THE BANK'S LOAN PORTFOLIO AND METHODS OF ITS OPTIMIZATION

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Annotatsiya. Kredit portfeli tijorat bankining asosiy aktivlar tarkibini tashkil etadi va uning rentabelligi, likvidligi hamda umumiy moliyaviy barqarorligini belgilashda hal qiluvchi rol o'ynaydi. Kredit portfelini samarali boshqarish va optimallashtirish banklarga kredit xavfini minimallashtirish, aktivlar sifatini yaxshilash va uzoq muddatli barqaror o'sishni ta'minlash imkonini beradi. Ushbu maqolada bankning kredit portfeli tushunchasi, tuzilishi va xususiyatlariga keng qamrovli tahlil berilgan, uning sifatiga ta'sir qiluvchi asosiy omillar ko'rib chiqilgan va kredit portfelini optimallashtirishning zamonaviy usullari va vositalari o'rganilgan. Maxsus e'tibor risklarni diversifikatsiyalash, kredit xavfini baholash, normativ talablar va kredit portfeli samaradorligini oshirishda raqamli texnologiyalarning roliga qaratilgan.

Аннотация. Кредитный портфель представляет собой ключевую структуру активов коммерческого банка и играет решающую роль в определении его прибыльности, ликвидности и общей финансовой стабильности. Эффективное управление и оптимизация кредитного портфеля позволяют банкам минимизировать кредитный риск, улучшать качество активов и обеспечивать устойчивый долгосрочный рост. В данной статье представлен всесторонний анализ концепции, структуры и характеристик кредитного портфеля банка, рассмотрены ключевые факторы, влияющие на его качество, и изучены современные методы и инструменты оптимизации кредитного портфеля. Особое внимание уделено диверсификации рисков, оценке кредитного риска, нормативным требованиям и роли цифровых технологий в повышении эффективности управления кредитным портфелем.

Abstract. The loan portfolio represents the core asset structure of a commercial bank and plays a decisive role in determining its profitability, liquidity, and overall financial stability. Effective management and optimization of the loan portfolio enable banks to minimize credit risk, improve asset quality, and ensure sustainable long-term growth. This article provides a comprehensive analysis of the concept, structure, and characteristics of a bank's loan portfolio, examines the key factors affecting its quality, and explores modern methods and tools for loan portfolio optimization. Special emphasis is placed on risk diversification, credit risk assessment, regulatory requirements, and the role of digital technologies in enhancing loan portfolio efficiency.

Kalit so'zlar: portfelni boshqarish, moliyaviy ishonchlilik, keng qamrovli yondashuv, iqtisodiy sharoitlar, kredit vositalari, monitoring.

Ключевые слова: управление портфелем, финансовая надежность, комплексный подход, экономические условия, кредитные средства, мониторинг.
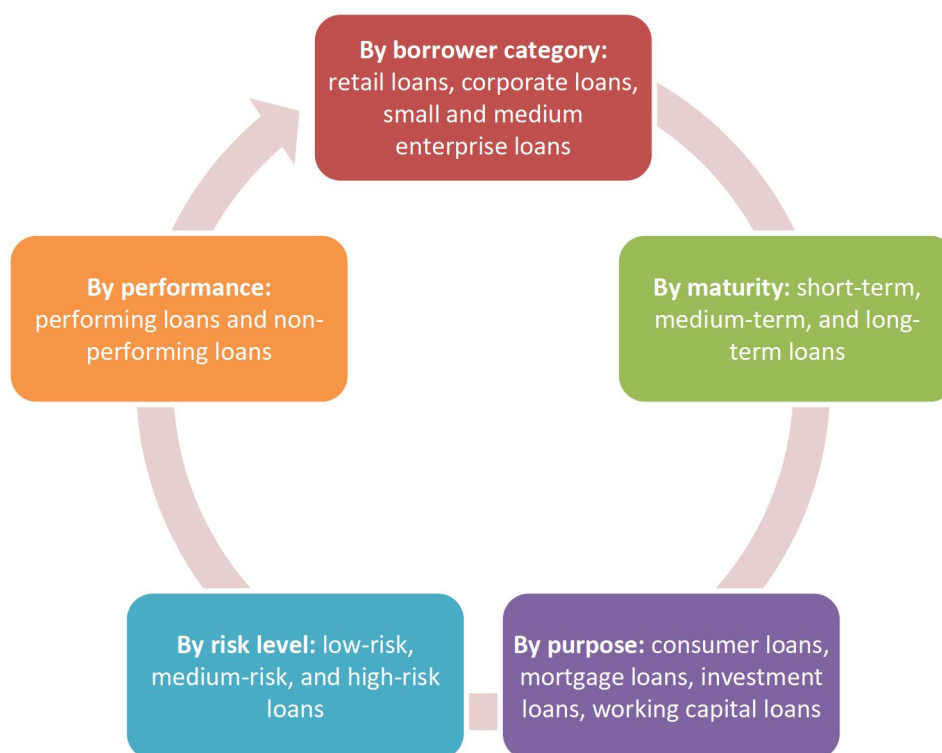
Keywords: portfolio management, financial reliability, comprehensive approach, economic conditions, credit facilities, monitoring.

In the modern financial system, commercial banks serve as the primary intermediaries between savers and borrowers. Lending activities constitute the main source of income for banks, making the loan portfolio the most significant component of their assets. The effectiveness of a bank's operations largely depends on how well its loan portfolio is formed, managed, and optimized.In recent years, increased competition, economic uncertainty, and stricter regulatory requirements have made loan portfolio management more complex. Poorly structured loan portfolios can lead to rising non-performing loans, liquidity shortages, and financial instability. Therefore, optimizing the loan portfolio has become a strategic priority for commercial banks aiming to balance profitability and risk. Bank credit is one of the main sources of spending on productivity and economic services. However, because of the limitations in its amount, accurate planning is essential to optimize its allocation to applicants. This study aims to provide a suitable model to help managers and bank officials achieve the best allocation of credits to applicants in different sections by considering economic conditions according to the limitations of the banking system. The point that it is quite very complex to create a deposit-and-loan portfolio. In the contemporary financial market context, they are obliged to take into account the volatile nature of either external or internal environments. The main task of managing the efficiency of a bank is the task of optimizing the banking portfolio. For the purposes of this work, it is important to distinguish the concepts of "financial reliability" and "financial stability" of a banking organization (Zavyalova et al., 2017). In the authors' opinion, "financial reliability" characterizes the bank's ability to cover all current liabilities to customers (individuals and legal entities) at the expense of its own funds and reserves, without violating liquid liabilities.

A bank's loan portfolio is defined as the total volume of loans and credit facilities extended to borrowers at a given point in time. It reflects the bank's credit policy, risk appetite, and strategic objectives. The loan portfolio is not merely a collection of loans; rather, it is a dynamic system that requires continuous analysis and adjustment. From an economic perspective, the loan portfolio serves as a tool for reallocating financial resources within the economy. By directing funds to productive sectors, banks contribute to economic growth, employment, and investment activity.

The loan portfolio can be classified according to various criteria, which helps banks assess risk concentration and performance:

A balanced loan portfolio requires an optimal combination of these categories to ensure stable returns and controlled risk exposure. Loan portfolio management is a continuous process aimed at achieving the bank's financial and strategic goals. Effective management allows banks to:

- Maximize interest income
- Maintain sufficient liquidity
- Reduce credit and concentration risks
- Comply with prudential regulations
- Enhance capital adequacy and solvency

Without proper management, even a large loan portfolio may become a source of financial vulnerability.

Loan portfolio quality is influenced by a wide range of internal and external factors. Internal factors include the bank's credit policy, lending standards, risk management framework, and staff expertise. External factors involve macroeconomic conditions such as economic growth, inflation, unemployment, and interest rate volatility. Economic downturns often lead to reduced borrower repayment capacity, resulting in higher default rates. Therefore, banks must adopt a proactive approach to loan portfolio monitoring and adjustment.

The modeling of the second variant of the portfolio structure is based on the branch financial stability indicators, namely indicators of financial independence. The analysis of financial independence enables banks to assess the dependence of the branch on the loans. Thus, the financial stability indicators can be a characteristic of branch risks, based on which the overdue indebtedness, the quality of the loan portfolio can be predicted. Accordingly, the

financial sustainability indicators can be used as an input data for modeling the structure of loan portfolio. The results of the calculation of sectorial indicators of financial independence and modeling the structure of loan portfolio by Monte Carlo method simulation are shown in Table2. In columns 3-8 there are results of the authors' calculations of the coefficients of financial autonomy for branches shown in column 1, according to the State Statistics Committee of Russia. In column 2 there is a structure of the loan portfolio obtained by Monte Carlo method based on industry performance ratios of the autonomy. The industries with the highest level of the financial independence are as follows: mining, production and distribution of electricity, gas and water, other utilities and social services. From the perspective of lenders the higher rates of financial independence mean the low risk of losses of the given loans. Accordingly, industries with high financial autonomy have increased the proportion of the loan portfolio. Industries with a minimum share: the construction branch, fisheries, aquaculture, education have reduced rates of financial independence.

Credit risk is the most significant risk associated with loan portfolios. It arises when borrowers fail to meet their contractual obligations. High credit risk can negatively affect a bank's profitability and capital position. Managing credit risk requires a comprehensive approach that includes borrower assessment, loan pricing, collateral management, and continuous monitoring. Diversification is a fundamental method of reducing credit risk. By distributing loans across different economic sectors, geographic regions, and borrower types, banks can minimize the impact of individual defaults on the overall portfolio. Advanced credit scoring models enable banks to evaluate borrower creditworthiness more accurately. These models use financial ratios, income stability, repayment history, and behavioral data to estimate default probabilities. Stress testing allows banks to assess how their loan portfolios would perform under adverse economic scenarios. This helps identify vulnerabilities and develop contingency plans. Continuous monitoring of loan performance helps banks detect early signs of financial distress. Early warning indicators include delayed payments, declining account activity, and deteriorating financial ratios. When borrowers experience financial difficulties, restructuring measures such as extending loan terms or adjusting interest rates can help reduce losses and improve recovery rates. Adequate loan loss provisions and capital buffers are essential for absorbing potential losses. Compliance with international regulatory standards, such as the Basel framework, enhances the resilience of the banking system.

Digital transformation has significantly improved loan portfolio management. Big data analytics, artificial intelligence, and automated monitoring systems enable banks to make faster and more accurate lending decisions. These technologies also enhance transparency and operational efficiency. An optimized loan portfolio supports sustainable economic development by ensuring efficient allocation of financial resources. It enhances the bank's competitiveness, strengthens financial stability, and builds trust among customers and regulators.

Conclusion

The bank's loan portfolio is a critical determinant of its financial performance and risk profile. Effective management and optimization of the loan portfolio require a comprehensive approach that integrates diversification, risk assessment, monitoring, and regulatory compliance. In an increasingly complex financial environment, banks must continuously adapt their loan portfolio strategies to ensure sustainable growth and long-term stability.

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