



## Characteristics of the credit portfolio and their impact on the formation of non-performing Loans

Salixova G.J.

Assistant at Tashkent State University of Economics

Annotatsiya

The article analyzes the dynamics of the credit portfolio of commercial banks in Uzbekistan and the share of non-performing loans (NPLs) over the period 2022–2024. Based on official data from the Central Bank of the Republic of Uzbekistan, the composition of banks' assets and the trends in credit allocation are examined. The research highlights that lending has become a priority area of banking activity, as evidenced by the growing share of loans in the asset structure. At the same time, despite the overall growth in the credit portfolio, the ratio of non-performing loans has shown a downward trend, indicating an improvement in loan quality and risk management. The study also identifies differences in performance across individual banks, with some institutions demonstrating high NPL ratios, while others have significantly improved portfolio quality. Conclusions are drawn regarding the strengthening role of credit intermediation and the importance of effective credit risk management in the development of the banking sector.

Kalit so'zlar

Commercial banks, credit portfolio, non-performing loans (NPL), asset structure, credit risk, Central Bank of Uzbekistan, loan quality, banking sector.

### Introduction

The experience of developed countries shows that the qualitative formation of the asset portfolio is a key factor in ensuring the financial stability and adequate liquidity of commercial banks. In shaping their asset portfolios, commercial banks simultaneously seek to increase the efficiency of capital allocation and to reduce risks. Monitoring the credit portfolio and its quality constitutes the foundation of effective banking activity. The prudent management of the credit portfolio is the basis for mitigating credit risks. To achieve this, banks, acting as investors, optimize their portfolios by selecting financial instruments with high profitability. At the same time, banks serve as intermediaries between issuers and investors, improving mechanisms for allocating assets in line with market demand and risk levels, thereby enhancing the overall efficiency of the asset portfolio.

### Analysis of literature on the topic

Different scholars have provided varying definitions of the credit portfolio. For instance, Prof. Sh.Z.Abdullayeva defines it as “the aggregate of a bank’s claims on loans classified according to certain criteria based on various types of credit risks,”<sup>1</sup> emphasizing the grouping of loans by specific parameters and the importance of risk assessment. According to O.Sattorov, the approach of diversifying the asset portfolio across sectors and industries helps to mitigate the effects of economic fluctuations and ensures continuous monitoring of asset efficiency.<sup>2</sup> Similarly, J.Sinkey argues that “improving the efficiency of the commercial bank credit portfolio and analyzing the borrower’s cash flow plays a crucial role in reducing credit risk and represents one of the essential conditions for maintaining the quality of the credit portfolio.”<sup>3</sup> And also, B.Graham emphasizes that gradually increasing the share of highly profitable but controlled types of loans within the structure of bank assets not only enhances the efficiency of credit resource utilization but also contributes to maintaining the overall quality of the credit portfolio.<sup>4</sup>

### **Research Methodology**

The research relied on a review of scientific works and analytical articles by economists that discuss the significance of credit quality and NPL management for banking stability. Economic research methods such as statistical analysis, comparison, classification, grouping, synthesis, and logical reasoning were extensively applied. These methods made it possible to evaluate the quantitative dynamics of credit growth, measure the relative share of NPLs, and draw conclusions about the effectiveness of credit risk management in the banking sector.

### **Analysis and Discussion of Results**

Effective portfolio management is directly linked to the profitability of commercial banks and plays a significant role in reducing the share of non-performing loans (NPLs). Well-designed and carefully considered management decisions not only increase bank revenues but also reduce the likelihood of NPL formation by diversifying risks within the portfolio. Rational allocation of resources across different asset types and sectors, in-depth analysis of borrowers’ repayment capacity, and a cautious credit policy enable banks to achieve both high profitability and long-term stability. Conversely, poor management decisions can lead not only to a decline in income but also to a rise in the volume of NPLs, thereby negatively affecting bank profitability.

In Uzbekistan, challenges remain in improving the quality of commercial banks’ asset portfolios. In particular, the issue of resource support for long-term loans has not

---

<sup>1</sup> “Banking” / Sh.Z. Abdullaeva, U.O. Azizov; Tashkent: “Iqtisod-Moliya”, 2019.

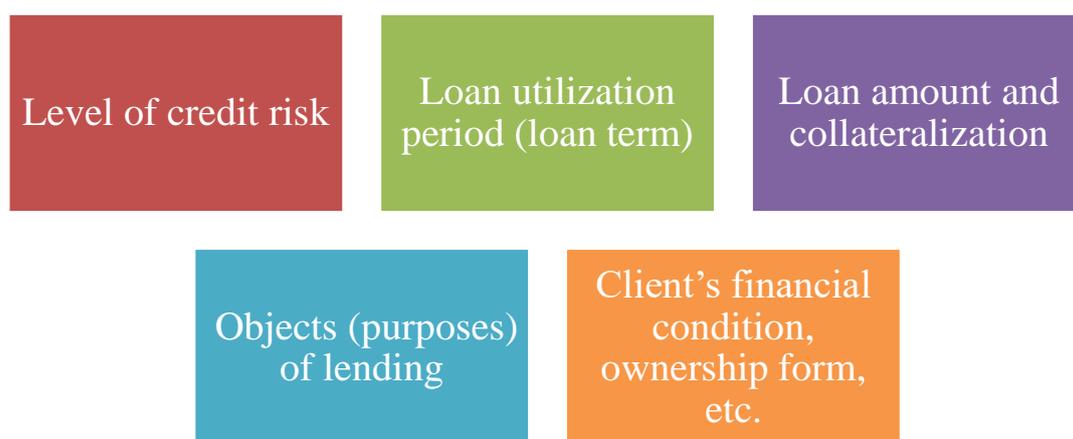
<sup>2</sup> Sattorov, O. Improving the Methodology for Ensuring the Stability of the Banking System of the Republic of Uzbekistan. Abstract of the dissertation submitted for the degree of Doctor of Economic Sciences. Tashkent: BMA, 2018. – 18 p

<sup>3</sup> Sinkey, J. Financial Management in a Commercial Bank and in the Financial Services Industry. Translated from English. Moscow: Alpina Publisher, 2017. – pp. 485–486.

<sup>4</sup> Graham, B. (2016). The Intelligent Investor: A Book of Practical Counsel. Revised edition. New York: HarperCollins. p. 21.

yet been fully resolved. For example, “while 70 percent of deposits placed in banks are short-term, 90 percent of loans are issued on a long-term basis.”<sup>5</sup> Therefore, stabilizing the financial market, strengthening the investment capacity of commercial banks, enhancing the effective regulation of the securities market by competent authorities, as well as implementing comprehensive transformation of state-owned commercial banks to foster genuine competition and align banking activities with market principles, have been identified as priority tasks.

It is essential to consider several factors when studying the credit portfolio. Only by doing so can banks effectively regulate their credit portfolios and ensure sustainable development.



**Figure 1. Factors necessary for studying the loan portfolio.<sup>6</sup>**

One of the most important criteria in assessing the quality of a credit portfolio is the level of credit risk. Each loan inherently involves a degree of uncertainty and the possibility of default. Therefore, when granting a loan, the bank must analyze the borrower’s repayment capacity, previous credit history, market position, and the general economic environment in order to determine the risk level. Loans with a higher degree of risk pose a greater likelihood of losses for the bank and, consequently, must be placed under stricter supervision.

The purpose for which the loan is granted also has a significant impact on the quality of the portfolio. For example, the risk level of a loan issued to a manufacturing enterprise differs from that of a loan allocated for speculative activities. Although investment project loans are typically long-term, they can contribute to enhancing economic efficiency. Thus, by analyzing loan purposes, banks are able to direct capital toward the most promising and secure areas.

The maturity structure of loans—short, medium, and long term—is another factor determining the quality of the credit portfolio. Short-term loans are repaid more

<sup>5</sup> Mirziyoyev Sh.M. “Banks must now pull their own weight”. Available at: <https://sputniknews-uz.com/economy/20191026/2694075>

<sup>6</sup> Author’s elaboration based on the textbook “Banking” / Sh.Z. Abdullaeva, U.O. Azizov; Tashkent: “Iqtisod-Moliya”, 2019. – 210 p.

quickly and help maintain the bank's liquidity. Long-term loans, on the other hand, may generate higher profits but tie up the bank's resources for extended periods and are associated with greater risk. Therefore, loan maturities must be chosen in a balanced manner.

Loan size also directly affects the level of risk: the larger the loan, the greater the potential risk for the bank. For this reason, large loans are generally secured with additional guarantees and collateral. The extent to which the loan is fully or partially insured, as well as the adequacy and liquidity of collateral, is of crucial importance for the bank. Strong collateral enhances confidence in repayment and reduces the likelihood of losses.

The borrower's financial stability and repayment capacity constitute one of the most decisive factors for ensuring the security of the credit portfolio. The ratio of assets to liabilities on the client's balance sheet, the stability of income sources, and the form of ownership all increase the reliability of the loan. For instance, loans to state-owned enterprises are often considered more stable, whereas those extended to the private sector may involve higher risks. In addition, a positive credit history of the borrower plays a significant role in the decision-making process.

Table 2

### Stages in the process of forming banks' credit portfolios:<sup>7</sup>

Stages	Description
<b>Selection of criteria for assessing credit quality</b>	Specific criteria are developed for evaluating loans, taking into account the level of credit risk. These criteria are based on factors such as the borrower's financial condition, repayment capacity, collateral, and market conditions. In addition, loans are classified into main groups according to their interest rates.
<b>Classification of loans</b>	Loans are grouped according to their maturity (short-, medium-, and long-term), purpose (consumer, investment, working capital replenishment, etc.), and level of collateral. This process enables the bank to conduct a deeper analysis of the structure of the credit portfolio.
<b>Determination of risk percentage</b>	The expected level of risk is determined for each loan group. For instance, consumer loans may carry a higher level of risk, while investment loans may be considered medium or low risk. Proper determination of the risk percentage is essential for assessing the overall risk of the credit portfolio.
<b>Calculation of the absolute amount of credit risk</b>	The monetary amount of risk for each loan and for the bank as a whole is calculated. This is done by multiplying the loan amount by the corresponding risk percentage. This process provides a clear measurement of the risk volume in the credit portfolio.

<sup>7</sup> Author's elaboration based on the textbook "Banking" / Sh.Z. Abdullaeva, U.O. Azizov; Tashkent: "Iqtisod-Moliya", 2019

<b>Formation of reserve funds</b>	Based on relevant statistical and practical data, sufficient reserves are allocated to cover potential loan losses. This serves as a key tool for ensuring the bank's financial stability and protecting against unexpected losses.
<b>Assessment of credit portfolio quality</b>	Using specific ratios (e.g., the share of non-performing loans, profitability level, and risk-related indicators), the quality of the credit portfolio is analyzed. This evaluation allows the bank to determine the effectiveness of its credit policy.
<b>Improvement of credit portfolio structure</b>	Strategies are developed to reduce the share of high-risk loans, expand diversification, and focus on low-risk and high-yield loan types. As a result, the stability and profitability of the credit portfolio are enhanced.

In practice, the formation of a credit portfolio consists of several successive stages that together create an interconnected system. At the outset, the bank establishes criteria that serve to assess the quality of loans and ensure their proper allocation. This process is based on a thorough analysis of borrowers' financial condition, the degree of collateral coverage, and an evaluation of market conditions. Such an approach enables the bank to pursue a consistent lending policy.

At the next stage, the structure of the credit portfolio is determined. Loans are grouped according to their purpose, maturity, and level of collateral, which ensures portfolio diversification. Through this process, the bank prevents excessive accumulation of high-risk loans and maintains a balanced overall risk level.

The process of assessing credit risks is also of particular importance. The expected risk level for each loan type is identified, and corresponding interest rates are assigned. This approach allows the bank to control risks not only qualitatively but also quantitatively.

On this basis, the absolute volume of risks within the credit portfolio is calculated. This stage provides the bank with a clear measure of the financial scale of risks and determines the necessity of forming reserve funds. The reserve system is one of the key instruments for ensuring the bank's financial stability and serves to mitigate unexpected losses arising from credit activities.

In the following stage, the quality of the portfolio is assessed. Using indicators such as the share of non-performing loans, profitability measures, and other financial ratios, the effectiveness of the bank's credit policy is evaluated. Based on these assessment results, decisions are made to further improve lending strategies.

Finally, the portfolio structure is optimized. The bank directs its strategy toward reducing the share of high-risk loans, increasing the degree of diversification, and expanding the proportion of more stable and profitable loan types. As a result, the profitability of the credit portfolio increases, while the bank's financial stability is strengthened.

**Table 2**

### Structure of the assets of commercial banks of the Republic of Uzbekistan (as a percentage of total)<sup>8</sup>

Structure of Assets	Years		
	2022	2023	2024
Cash in hand	1,6	2,9	2,5
Funds with the Central Bank	14,2	8,9	5,3
Funds in other banks	12,9	15,0	9,3
Investments	3,1	2,5	1,1
Loans and advances	61,9	65,1	76,8
Fixed assets	2,1	1,4	1,6
Other assets	4,2	4,2	3,4
<b>Total assets</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

The data in Table 2 indicate that during 2022–2024, significant changes occurred in the structure of commercial banks' assets. The largest share is accounted for by loans and advances: from 61.9 percent in 2022, this figure increased to 65.1 percent in 2023 and reached 76.8 percent in 2024. This demonstrates that lending activities are increasingly becoming the priority direction in banks' operations. At the same time, the volume of funds held with the Central Bank has decreased considerably. While in 2022 this share stood at 14.2 percent, by 2024 it had fallen to 5.3 percent. Hence, it can be observed that commercial banks are allocating a greater portion of available resources to lending.

**Table 3**

### Commercial banks' credit portfolio and the amount of non-performing loans (in billion soums)<sup>9</sup>

Bank name	2022- yil Credi t portfo lio	2022 -yil NPL	2022 -yil NPL (%)	2023- yil Credi t portfo lio	2023 -yil NPL	2023 -yil NPL (%)	2024- yil Credi t portfo lio	2024 -yil NPL	2024 -yil NPL (%)
<b>JSCB “National Bank”</b>	74033	3305	4.46	89410	2638	2.95	99423	3098	3.12
<b>JSC “Industrial Construction Bank”</b>	43148	1630	3.78	48076	1359	2.83	57124	1283	2.25

<sup>8</sup> Author's elaboration based on data from the Central Bank's website. <https://cbu.uz>

<sup>9</sup> Author's elaboration based on data from the Central Bank's website. <https://cbu.uz>

<b>JSCB “Asaka”</b>	37685	1819	4.83	36742	1707	4.65	39213	1731	4.41
<b>JSCB “Agrobank”</b>	32258	1495	4.63	43846	1685	3.84	54483	2071	3.8
<b>JSC “People’s Bank”</b>	19596	3857	19.68	21666	2584	11.93	24549	1855	7.56
<b>JSCB “Business Development Bank”</b>	17496	749	4.28	20292	790	3.89	21801	1935	8.88
<b>JSCB “Microcredit bank”</b>	10816	642	5.94	13319	635	4.77	14437	865	5.99
<b>JSCB “Turonbank ”</b>	8129	266	3.27	9431	242	2.57	11894	271	2.28
<b>JSC “Aloqabank ”</b>	7754	314	4.05	9162	186	2.03	10294	157	1.53
<b>JSC “Capital Bank”</b>	80	2	2.5	74	1	1.35	79	2	2.53
<b>Total</b>	25099 5	1407 9	5.61	29201 8	1182 7	4.05	33329 7	1326 8	3.98

Over the past three years, the lending activity of commercial banks has demonstrated a stable growth trend. In 2022, the total credit portfolio amounted to 250.9 trillion soums, while by the end of 2024 this figure had reached 333.3 trillion soums. In other words, within a short period the portfolio volume increased by nearly one-third. This indicates the expansion of financial intermediation activities and the rising volume of lending in the economy.

Alongside the credit portfolio, the indicators of non-performing loans (NPLs) also play an important role in assessing the performance of banks. In 2022, the total volume of NPLs amounted to 14.1 trillion soums, whereas by 2024 it had decreased to 13.3 trillion soums. This suggests that the quality of the banking sector’s loan portfolio has gradually improved. Most importantly, the share of NPLs fell from 5.6% in 2022 to 3.9% in 2024. These figures indicate a decline in credit risks and an improvement in management quality.

However, not all banks demonstrated the same results. For instance, the People’s Bank held an NPL ratio of 19.7% in 2022. Although the indicator sharply declined in subsequent years (7.5% in 2024), it still remained the highest in the system. Similarly, the Business Management Bank also recorded a relatively high share of non-performing loans, reaching 8.9% in 2024, well above the sector average.

Conversely, positive dynamics can be observed in certain banks. At Aloqabank, the NPL ratio stood at 4% in 2022 but decreased to only 1.5% in 2024. At Turonbank, this indicator remained around 2.3%, positioning it among the banks with the lowest NPL levels. Among the larger banks, the National Bank and the Industrial Construction Bank maintained NPL shares within the 2–4% range, which was close to the sector's average.

**In conclusion**, the analysis confirms that the credit portfolio remains the dominant component of commercial banks' assets, highlighting its critical role in financial intermediation. At the same time, the presence of non-performing loans (NPLs) indicates that credit risk management remains a persistent challenge for the banking sector. A downward trend in NPL ratios generally reflects improvements in monitoring, borrower assessment, and regulatory measures; however, discrepancies across individual banks suggest that risk levels are not evenly distributed. Sustainable banking stability therefore requires not only credit growth but also balanced portfolio diversification and effective control mechanisms.

#### Recommendations

- Strengthen credit risk assessment: Commercial banks should adopt more advanced credit scoring systems and digital tools to better evaluate borrowers' solvency and reduce the likelihood of defaults.
- Diversify the credit portfolio: Expanding lending across different sectors and client groups can minimize the concentration of risks and ensure portfolio stability.
- Enhance NPL management practices: Introducing early-warning systems, restructuring options for distressed loans, and active secondary markets for NPLs would help reduce problem loan ratios.
- Improve reserve formation policies: Adequate provisioning for expected credit losses will safeguard banks against unforeseen shocks and strengthen overall financial resilience.
- Promote regulatory oversight and transparency: The Central Bank should continue enforcing prudential standards, while commercial banks must provide transparent reporting on credit quality and NPL levels.

#### References:

1. Mirziyoyev Sh.M. "Banks must now pull their own weight". Available at: <https://sputniknews-uz.com/economy/20191026/2694075>
2. Banking" / Sh.Z. Abdullaeva, U.O. Azizov; Tashkent: "Iqtisod-Moliya", 2019. – 210 p.
3. Sattorov, O. Improving the Methodology for Ensuring the Stability of the Banking System of the Republic of Uzbekistan. Abstract of the dissertation submitted for the degree of Doctor of Economic Sciences. Tashkent: BMA, 2018. – 18 p
4. Banking. Textbook. Edited by Prof. O.I. Lavrushin. Moscow: KNORUS, 2016.
5. Sinkey, J. Financial Management in a Commercial Bank and in the Financial Services Industry. Translated from English. Moscow: Alpina Publisher, 2017. – pp. 485–486
6. Graham, B. (2016). The Intelligent Investor: A Book of Practical Counsel. Revised edition. New York: HarperCollins. p. 21