узнаваемость бренда потребителями, знания, отношения и предпочтения. Тем не менее, какие продажи и прибыль производятся рекламной кампанией, которая повышает узнаваемость бренда на 20 процентов. Обычно сложно измерить влияние рекламы на про-

дажи и прибыль по сравнению с измерением эффекта коммуникации, потому что продажи и прибыль влияют на другие факторы, кроме рекламы, такие как характеристика продукта, цена. Один из способов измерить влияние рекламы на продажи и прибыль - сравнить прошлые продажи и прибыль с прошлыми расходами на рекламу.

Еще один способ оценить эффективность рекламы - эксперименты. Например, Coca-Cola для тестирования влияния различных уровней расходов на рекламу, она может варьировать сумму, которую она тратит на рекламу в разных областях рынка, и измерять разницу в полученных уровнях продаж и прибыли.

Наконец, многие факторы могут повлиять на эффективность рекламы, некоторые контролируемые, а другие нет. Измерение результатов рекламных расходов поддерживает неточную науку.

#### Список литературы

- 1. Balboni B. & Gabrielli V. (2010). SME Practice towards Integrated Marketing Communication. Marketing Intelligence and Planning, 28(3), 275-290.
- 2. Bettiol, M., Di Maira E. & Finotto, V. (2012). Marketing in SMEs: the role of entrepreneurial sense making. International Entrepreneurship and Management Journal, 8(2), 223-248.
- 3. Bryman, A. & Bell, E. (2015). Business research methods. 4th edition, Oxford: Oxford University Press
- 4. Esposito, A. (2013). Insights about Integrated Marketing Communication in Small and Medium sized Italian Enterprises. Business Systems Review, 2(1), 80-98.
- 5. Saunders, M., Lewis, P. & Thornhill, A. (2012). Research Methods for Business Students. 6th edition, Harlow: Financial Times Prentice Hall.

# MAIN PROSPECTIVE DIRECTIONS OF IMPROVING THE BANK'S CREDIT PORTFOLIO MANAGEMENT

Polova O.

Doctor of Economics, Professor of the Department of Finance, Banking and Insurance, Vinnytsia National Agrarian University

#### Abstract

The article considers the main promising areas for improving the bank's credit portfolio management. Problems of credit portfolio management of Ukrainian banks are identified and ways to overcome them are identified. Carrying out a SWOT-analysis allowed us to identify the weaknesses and strengths of the bank's credit portfolio, potential threats and opportunities of the internal and external environment and, accordingly, to justify ways to improve the credit portfolio management policy as a whole. The article analyzes the assessment of credit risk using special methods of credit rating, which are a set of assessment parameters of the borrower's creditworthiness. The use of world experience should be a prerequisite for the formation and improvement of the banking system of Ukraine.

**Keywords:** management of the credit portfolio, the bank, risk management.

The modern development of the domestic banking system is characterized by significant changes and is in the process of reform. Not only the quantitative but also the qualitative component of banking activity is changing. Competition in the banking sector to place financial resources is increasing not only among banking institutions, but also under increasing pressure from non-

banking financial institutions, including fast-loan financial companies, credit unions, pawnshops, leasing and factoring companies. The problems of attracting, placing and managing bank funds are extremely acute in modern conditions. On the one hand, a sharp reduction in the number of banks undermines confidence in the banking system as a whole, especially in the event of bankruptcy and insolvency; on the other hand, the cleansing of banking activities from inefficient banking institutions will further increase the competitiveness and resilience of banks.

The main type of resource allocation for domestic banks is lending. This type of banking operations is one of the most profitable, but also risky at the same time. In an unstable economic situation, banks have to adapt to rapid changes in operating conditions, including exchange rate instability, growing distrust of banks due to their reduction (including the reasons for declaring them insolvent), increasing banking requirements by the regulator, deterioration of creditworthiness of borrowers, both potential and existing, etc. As a result, the quality of assets deteriorates and profitability decreases, which requires banks to improve the management of both passive and active operations, including lending, especially in terms of risk management.

The problems of banking reform always remain in the field of view of scientists and practitioners, because the banking system is a kind of "circulatory system" that provides the economy with the necessary financial resources. One such financial flow is lending. The efficiency of the bank's lending activities has always been determined by a prudent credit policy and the availability of effective methods and tools of credit risk management.

The current state of the economy in Ukraine requires constant attention to the banking system in general and commercial banks in particular, the policy aimed at creating favorable conditions for overcoming the crisis, for the stable and efficient functioning of our economy. This need is due to the fact that the banking system of Ukraine is one of the main factors of economic growth policy.

The leading role in solving significant problems belongs to credit relations and banks, which is explained not only by the increase in their role in economic development, but also by the ability to respond quickly and effectively to the new management mechanisms.

In modern conditions, banks in different countries are increasingly experiencing the problem of bank lending. It is even more relevant for the domestic banking system, the level of overdue debt, which over the past 5-7 years has shown a steady upward trend [4].

The efficiency of banks' lending today is a necessary, if not decisive, factor in the viability of banks, as the credit portfolio accounts for more than half of all bank assets. In the structure of the bank's balance sheet, the credit portfolio is considered as a whole and an integral part of assets, which has its own level of return and risk. Therefore, in order to successfully lend - to ensure the repayment of loans and increase the profitability of lending operations, banks must implement an efficient and flexible system of credit portfolio management. This can be achieved by studying the theoretical and practical issues of approaches and the process of formation and management of the credit portfolio of a commercial bank.

In modern crisis conditions and in order to ensure the organization of effective lending activities, commercial banks face one of the most important tasks of credit management, namely - the formation and management of the credit portfolio of a commercial bank.

The credit portfolio is not just a passively formed set of loans, but the result of active, purposeful actions of a dynamically developing bank, a purely managerial relationship between different types of loans. The bank's credit portfolio should be considered as the implementation of the bank's credit policy, which is an integral part of its overall development strategy.

To enhance the role of the credit portfolio as a tool for implementing the objectives of public credit policy, it is advisable to consider it from three positions.

First, it is a strategic credit portfolio, which must be formed in accordance with the requirements of the state credit policy, the place and tasks of the bank in its implementation. Secondly, it is a tactical credit portfolio, which is formed by the bank on the basis of the volume and structure of the strategic credit portfolio. Third, it is a portfolio of loans actually granted, which is now recognized [7].

Effective credit management of commercial banks is largely associated with the development and implementation of appropriate credit policies. The latter allows to ensure the most efficient use of the bank's credit potential, the formation of the optimal credit portfolio for it, a clear organization of the entire credit process.

The formation and management of the credit portfolio is one of the fundamental priorities in the bank's activities. An optimal, high-quality credit portfolio affects the bank's liquidity and reliability. Reliability is important for shareholders, companies, individuals who are depositors and use the services of the bank. Financial imbalances reduce overall confidence in the country's credit system, and this is felt in other sectors of the economy.

The main goals of the credit portfolio are: high level of income in the current period; high rate of expected income in the long run; minimization of the level of risks of the credit portfolio and compliance with the required liquidity.

The portfolio approach to credit services makes it possible to systematize loans according to the degree of risk, and also allows you to develop certain measures for approaches to lending, credit risk prevention, as well as generalize the directions and tools of the customer lending mechanism. Credit portfolio management is the management of credit portfolio profitability and risk management (credit risk, liquidity risk, interest rate risk, etc.).

However, some scholars suggest considering credit portfolio management as a process consisting of certain stages. Define the following stages: the choice of credit policy; credit market analysis; formation, review, evaluation of the effectiveness of the credit portfolio.

The process of managing the credit portfolio of a commercial bank is most appropriate to present as a system that contains a number of successive stages, including the following:

- 1. Collection and analytical processing of information.
  - 2. Selection of criteria for loan diversification.

- 3. Establishment of credit limits on the basis of selected priorities among the criteria of diversification and modeling of the overall portfolio structure.
- 4. Quality control of the credit portfolio and adjustment of its structure based on a system of ratios [9].

Stability, reputation and financial success largely depend on the structure and quality of the credit portfolio. Therefore, the bank needs to analyze the quality of loans, conduct independent examinations of large credit projects and activities, identify cases of deviation from the legal credit policy. The portfolio study includes an analysis of assets by maturity, by degree of risk, by currency of debt, analysis of risk concentration by sectors of the economy, by groups of clients, analysis of related party lending.

The system of credit portfolio quality assessment includes the following elements: quality assessment of loans that make up the credit portfolio; determining the structure of the portfolio based on the quality of loans and assessing this structure based on the study of its dynamics; determining a sufficient amount of reserves to cover losses on loans based on the structure of the credit portfolio.

The economic aspect of the credit portfolio valuation is determined by the assessment in the dynamics of the balance sheet indicators of the credit portfolio, in particular: portfolio size, weighted average interest rate, share in assets, average cost of resources, their temporary parameters (liquidity gaps); the share of problem loans and their coverage by the actually formed reserve at the expense of the insurance fund; the amount of debt on interest, its ratio to actual income [2].

In modern conditions of commercial banks, the analysis of the bank's credit portfolio is growing significantly, and it is becoming one of the most important parts of the analysis of banking as a component of the credit institution's management system. Constant and timely analysis of the credit portfolio allows you to choose the option of rational allocation of resources, the direction of the bank's credit policy, reduce risk by diversifying credit investments, to decide on the feasibility of lending to customers.

The analysis of the credit portfolio requires a study of its structure by risk groups, degree of security, industry structure, forms of ownership of borrowers, as well as the study of the dynamics of each group and its segmentation.

The increase in bad debts primarily causes an increase in losses associated with non-repayment of principal and interest on the loan. Secondly, it leads to additional operating costs related to the repayment of problem loans, freezing of funds in non-profit assets, which leads to a decrease in the bank's profitability, deteriorating liquidity and reducing the quality of its assets

Third, it has a negative impact on the bank's reputation and ratings, which causes a decrease in the level of confidence on the part of depositors and investors. In order to manage problem assets, Ukrainian banks use external methods of managing them, such as transferring them to a third party (collector) and selling them to an unrelated financial company on a factoring basis. This allows you to not increase the amount of reserves

for problem loans, reduce operating and production costs.

Intrabank methods of managing problem assets include early regulation of risk managers of banks to worsen the service of loans by borrowers and rehabilitation of credit debt, restoring the ability of borrowers to generate cash flows to service loans. In particular, determine the following areas of debt restructuring:

- 1. Prolongation of credit terms.
- 2. Changing the method of loan repayment, the transition from classic (standard) to annuity.
- 3. Deferred payment on the loan ("credit vacation").
  - 4. Reduction of interest rates on the loan.
  - 5. Conversion of foreign currency loans.
  - 6. Reduction of the principal amount of debt.

Thus, the formation and management of the credit portfolio is the basis of effective credit management. Portfolio management allows you to balance and retain the risk of the entire portfolio, anticipating and controlling the risk that is inherent in those and other markets, customers, credit instruments, loans and operating conditions. Portfolio management is especially relevant in connection with the diversification of banks' operations, it is strongly associated with strategic planning processes.

Following the results of the banking system in the first half of this year, certain conclusions can already be drawn. In the banking market, resources are still expensive and short, and lending is complicated by the lack of solvent borrowers.

An important factor limiting the volume of lending, as well as the competitiveness of the banking system of Ukraine in modern conditions, is the insufficient level of their capitalization, which is manifested in the fact that despite capital growth, banks do not have time to expand their liabilities and assets. The low level of capitalization also contributes to the growth of lending rates and reduces the competitiveness of banks.

Analyzing the problems of bank lending in Ukraine, we concluded that the banking system of Ukraine needs significant reform aimed at reducing the cost of loans, increasing their availability, the emergence of economically reasonable lending rates, improving the legal framework, learning from foreign countries.

Improving credit policy by domestic banks should ensure the recovery of the financial sector and the restoration of economic growth in Ukraine. This is the main task in the need to overcome the consequences of the financial crisis in the domestic economy and the key to ensuring its further development.

One of the lessons of the crisis was the excessive use of foreign borrowing by banks to form their own resources, which led to an imbalance of the resource base and disproportion in its use for lending to the real and consumer sectors of the economy. These factors have become a serious prerequisite for a deeper banking crisis in Ukraine compared to other countries. In particular, the confidence of banks and other money market participants in banks has significantly deteriorated, banks 'credit portfolios have deteriorated rapidly, the search for creditworthy borrowers on new loans has

become more difficult, banks' investment attractiveness for domestic and foreign investors has declined, and banking profitability has declined.

It is also necessary to take into account that Ukraine has set a European integration course for itself, and therefore our financial market will face significant changes in the future, which will be manifested, first of all, in the expansion of the presence of foreign financial institutions. This is forcing Ukrainian financial companies to enter into fierce competition. It will be possible to win the struggle only by: creating a sufficient scientific base necessary for the development and implementation of deposit and credit policy; formation and management of the credit portfolio, training of scientific personnel capable of implementing their own developments taking into account the peculiarities of Ukraine; creation of centers that will be able to coordinate statewide work related to the formation of resource potential; availability of a reliable system of communication between banks and the public.

The financial situation in which the bank operates is changing dynamically: new technologies are being introduced, competition for customers is intensifying, the means of regulating banking activities are being adjusted, and so on. Therefore, there is a need to manage the credit portfolio by supervising and controlling the activities of the banking institution.

Despite the difficult economic situation, our country has positive long-term prospects. According to the forecasts of the Cabinet of Ministers of Ukraine, the growth of gross domestic product may increase by 2% next year [4], which, against the background of lowering the discount rate of the National Bank of Ukraine [4], creates additional opportunities to increase bank lending. The bank's credit operations, in turn, are a key factor in shaping the profitability of a banking institution, and the efficiency of lending is ensured, in particular, by the thoughtful formation and rational application of the bank's credit portfolio management policy.

Under the credit portfolio management policy of a commercial bank we understand a set of certain rules and principles of the bank's credit portfolio management system in order to achieve the strategic goal and tactical goals of its credit policy. In order to find possible directions for improving the bank's credit portfolio management policy, we use SWOT-analysis for the bank's credit portfolio analysis. SWOT analysis is a process of establishing links between the most characteristic opportunities for an entity, threats, strengths (advantages), weaknesses, the results of which can be further used to formulate and select the strategies of the entity. (Table 1).

Table 1

SWOT-analysis of the bank's credit portfolioТаблиця 1

### STRENGTHS (S) OP

# Growth: volumes of the bank's credit portfolio and lending to legal entities, individuals; short-term lending to other banks; interest income from credit operations; volumes of secured loans; volumes of loans with highly liquid collateral.

Negative dynamics of impaired loans.

Compliance with the standards of additional risk indicators of the credit portfolio.

# OPPORTUNITIES (O) Prospects for economic growth of the state, increasing business activity and purchasing power of individu-

Increasing the market share of lending to customers and other banks.

Deepening cooperation with banks

Improving the risk management system.

Better scores than many competitors

rating agencies.

Deterioration of the financial condition of competi-

Availability of reliable regular customers.

#### WEAKNESSES (W)

# Reductions: mortgage and other lending to individuals; credit portfolio management efficiency ratio; shares of long-term

lending; shares of lending to individuals in the credit portfolio.

Growth: amounts and shares of unsecured loans in the bank's credit portfolio. Instability of the credit portfolio in terms of uneven changes in the share of loans with different maturities.

#### THREATS (T)

Rising inflation and the NBU discount rate.

Decrease: business activity; solvency of the population; demand for

credit resources; the bank's reputation through discrediting shareholders or senior officials; prices of loans from competing banks. Liquidation of partner banks and banks-

debtors. Deterioration of the situation in crisis regions. The emergence of crisis situations in the current stable and prosperous regions.

Deepening economic crisis in the country.

Conducting SWOT-analysis based on the processing of sources, allowed us to identify weaknesses and strengths of the bank's credit portfolio, potential threats and opportunities of internal and external environment and, accordingly, to justify ways to improve credit management policy in general. Given the large number of banks that have been declared insolvent by the state regulator [1] and the violation of the financial

stability of the banking system in general, we consider it appropriate to use a moderate credit strategy by our bank.

With the growth of the amount and share of impaired loans against the background of declining solvency of other banks, businesses and individuals, a riskier credit portfolio may contribute to the development of crises in the financial and economic activities

of the bank in the medium term. Although interest income on long-term lending is generally lower for banking institutions, the availability of long-term loans in the bank's credit portfolio facilitates long-term financial planning of the bank, as it allows to more accurately calculate the forecast of payments for such debt. Since most banks have a predominantly low-risk credit portfolio, in the face of reduced lending, the availability of long-term loans creates a certain stability of the bank.

The uneven change in the share of bank loans with different maturities makes it difficult to financially plan the bank's cash flows. The increase in short-term lending to other banks is attributed to the advantages of the bank, because we consider it appropriate to dominate the bank's credit portfolio for lending to other banks in this area of lending. This is due to the crisis of defaults of many other banks, as well as the specifics of financial and economic activities of financial institutions. The declared European course of development of Ukraine, prospects of cooperation of our state with the countries with the developed market economy, introduction of innovative structural reforms [3] will promote deepening of cooperation of domestic banking system with banking systems of the countries.

Organization of economic cooperation and development, so the deepening of cooperation with banks in OECD countries is considered a promising opportunity for domestic banks. Critically-problematic debt is essentially bad, ie has little chance of being returned to the bank; on the other hand, although questionable-critical is certainly problematic, it has a better chance of being returned. The assignment of debt on a specific loan to a critically problematic or doubtfully problematic is left to the responsible employee of the bank, who is a credit expert.

We propose to divide the loan amount into significant and insignificant in accordance with the mark of UAH 50,000, as we believe that the debt less than this amount is small for this bank and its total amount will

other activities. bank. Although this amount may be adjusted according to changes in the size and structure of the bank's credit portfolio, both downwards and upwards. The use of the algorithm proposed in the above decision support system will optimize the bank's work on problem loan management. As a result of the SWOT-analysis, promising strategic alternative solutions of the bank in the context of certain strengths and weaknesses of the bank's credit portfolio, its potential opportunities and threats in the context of improving the credit portfolio management policy of the banking institution are outlined (Table 2).

As WO and WT strategies are largely based on changes in the external environment of the bank, these alternatives may be more widely implemented in the bank's operations than within its credit portfolio management policy.

Based on the SWOT-analysis of the strengths and weaknesses of the bank's credit portfolio, opportunities and threats of the bank's credit portfolio management and the planned alternative strategies for the bank's development, we offer the following measures to improve the bank's credit portfolio management policy:

- 1. Development and implementation of a flexible system for determining lending conditions depending on the economic situation, the financial condition of the bank and the financial capabilities of the client and identifying key conditions that have a certain advantage over the main competitors.
- 2. Defining stricter requirements for assessing the creditworthiness of borrowers based on the use of modern innovative and information technologies.
- 3. Carrying out an active information and advertising campaign in institutions and on the bank's website, as well as mass media to confirm the good reputation of the bank and prompt response to the publication of false or discrediting information about the bank, as well as deepening the use of national-patriotic motives in documentation, information, advertising booklets,

not cover the cost of resources and time for claims and	l corporate colors of the bank.
	Table 2
Strategic alternatives for bank credit portfolio management based on SWOT analysis of the credit portfolio	
SO	ST
Increasing lending to customers and other banks.	Determining the optimal interest rate on loans, taking
Capturing a larger share of the bank credit market in	into account the discount rate and the ability of custom-
Ukraine and abroad.	ers to issue and repay the loan. Informing the bank's cli-
Development and implementation of more attractive	ents about the positive achievements of the bank.
lending conditions than competitors.	Monitoring the situation in the regions.
Active advertising of credit services of the bank.	Advanced training of employees and control over their
Deepening lending to reliable regular customers.	work.
Wider introduction of modern information technol-	Making optimistic, pessimistic and realistic forecasts of
ogies and software into the bank's activity.	the bank's credit portfolio.
WO	WT
Development and implementation of beneficial for	Strict compliance with certain regulatory values of addi-
current customers of the bank programs of mortgage	tional risk indicators of the credit portfolio.
and other lending to individuals.	Development of the bank's development strategy within
Implementation of new management decisions	the framework of stable profitability reduction.

within the risk management policy of the bank's credit portfolio.

Improving the efficiency of the bank's credit portfolio management.

Improving work with problem borrowers.

Development of the bank's development strategy within the framework of stable profitability growth.

the framework of stable profitability reduction.

Diversification of the list of partner banks and debtor banks based on the analysis of the current financial condition of financial institutions.

Building a system of rapid response to the disclosure of false and discrediting information about the bank.

- 4. Development of a program of in-depth cooperation with reliable regular customers of the bank, including other areas of banking.
- 5. Search and implementation of possible areas of cooperation with reliable banks in developed countries and expansion of lending to OECD banks.
- 6. Improving the process of using information technology not only to assess the creditworthiness of the bank's customers, but also to monitor the situation in the regions of the country and the world.
- 7. Drawing up a forecast of the dynamics, structure, quality and riskiness of the bank's credit portfolio on the basis of optimistic, realistic and pessimistic scenarios of changes in the internal and external environment of the bank.
- 8. Organization of the bank's work with problem borrowers in the use of the proposed decision support system.
- 9. Development of an algorithm of actions in the conditions of crisis situations in prosperous and stable regions and acquaintance with it of the bank staff within the framework of advanced training of employees of the financial institution.

The application of the above measures will not only improve the credit portfolio management policy of the bank we are studying, but also increase the efficiency of its lending activities in general, provided that the level of risk is acceptable. We see the possibility of using a similar analysis to study the policy of credit portfolio management of other financial institutions of the banking system of Ukraine, as well as the decision support system for managing problem loans may interest the management of a commercial bank in the presence of bad debts.

The use of world experience should be a prerequisite for the formation and improvement of the banking system of Ukraine. Despite the fact that the banks of developed countries operate in other economic conditions, their methods of work can be adapted for use in our country.

Lending in other countries is also associated with significant credit risk, but it is measured on a slightly different scale. In world practice, the future of the bank, the share of overdue (over 90 days) loans which is close to 7% of the total, is quite problematic. For reliable banks, this figure is about 3%. For the domestic banking system, the values of similar indicators vary in a wide range: from 2 to 30% [5].

In the world banking practice, much attention is paid to the assessment and minimization of credit risk at the level of the entire credit portfolio. The volume, structure and quality of the credit portfolio are assessed, and only then measures are taken to optimize its structure to reduce risk. In Ukraine, as experience shows, to date, such mechanisms are absent, which led to the relevance of the study.

Foreign banks use special credit rating techniques to assess credit risk, which are a set of assessment parameters of the borrower's creditworthiness. They are characterized by the complexity and comparability of the entire range of credit risk factors.

British clearing banks assess the potential risk of loan default using the "PARSEL" and "SAMPARI"

methods.

The "PARSEL" method includes: P (Person) - information about the person of the potential borrower, his reputation; A (Amount) - justification of the amount of the requested loan; R (Repayment) - the possibility of repayment; S (Security) - security assessment; E (Exrediensly) - the feasibility of the loan, R (Remuneration) - the bank's fee (interest rate) for the risk of the loan [10].

SAMRARI method is more widespread in the evaluation system: C (Character) - the reputation of the borrower; A (Ability) - assessment of the borrower's business; M (Means) - analysis of the need to apply for a loan; P (Rirpose) - the purpose of the loan; A (Amount) - justification of the purpose of the loan; R (Repaiment) - the possibility of repayment; I (Insurance) - a method of credit risk insurance [10].

In the practice of American banks use the "rule of five C": 1 C (customer's character - the character of the borrower) - the reputation of the borrower, the degree of responsibility, willingness and willingness to pay the debt; 2 C (sarasitu to rau - financial opportunities) - involves a careful analysis of income and expenses of the borrower and prospects for their development in the future; From C (sarital) - capital, property; 4 C (collateral) - loan security, sufficiency, quality and degree of the realized collateral in case of outstanding loan; 5 C (current business conditions and goodwill - general economic conditions) - determine the business climate in the country and affect the position of the bank and the borrower. These criteria "si" are sometimes supplemented by the sixth criterion - 6 C (control) - monitoring of the legal framework of the borrower and its compliance with bank standards [7].

Optimally using these methods, foreign banks minimize credit risk, clearly organize the credit process, achieving the best quality of the credit portfolio.

The subject of thorough analysis for American commercial banks are factors formed under the influence of adverse economic conditions, ie a group of factors independent of the bank's activities: imperfect management, inadequate initial capital of the firm, high financial ratio and current cost ratio, high sales: , competition, economic downturn.

In this aspect, the experience of the foreign banking sector in involving independent rating agencies in credit risk assessment is interesting. The rating agency has a large amount of information and experience in creating unbiased assessments for all possible situations, it has no interest other than the formation of a reliable assessment of the bank's credit risk.

Foreign banks use an audit of loans. Control over large problem loans may consist of re-examination of accounting and financial statements, verification of documentation, quality of collateral. The control examination considers the issue of compliance of this loan with the credit policy of the bank, assesses the creditworthiness and financial condition of the borrower. An important form of control over the quality of the credit portfolio used by Western banks is the audit of loans. It is conducted by a special department and differs from the control of the credit inspector in that it is carried out secretly by employees of independent services that are

not related to the credit department. The results of audits are reflected in a special report provided to the bank's management. Along with the assessment of the credit portfolio, the auditors provide recommendations for the deepening of credit work, and if necessary, changes in methods and forms of lending that have developed in the bank. As the legal owner of the borrowed funds is the bank, it has the right to actively influence the borrower in case of abnormal situations.

Abroad, risk management methods such as credit sales, securitization, scoring and credit bureaus are common.

A very common way is to protect against credit risk through the sale of loans. The bank, based on its assessment of the credit portfolio, may sell a portion of loans to other investors. Due to this operation, the bank is able to return the funds that were directed to credit investments (in whole or in part). The effect of such operations is multifaceted. First, the sale of low-yield assets frees up resources to finance more profitable assets; second, the sale of assets slows down the growth of bank assets, which helps the bank's management to achieve a better balance between the increase in bank capital and the risk associated with lending; third, thus reducing the relevant items of the bank's balance sheet (those that characterize its activities are not the best). As for the technique of selling loans, the seller-bank may in some cases retain the rights to service the debt.

The procedure for repurchasing problem loans from banks can be carried out directly by the central bank (Chile, Hungary, Poland) or the Restructuring Agency (Czech Republic, USA, Mexico, South Korea). Loans are sold at a price below their face value. For example, in one of the largest markets for the resale of loans belonging to "third world" countries, credit debts of borrowers from Argentina, Brazil, Mexico, Peru, the Philippines and other countries are often sold at a nominal value of 5 cents per dollar. Most of these loans are purchased in multi-million dollar packages by banks and corporations with experience in the debtor country. At the same time, if the economic situation in such a country improves, the buyers of loans receive significant profits, and in the negative case, the losses on such loans are much smaller than when they are provided directly.

One of the most common forms of selling their credit investments by banks in some countries is the so-called securitization of loans. When carrying out securitization, the bank offers for sale not the loans themselves, but the securities (financial claims) that were issued for these loans.

Securitization is mainly applied to bank loans, allowing banks to transfer credit risk to other market participants - investors who buy securities. In addition, with the help of securitization, the bank can transfer the risk of interest rate changes and the risk of early repayment of the loan. The securitization process allows you to move the bank's balance sheet assets to the balance sheet, ie is one of the off-balance sheet activities of the bank. Securitization of assets reduces the level of risk of the bank, improves the quality of assets, allows, other things being equal, to increase capital adequacy

ratios. In developed markets, securitization as a separate type of off-balance sheet activity spread relatively recently in the 1980s. Several parties are involved in the securitization process: the bank as the initiator of the sale of the loan package; a company that issues securities; guarantor (insurance company); investors (individuals or legal entities) who buy securities on the market. The securitization procedure begins with the bank that initiates the sale of loans concludes an agreement with the company that issues securities for the total amount of securitized loans. Before placing a package of securities on the market, the issuing company must obtain the support of a guarantor who performs the function of insurance of issued securities. Such support is often provided in the form of government guarantees or letters of credit from a large bank. As a result, the securities are placed on the market, and the money received from their sale begins to flow to the guarantor and the issuing company, which transfers them to the initiating bank [11].

Thus, the bank receives cash for the total pool of securitized loans. At the same time, the bank continues to service these loans (which become off-balance sheet liabilities of the bank), ie to make payments to borrowers, receive funds from the repayment of the principal amount of debt and interest payments. The bank sends the received cash flows to the issuer of securities, which, in turn, transfers them to investors, ie pays the income on the securities.

Thus, the cash flow begins to flow to the investor when borrowers pay the principal amount of debt and interest to the initiating bank. When loans are securitized, ie converted into a package of securities, ownership of these loans and related cash flows flows to investors. Hence the name - transitional securities. Examples of securitized assets are mortgages, car loans, and equipment loans. The securitization procedure allows the bank to transfer credit risks (transfer the risk to other market participants), because along with the ownership of loans and receipts on them to investors who have purchased securities on the market, the credit risk is transferred. In case of non-repayment of loans, investors suffer losses.

The dominant concept of credit risk optimization is the theory of diversification. Modern researchers believe that providing several large loans is much more dangerous than a large number of small ones. However, economists also note that this method of risk minimization solves the problem of reducing it not by destroying the economic factors of its occurrence, but by using public resources to cover the structural defects of individual economic entities.

A striking manifestation of the process of credit risk diversification is the development in the world practice of consortium lending, in which creditors are several banks participating in the consortium.

Banks may enter into consortium lending agreements for co-financing. Within such an amalgamation, the risk associated with long-term lending is shared among the participants, allowing member banks to maintain their liquidity reserves at a lower level. Banking consortia have a special place in such associations. Consortium lending is carried out in order to guarantee

the return of large loans, reduce the level of risk when lending to projects that require significant capital investment.

A banking consortium is a temporary association of banks that is created to coordinate actions in conducting various types of banking operations or to lend to one but large transaction [9]. A banking consortium is formed by banks on a parity basis. The number of members of such a consortium is not limited. The actions of the participants are coordinated by the main bank (leader), which represents the interests of the consortium, but acts within the powers it receives from other members of the consortium. For the organization of the consortium, the leading bank receives a special fee, in addition to interest and commissions covering its costs. In the case of consortium lending, only the part of the loan provided directly by that bank is subject to reservation in the leading bank. Each member of the consortium independently evaluates the effectiveness of the project and determines the conditions of participation in it or can offer their own option for project lending. The members of the consortium are jointly and severally liable to the borrowers.

In the event of maturity, the borrower not only returns to the creditors the loan amount and interest on the loan, but also reimburses all costs of the organization to carry out credit operations. Repayment of the loan, payment of interest and commissions that cover the costs of participating banks are made in proportion to their role and share of participation provided for in the consortium agreement. A parallel loan has some similarities with a consortium loan. Such an agreement involves two or more banks, each of which independently negotiates with the borrower, and then they agree on the terms of the loan in order to eventually enter into loan agreements with the borrower on equal terms. Each bank independently provides the borrower with a certain share of the loan. Repayment of the loan and payment of interest are made by the borrower to each creditor bank separately.

But it should be noted that the method of diversification is unable to protect against the influence of factors such as expectations of crisis or economic growth in general, fluctuations in bank interest rates, political fluctuations and other global factors. In addition, diversification can not only reduce but also increase risk. The risk increases in the case of lending to industries for which information is limited and insufficient.

Another method of minimizing credit risk used by banks and requiring reliable information about the borrower is insurance.

In foreign practice, credit insurance was first developed in Europe after the First World War. Nowadays, credit insurance is mainly provided by specialized insurance companies. Acceptance of credit risk is mainly associated with the formation of a database on the financial condition of potential customers. Banks are the providers of such information. Information exchange is widely practiced among insurance companies engaged in credit insurance.

There are also specialized firms that provide the necessary information for a fee, including confidential.

For example, in world practice, one of the most

well-known sources of data on creditworthiness is the firm "Dan and Bradstreet", which collects information about about 3 million companies in the United States and Canada and provides it by subscription. Brief information and assessment of the creditworthiness of each firm are published in national and regional directories [4].

In the United States and Western Europe, scoring is widely used in lending - as one of the methods of assessing credit risk - automated systems based on mathematical and statistical methods. Credit scoring is a technology used by credit and financial institutions to determine and assess the solvency of customers. Credit scoring allows, based on certain characteristics of existing customers and potential suppliers, by calculating the points, to determine the risks associated with lending [10].

The initial material for scoring is a variety of information about past customers, on the basis of which using various statistical and non-statistical methods of classification predict the creditworthiness of future borrowers. Among the advantages of scoring systems, Western bankers in the pre-crisis period noted, first of all, a decrease in the level of loan default. However, the crisis has radically changed views on the risk management system. Some modern economists believe that the introduction of scoring and unification of the assessment of the borrower's creditworthiness caused a credit crunch. At the moment, the tendency of an individual approach to each client in assessing its creditworthiness is more progressive.

Scoring can be used at every stage of the credit cycle. When the client applies to the lender, a preliminary scoring is calculated, which allows you to weed out unwanted clients, before the decision to issue a scoring application is used. The scoring method allows you to perform a quick analysis of the loan application in the presence of the client. It should be noted that scoring is used as an additional tool to determine the creditworthiness of the borrower, along with the business rules established for the decision to grant a loan.

After the loan is issued, the scoring of the client's behavior is calculated on the basis of his payment discipline. Based on the results of this scoring, a set of measures to work with current customers is determined - the offer of loyalty systems, additional services on preferential terms to customers with high scoring.

In the third stage of the loan cycle, the scoring of debt collection is calculated. Before repaying the loan, a preliminary scoring of the probability of bad debt is calculated, which identifies customers with a high risk of loan default to which a set of appropriate measures is applied, which allows to significantly prevent the occurrence of bad debts. After overdue debt payment, scoring also allows you to determine a set of actions for such clients.

Advantages of using scoring:

- Reducing the costs of the credit and financial institution by selecting the most reliable customers.
  - Accelerate the loan process.
- Reducing the number of unscrupulous borrowers.
  - Implementation of customer segmentation to

choose the best pricing solution.

- Monitoring the current status of customers.
- Use of different types of scoring cards.
- Support for various strategies.
- Automatic data verification.
- Development of documents (loan agreements, promissory notes, letters of guarantee, etc.).
- Constant supervision over the functioning of the system by specialists of the credit department [1].

At the level of credit portfolio management, they move from optimizing the decision-making process at the level of customers / accounts and transactions to decisions at the level of credit portfolios. The development of stress test models involving "shocks" of external macroeconomic factors and their impact on the "internal parameters" of losses (PD, LGD and the like) is expected.

With this mechanism, the investment rating can already correspond to the entire portfolio, which is equivalent to the rating assigned by the rating agency. These models usually show the time lag between the movements of external factors and the corresponding changes in the default parameters. And these temporary lags vary from product to product. For example, for an unsecured consumer credit portfolio, the effect will be faster than for a mortgage portfolio. In light of this effect, it is possible to identify the possibility of reducing the requirements for economic capital.

The advantage at this level is a measure of the parameters of "appetite" for risk. Risk reduction can be done through securitization, reinsurance or even withdrawal of investments. Risk-adjusted pricing can be retrospectively analyzed at the level of the entire portfolio to determine the true profitability of set prices. External factors that affect the level of losses are identified in advance, which allows you to respond quickly and in a timely manner to changes in the economic situation.

The architecture to maintain this level already requires a "causal" model of losses (ie, which expresses the relationship of losses as a consequence, with the causes that caused them), which should include stress tests and modeling of potential feedback policies. Certain difficulties arise in selecting the appropriate time sequences of data to calibrate the model.

But the best, in our opinion, is the creation in Ukraine of the so-called "gear", a system of specialized credit bureaus, which play an important role in reducing the risk of transactions. A study of world experience has shown that such bureaus are created so that the lender can obtain information about the state of the borrower's solvency, violation of payment discipline and on its basis to assess the degree of risk of future transactions. Foreign experience shows that these problems can be solved only with the help of credit bureaus created to exchange information about borrowers between creditors.

The credit bureau provides various reports on credit transactions depending on the availability of information about the potential borrower, the type of loan they provide and, most importantly, the level of detail required by the lender. The simplest report contains information on past outstanding and overdue loans - the so-called "black" or "negative" data. The most detailed

reports - "white" or "positive" contain the full range of information about the assets and liabilities of the borrower, guarantees, the structure of debt by maturity and time, his employment and family history. Credit bureaus in one form or another now operate almost all over the world. In most countries, it was concluded that effective economic development is impossible without information openness and transparency [7].

An analysis of foreign experience in solving the problems of non-performing loans of commercial banks shows that the elimination of doubtful debts from the balance sheets of commercial banks is a complex matter and requires prudent approaches. In addition, the experience of a number of countries with economies in transition (Czech Republic, Romania, Hungary, Poland), which managed to significantly reduce bad debts in the banking sector, shows that the effective implementation of programs to improve credit quality of banks was supported by government.

The use of foreign experience in improving credit risk management in Ukrainian banks should continue by creating a comprehensive credit risk management mechanism, the effect of which is to insure against probable, undesirable deviations of actual results from those predicted by financial instruments used in world practice. In our opinion, independent reliable rating agencies or credit bureau systems should be established in Ukraine, which have been operating abroad for a long time and have been proven to be effective.

Thus, based on the analysis of the state of credit portfolio management in domestic banks in general, the proposed strategic directions of credit portfolio improvement can be said that a prudent credit policy with rising interest rates, constant monitoring of credit portfolio components, urgent actions of banking management should lead to risk management. to the growth of lending, improving the quality management system of the credit portfolio. Also, the implementation of mostly high-quality measures to improve the structure of the credit portfolio, in our opinion, will affect the financial stability of banks and the efficiency of their activities, will increase the competitiveness and security of domestic banking institutions.

#### References

- 1. Aleskerova Yu.V. Kredy`tno-investy`cijna diyal`nist` bankiv Ukrayin. Elektronne naukove faxove vy`dannya «Global`ni ta nacional`ni problemy` ekonomiky`». 2017. #18 . S.436-438.
- 2. Gajdarzhy`js`ka O.M., Chernikova O.G. Napryamy` udoskonalennya upravlinnya kredy`tny`m ry`zy`kom Problemy` pidvy`shhennya efekty`vnosti infrastruktury`. 2014. # 38. S. 47-50.
- 3. Garbar Zh.V., Stafijchuk L.V. Upravlinnya kredy`tny`m ry`zy`kom komercijnogo banku.Visny`k KNTEU. 2009. #1. S.34-39.
- 4. Garyaga L.O., Bilashenko O.C. Monitory`ng kredy`tnogo ry`zy`ku z vy`kory`stannyam integral`nogo pokazny`ka.Visny`k Ukrayins`koyi akademiyi bankivs`koyi spravy`. 2010. # 2 (29). S. 64-60
- 5. Gluboky`j V. Suchasni pidxody` do ocinky` kredy`tnogo ry`zy`ku banku. Visny`k KNTEU. 2008. #

3 S.101-110.

- 6. Oxrimenko, O. Bankivs`ka sy`stema Ukrayiny`: chy` ye pry`vid dlya poboyuvan` [Elektronny`j resurs] Oficijny`j sajt Ukrayins`koyi Asociaciyi bankiv. Rezhy`m dostupu : http://economics.unian.net/ukr/detail/134820.
- 7. Pashkov A.I. Ocinka yakosti kredy`tnogo portfelya. Buxgalteriya j banky`. 2015. # 3. S. 29-34.
- 8. Pirog V.V. Ocinyuvannya yakosti kredy`tnogo portfelya bankiv z uraxuvannyam vy`konannya ekonomichny`x normaty`viv NBU. Naukovy`j visny`k NLTU Ukrayiny`. 2011. # 2. S. 228-235.
  - 9. Vorobecz` L.V. Ponyattya bankivs`kogo

kredy`tu ta kredy`tny`x ope-racij banku. Pravo Ukrayiny`. 2002. # 12. S. 62-65.

10. Vy`govs`ky`j O. Kredy`tuvannya yak ody`n iz potencijny`x ry`zy`kiv 2018 roku. Ry`zy`ky` dlya bankiv i vkladny`kiv. ZN. 2018. # 1176. URL: https://dt.ua/finances/kredituvannya-yak-odin-iz-potenciynih-rizikiv-2018-roku-riziki-dlya-bankiv-ivkladnikiv-265969 .html

11. Vy`znachennya «kredy`tny`j portfel`»: oficijny`j sajt Nacional`nogo banku Ukrayiny` [Elektronny`j resurs]. — Rezhy`m dostupu: https://bank.gov.ua/control/uk/publish/article?art\_id=1 23409.

#### АНАЛІЗ СУЧАСНОГО СТАНУ ФУНКЦІОНУВАННЯ ФОНДОВОГО РИНКУ УКРАЇНИ

#### Марценюк О.

к.е.н., доцент, доцент кафедри фінансів, банківської справи та страхування, Вінницький національний аграрний університет

#### Руда О.

к.е.н., доцент, доцент кафедри фінансів, банківської справи та страхування, Вінницький національний аграрний університет

## ANALYSIS OF THE CURRENT STATE OF FUNCTIONING OF THE STOCK MARKET OF UKRAINE

#### Martseniuk O.

Candidate of economic sciences, associate professor of department of finances, banking and insurance, Vinnytsia national agrarian University

#### Ruda O

Candidate of economic sciences, associate professor of department of finances, banking and insurance, Vinnytsia national agrarian University

#### Анотація

В статті проаналізовано сучасний стан фондового ринку України. Обгрунтовано актуальні проблеми, що стримують розвиток фондового ринку України та його адаптацію в світовий економічний простір. Доведено, що активізація функціонування фондової біржі в Україні сприятиме залученню стратегічних інвесторів для фінансування інноваційних процесів розвитку на підприємствах промисловості. Визначено основні напрями стратегії розвитку фондових бірж України. Наведено та обгрунтовано можливості використання в Україні методик управління фондовими ринками країн із розвинутою економікою.

#### Abstract

The article analyzes the current state of the stock market of Ukraine. The current problems hindering the development of the stock market of Ukraine and its adaptation to the world economic space are substantiated. It is proved that the intensification of the stock exchange in Ukraine will help attract strategic investors to finance innovative development processes in industrial enterprises. The main directions of the strategy of development of stock exchanges of Ukraine are determined. Possibilities of using in Ukraine methods of management of stock markets of the countries with the developed economy are resulted and substantiated.

**Ключові слова:** фондовий ринок, фондова біржа, цінні папери, стратегічний інвестор, акція, облігація, депозитний сертифікат.

Keywords: stock market, stock exchange, securities, strategic investor, stock, bond, certificate of deposit.

Сучасні умови господарювання, зростання конкуренції, економічні та фінансові інтеграційні процеси поступово віддають провідні ролі ринку капіталів, зокрема ринку цінних паперів, завдяки якому підприємства мають можливість залучати додаткові фінансові ресурси для збереження прибутковості й подальшого розвитку своєї діяльності, а

ринок - ефективних емітентів.

Останніми роками спостерігаються істотні зміни в структурі фінансових інструментів операцій із цінними паперами в України, але динамічний розвиток таких операцій може відбуватися лише за умов дотримання жостких умов світового ринку щодо ліквідності, надійності, конкурентоздатності