

## Management of Asset Operations of Commercial Banks and Ways to Improve Their Efficiency

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**Abstract:** Ensuring the high quality of the asset portfolio of a commercial bank is currently one of the most critical issues required to guarantee their long-term financial stability, risk management mitigation, and overall liquidity. In modern economic conditions, banks face various financial risks that directly affect their profitability and capital adequacy. In this scientific article, a comprehensive analysis is conducted to evaluate the structural components of bank assets and their vulnerability to market fluctuations. Based on the findings, a thorough attempt was made to develop scientific and practical recommendations aimed at increasing the efficiency of asset management, optimizing the loan portfolio, and maximizing the return on investment. The study focuses on introducing advanced risk assessment methodologies and innovative financial instruments to enhance the premium quality of the assets of commercial banks. Ultimately, the proposed strategies and models serve as a valuable guide for banking authorities and financial managers to maintain a balanced, secure, and highly profitable asset structure.

**Key words:** Bank, bank assets, risks, national economy, bank portfolio, asset quality ass, banking system, credit portfolio investment.

### Introduction

In today's global economy, uneven development continues to create different economic challenges. Because of this, solving problems in the banking system, strengthening economic independence, and maintaining macroeconomic stability have become very important tasks. Another important issue is reducing the negative effects of financial and economic shocks that may occur in the financial and credit sectors. In this situation, the effective management of international bank assets plays a significant role. In recent years, effective asset management has helped many large banks strengthen their positions in the global financial market. As a result, the total value of bank assets has increased significantly. For example, in 2023 the asset volume of Industrial and Commercial Bank of China reached USD 3,473.1 billion. At the same time, the assets of Mitsubishi UFJ Financial Group amounted to USD 2,626.3 billion, JPMorgan Chase – USD 2,490.9 billion, HSBC Holdings – USD 2,374.9 billion, BNP Paribas – USD 2,189.2 billion, Deutsche Bank – USD 1,676.5 billion, and Sberbank – RUB 27.1 trillion. These figures show the rapid growth of bank assets in the global financial system.

Today, one of the important tasks of the global economy is improving the efficiency of asset management in commercial banks. This can be achieved through innovative approaches, improving risk-hedging practices in asset operations, and developing modern methods for assessing the influence of internal and external factors on banking activities. When developing asset management strategies, special attention is given to modern banking technologies and the active use of digital economy elements. These factors have become one of the main focuses of scientific research.

At the same time, researchers are conducting comprehensive studies to integrate marketing and management approaches into asset operation management and to improve asset management mechanisms.

In Uzbekistan, where rapid economic reforms are currently being implemented, the volume of assets in the banking system is steadily increasing, and their share in the country's GDP is also growing. However, the insufficient development of asset management strategies in some commercial banks remains a serious problem. Even though the total volume of banking assets is increasing, weaknesses in management strategies can lead to lower profitability in some large commercial banks.

Another issue is that a large part of bank deposits consists of funds from legal entities. This situation may increase the level of risk in asset operations carried out by commercial banks.

According to the Action Strategy for the Development of the Republic of Uzbekistan for 2017–2021, it is important to increase the capitalization of commercial banks, expand the volume of credit portfolios, improve their quality, finance investment projects, and widen lending opportunities for small businesses and private entrepreneurship.

## **Review of related literature.**

Issues related to the management of banking activities have been studied by many foreign and CIS economists. Important contributions to this field were made by researchers such as J. Sinkey, P. Rose, R. Daft, O. Lavrushin, B. Edwards, R. Claessen, F. Wertz, A. Alaverdov, A. Pechnikova, A. Maksyutov, G. Prosvetov, A. Lukakov and several other scholars.

In his studies on bank management, R. Daft considers bank management as a specific professional activity aimed at achieving strategic goals. According to him, banks can reach their objectives by using financial and labor resources effectively and by applying appropriate management principles, functions, and methods that correspond to the conditions of the market economy.

A. Pechnikova states that asset operations represent the process of placing bank resources. She emphasizes that this process is extremely important for commercial banks. Asset operations help ensure both profitability and liquidity of banks. Through these operations, banks are able to perform two major functions of commercial banking activity.

First, banks direct temporarily free financial resources into promising sectors of the economy. Second, they provide financial support to economic agents who need capital. As a result, asset operations contribute to the development of production and investment activities, the introduction of innovations, and the expansion of housing construction.

In addition to foreign researchers, Uzbek economists have also studied different aspects of bank operations management. Among them are F. Mullajonov, M. Sharifkhodjaev, A. Bekmurodov, N. Karimov, Yo. Abdullaev, Sh. Abdullaeva, N. Jumaev, O. Olimjonov, A. Omonov, T. Qoraliev, B. Berdiyarov, H. Rahmatov, N. Jiyanova and others.

For example, H. Rahmatov connects the development of the banking system with the effectiveness of asset operations and pays special attention to the asset management strategy in banks. According to him, asset management strategy is an important element of the overall financial strategy of a bank. When developing this strategy, banks should analyze various factors that influence financial stability.

Local economists A. Omonov and T. Qoraliev describe asset operations of commercial banks as operations related to the placement of funds formed through banks' passive operations. These operations are carried out for different purposes, mainly to generate income while maintaining the necessary level of liquidity.

## **Research methodology**

The purpose of this research is to develop scientific and practical recommendations aimed at improving the strategies used in managing asset operations of commercial banks.

In order to achieve this objective, different research methods were applied. The study used methods such as analysis, comparison, logical reasoning, and generalization to examine theoretical and practical aspects of asset management in commercial banks.

Statistical information related to the banking sector was also studied to evaluate the current state of asset management. In addition, international experience and the practices of commercial banks in Uzbekistan were analyzed.

Based on the results obtained during the research, appropriate conclusions were made and practical recommendations were proposed for improving the efficiency of asset management strategies in commercial banks.

The scientific novelty of the article consists of the following:

- the factors influencing the processes of managing asset operations of commercial banks and their interrelationships have been studied, and a mechanism for early identification of factors that negatively affect the ability of commercial banks to generate income has been developed;

– a proposal has been substantiated to improve the strategy for effective management of asset operations by enhancing the quality of banking services and attracting customers through the use of asset and liability instruments of commercial banks;

– “Asset operations are the main indicator ensuring the financial stability of commercial banks, encompassing the processes that generate sources of income”;

– “Effective management of asset operations is the single key factor in increasing a bank’s income and competitiveness, ensuring stability, and protecting against risks.”

The examination of the aforementioned theoretical features has scientifically validated the continuity of the sequence of procedures for the proper management of commercial banks' assets and liabilities. (Figure 1).

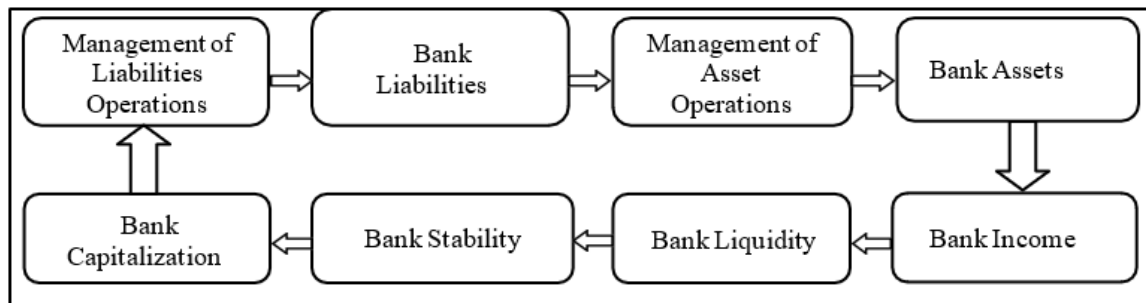


Figure 1. Continuity of the processes of effective management of assets and liabilities of commercial banks.

By ensuring the integrity and coherence of this mechanism, a bank achieves higher profitability, liquidity, stability, and growth in its capital. This, in turn, increases customers’ trust in the bank.

In the research, taking profitability into account, bank assets are analyzed by classifying them into income-generating and non-income-generating types. Figure 2 presents the growth trend in the volume of income-generating and non-income-generating assets of commercial banks over the period from 2010 to 2024.

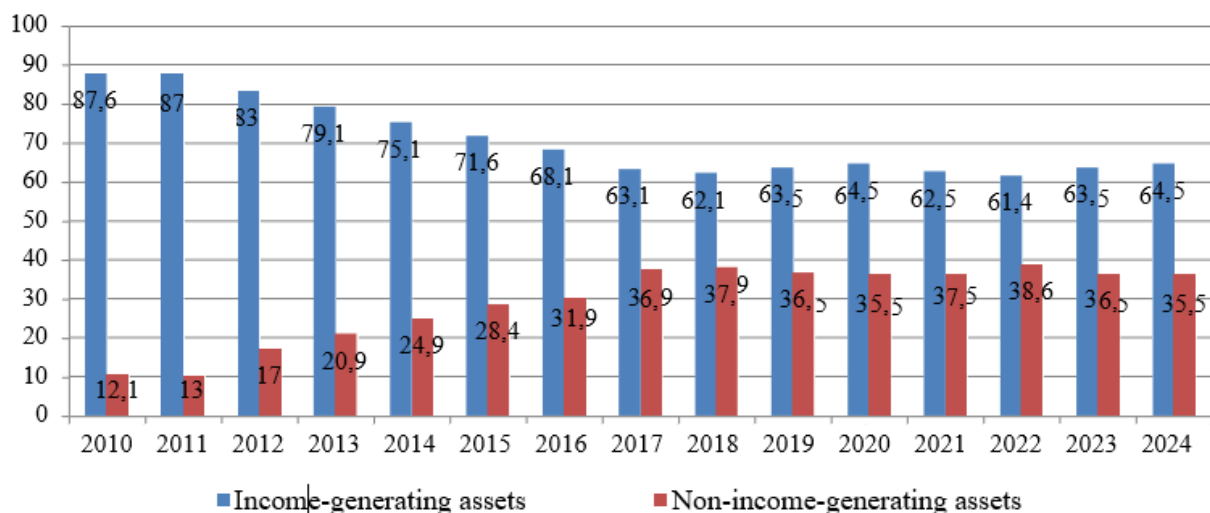


Figure 2. Dynamics of changes in the volume of income-generating and non-income-generating assets of commercial banks (in percent)

According to the data in Figure 2, in 2010 compared to 2024, the volume of income-generating assets decreased by 23.1 percentage points, while the volume of non-income-generating assets increased by 23.4 percentage points. The difference between them amounted to 29 percentage points in 2024. These indicators show that banks are operating on a risk-based basis, since the share of income-generating assets is not sufficiently high. Therefore, particular attention is paid to income-generating and non-income-generating assets in the process of managing asset operations.

We believe that managing asset operations according to their profitability is crucial for addressing several challenges, such as pinpointing avenues for enhancing bank profitability and making informed financing decisions; formulating strategies to diminish the proportion of non-income-generating assets within the overall asset operations; identifying key pathways for asset diversification, particularly emphasizing securities and investment operations, as these assets constitute a minor segment of the bank's balance sheet; and ensuring the appropriate distribution of asset operations across various regions of the country, while considering regional characteristics.

Table 1.

Analysis of the profitability of capital and assets of the National Bank for Foreign Economic Activity of the Republic of Uzbekistan, Uzsanoatqurilishbank JSCB, Mikroreditbank JSCB, and Trustbank PJSC

| Indicators             | Bank                 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|------------------------|----------------------|------|------|------|------|------|------|------|------|
| ROE (Return on Equity) | National Bank        | 5.27 | 5.73 | 7.09 | 7.40 | 0.55 | 0.19 | 24.2 | 22.6 |
| ROA (Return on Assets) | Uzsanoatqurilishbank | 0.76 | 0.51 | 0.69 | 0.68 | 0.12 | 0.04 | 3.1  | 2.6  |

Based on the data in Table 1, it can be observed that the level of profitability of capital and assets of Trustbank PJSC is higher than that of Uzsanoatqurilishbank JSCB, the National Bank for Foreign Economic Activity of the Republic of Uzbekistan, and Mikroreditbank JSCB.

This raises the question of why the National Bank for Foreign Economic Activity of the Republic of Uzbekistan—which ranks first among the country's banks in terms of capital and asset volumes—has a low level of profitability. This indicates inefficient use of the bank's capital and assets. Similar problems can also be observed at Uzsanoatqurilishbank.

To address these issues, first of all, it is necessary to systematize the activities of bank management bodies, which will make it possible to improve banks' asset operation management strategies. At the same time, management approaches should be developed based on an analysis of internal and external factors affecting asset operations. Identifying the causes of non-performing loans and proposing measures for their management will enable the improvement of asset operation management strategies of banks and, consequently, create opportunities to increase banks' profitability levels.

Research into the analysis of internal and external factors influencing the formation of asset operations involves studying the economic and legal conditions of financial activities within the bank and forecasting their possible changes in the future period. In addition, developing a strategy at this stage requires analyzing financial market conditions and preparing forecasts from the perspective of market segments related to the bank's future activities. The role of strategy in managing asset operations in banks is examined in Figure 3.

Operating on the basis of the factors outlined above has a positive impact on a bank's ability to achieve higher levels of profitability, stability, and liquidity. This, in turn, serves as a driving force for the further development of the national banking system. Consequently, maintaining the stability of the banking system is intricately connected to the management of asset activities that predominantly facilitate firms' economic expansion, modernization, technological advancement, and the manufacture of export-oriented commodities. The extended life cycle of bank clients enhances production sustainability, positively influencing both micro- and macro-level aspects.

The share of total assets of commercial banks in GDP also indicates how relevant and important the establishment of an effective asset operations management mechanism is.

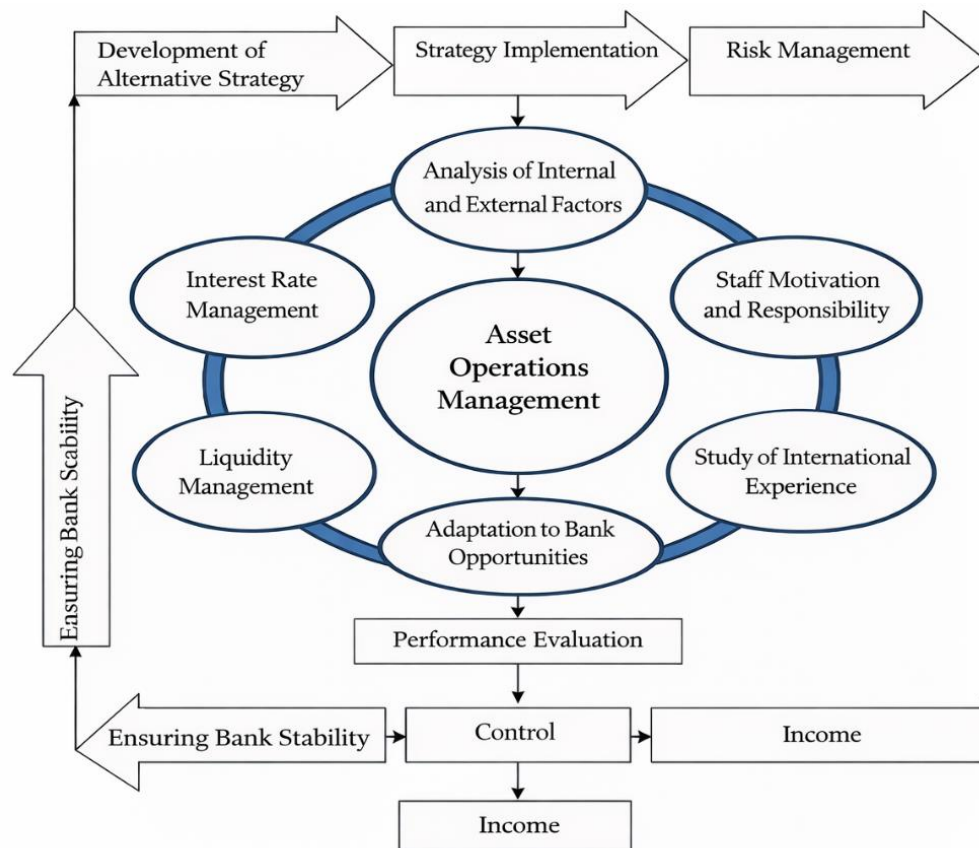


Figure 3. Mechanism for Implementing the Asset Operations Management Strategy

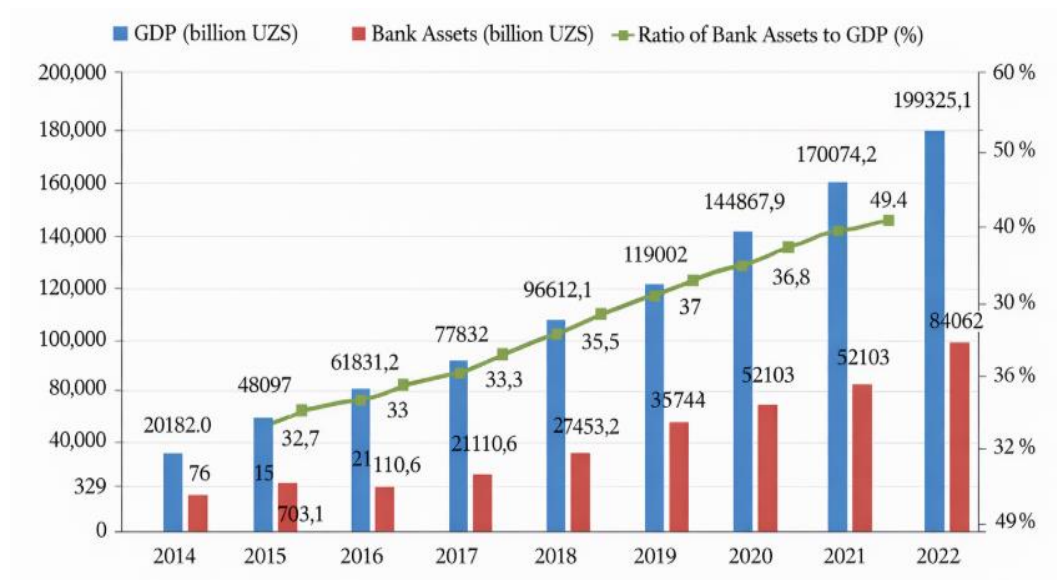


Figure 4. Trend in Changes in the Ratio of Total Assets of Commercial Banks to GDP in the Republic of Uzbekistan (as of January 1, 2024)

According to the data presented in Figure 4, during the period from 2014 to 2023, GDP increased by 6.3 times, while the total volume of bank assets grew by 9 times over the same period. However, for comparison, in 2023 the total assets of the banking system accounted for nearly 49.4 percent of GDP. These circumstances demonstrate the high relevance of improving the strategy for managing asset operations. In this context, measures aimed at eliminating sector-specific problems bring to the

forefront such priority tasks as improving the structure of commercial banks' assets, adapting the assessment of the banking system to international standards, and attracting customers through the introduction of modern banking operations.

The methods of managing asset operations in banks are classified, and all of these methods are currently applied by commercial banks. In the study, this set of methods was improved through proposals aimed at developing management based on the introduction of innovative methods in banks, in accordance with the Decree of the President of the Republic of Uzbekistan dated January 22, 2023, No. PF-5308, "On the State Program for the Year of Supporting Active Entrepreneurship, Innovative Ideas, and Technologies" (Figure 5).

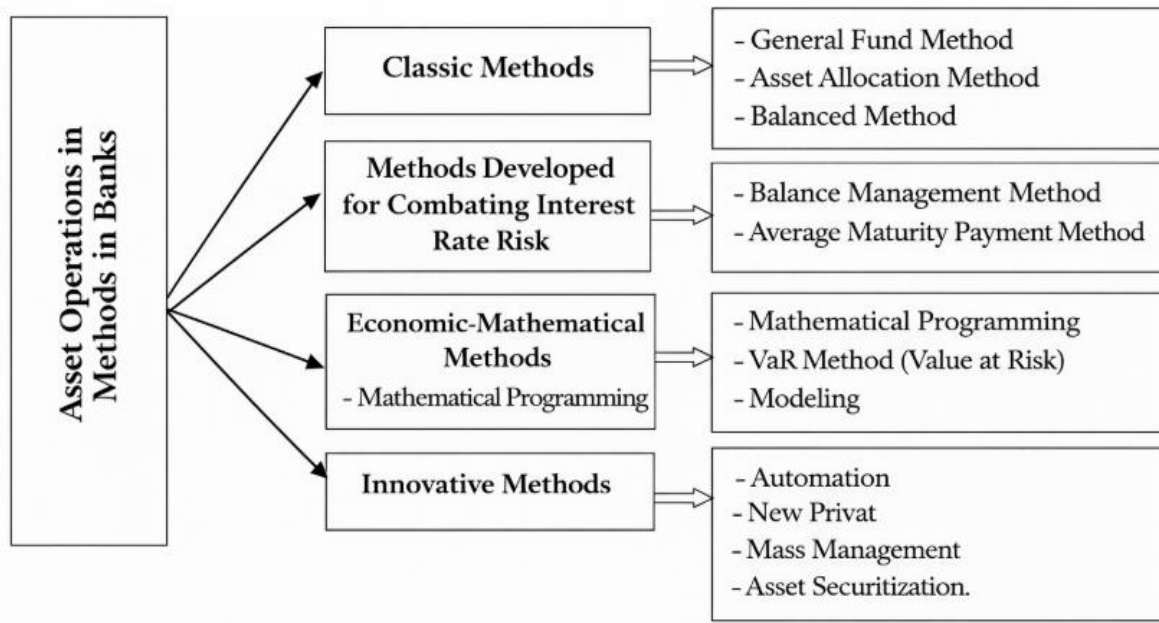


Figure 5. Methods of Managing Asset Operations in Banks

## Analysis and results

One of the innovative methods proposed in the scientific article is *New Privat*, through which modern types of services are introduced into the banking system. This creates broad opportunities for attracting customers and increasing bank revenues. This system is mainly implemented with the aim of attracting large clients.

This system is divided into two types:

1. **Pure economic income:** In this case, by directing clients' funds to various investment projects, it is envisaged that the bank and the client will earn profits on the basis of equal partnership.
2. **Socio-economic service provision:** Here, the client's conditions are taken into account, whereby the bank charges interest depending on the service package, while the client, trusting the bank, legally provides information to the bank about their socio-economic issues.

The results of the analysis show that the banks considered as the objects of the study differ in terms of their resource base, structure, and types of clients. Each of these banks pursues a development policy aimed at strengthening its position in the financial market by increasing its assets, enhancing its resource potential, and achieving growth through prudent risk-taking and effective management methods (Figure 6).

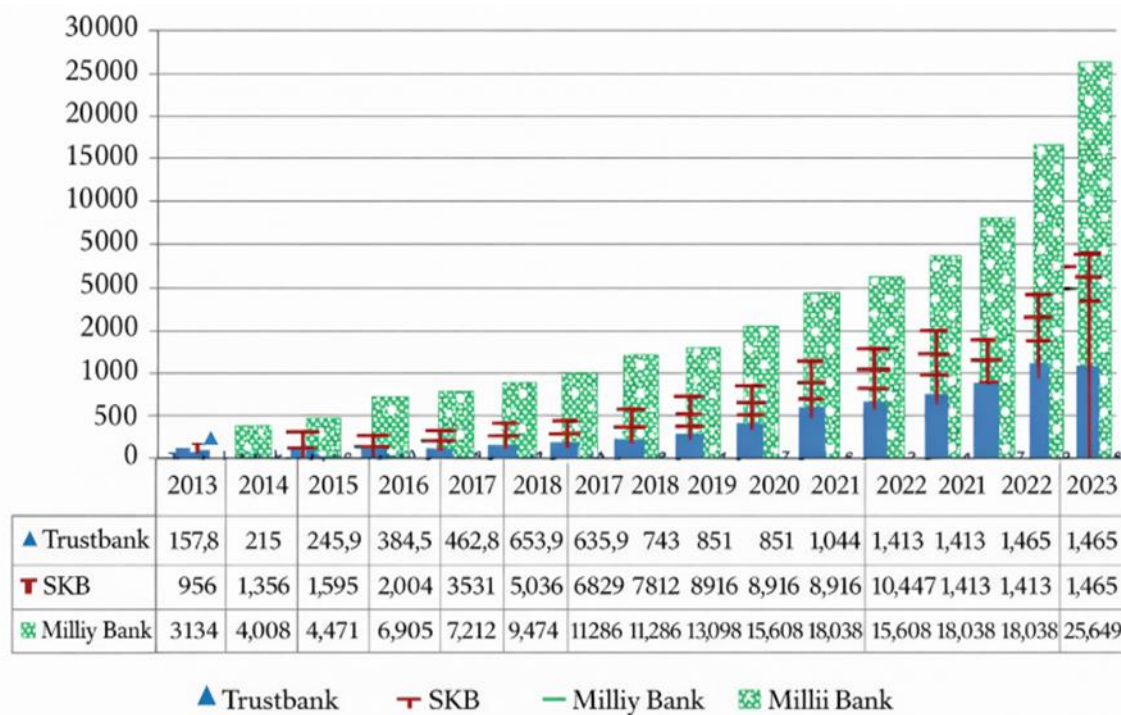


Figure 6. Trend in Changes in the Assets of the Research Objects during 2013–2023 (in billion UZS)

In particular, in 2023 compared to 2013, the growth dynamics of asset volumes amounted to 12.2 percent at the National Bank for Foreign Economic Activity of the Republic of Uzbekistan, 7.8 percent at Uzsanotqurilishbank JSCB, and 10.7 percent at Trustbank PJSC.

Achieving positive results largely depends on the formation of effective asset operations management strategies by commercial banks. In this context, based on an analysis of the structure and share of commercial banks' assets, it is necessary to pay special attention to identifying which types of operations are prioritized in asset operations management (Table 2).

Table 2.

Dynamics of Changes in the Structural Composition of Banking System Assets during 2018–2023 (in percent)

| No. | Assets                                                 | 2018       | 2019       | 2020       | 2021       | 2022       | 2023       | Change in 2023 compared to 2018 |
|-----|--------------------------------------------------------|------------|------------|------------|------------|------------|------------|---------------------------------|
| 1   | Cash and valuables                                     | 4.26       | 3.49       | 2.38       | 2.99       | 3.02       | 1.91       | -2.35                           |
| 2   | Funds with the Central Bank and correspondent accounts | 15.66      | 19.85      | 20.87      | 16.69      | 11.51      | 14.88      | -0.86                           |
| 3   | Funds receivable from other banks                      | 12.73      | 16.38      | 13.82      | 17.99      | 13.46      | 11.55      | -1.18                           |
| 4   | Funds from purchase and sale operations                | 3.49       | 0.55       | 0.39       | 0.13       | 0.08       | 0.07       | -3.42                           |
| 5   | Net investments                                        | 3.19       | 0.88       | 2.99       | 2.41       | 2.23       | 1.57       | -1.62                           |
| 6   | Loans and leasing assets                               | 46.76      | 48.31      | 48.43      | 50.28      | 61.43      | 61.78      | 15.02                           |
| 7   | Purchased bills                                        | 0.27       | 0.10       | 0.00       | 0.00       | 0.00       | 0.00       | -0.27                           |
| 8   | Other financial assets                                 | 1.68       | 2.77       | 2.16       | 1.04       | 1.88       | 1.78       | 0.10                            |
| 9   | Fixed assets                                           | 3.61       | 3.26       | 3.27       | 3.28       | 3.08       | 2.55       | -1.06                           |
| 10  | Accrued interest receivable                            | 1.23       | 0.70       | 0.65       | 0.64       | 0.61       | 0.71       | -0.52                           |
| 11  | Other assets                                           | 7.14       | 3.71       | 5.04       | 4.55       | 2.70       | 2.68       | -4.46                           |
|     | <b>Total assets</b>                                    | <b>100</b> | <b>100</b> | <b>100</b> | <b>100</b> | <b>100</b> | <b>100</b> | —                               |

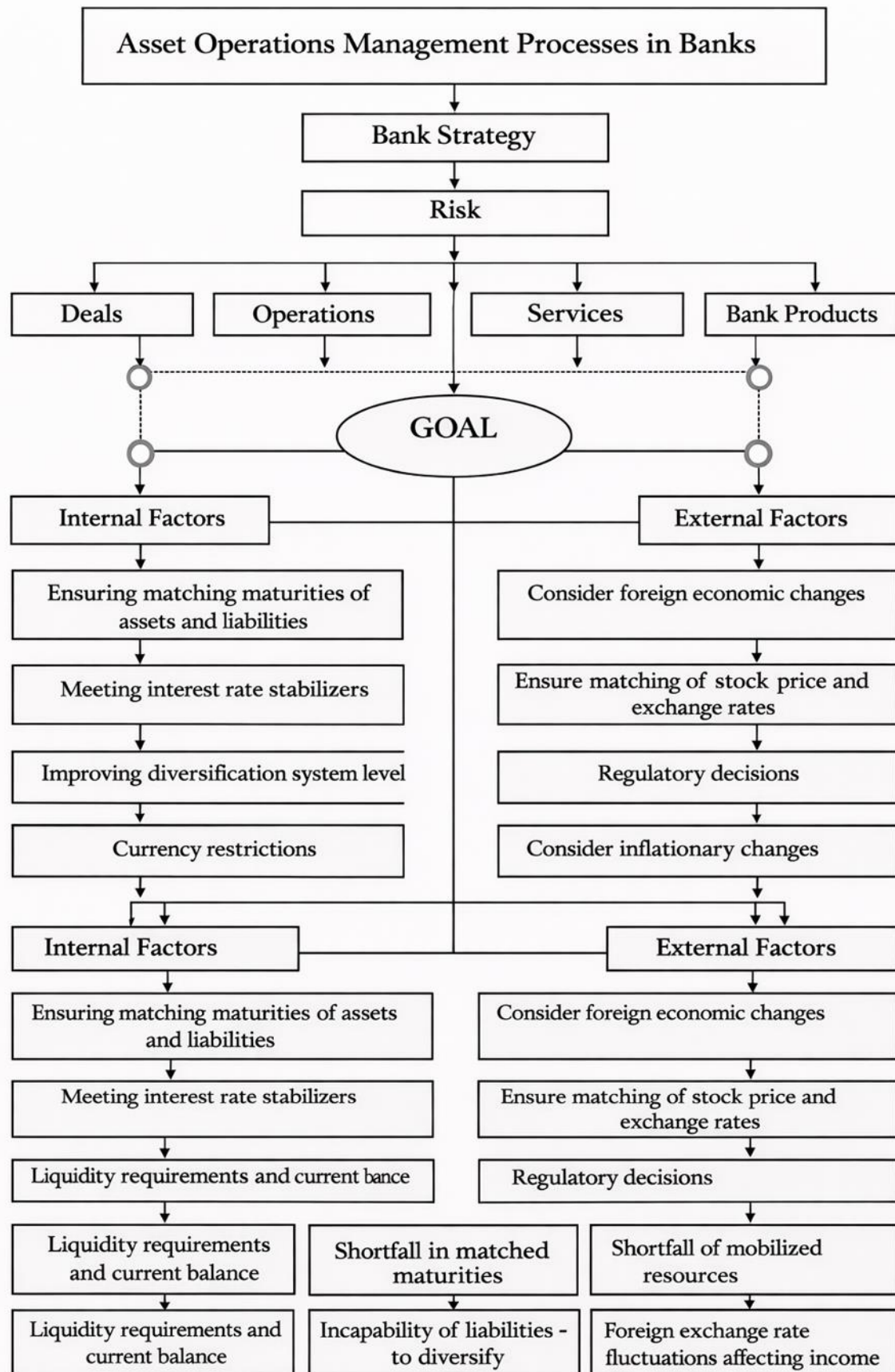


Figure 7. Factors Influencing the Management of Asset Operations of Commercial Banks and Their Interrelationship

Based on **Table 2**, it can be seen that during the period from 2018 to 2023, a positive growth trend of **15.02 percent** was observed only in loans and leasing funds within the structure of banking system assets. Since the main income-generating activity of commercial banks is lending operations, this situation indicates a positive development. However, a decline was observed in other income-generating asset components.

A comprehensive examination of the determinants influencing the management of non-performing loans facilitates the establishment of an efficient framework for safeguarding banking operations from hazards. The application of the strategies for managing non-performing loans outlined in this table aids in decreasing the proportion of problematic loans on the bank's balance sheet.

According to the data in **Figure 7**, identifying the factors influencing the management of asset operations of commercial banks and their interrelationships makes it possible to take into account in advance the factors that negatively affect the ability to generate income through deals, operations, services, and banking products included in the structure of asset operations, and to take the necessary measures accordingly.

In addition, based on the results of surveys conducted in banks, it has been scientifically substantiated that the application of innovative management through econometric analysis is expected to yield positive results.

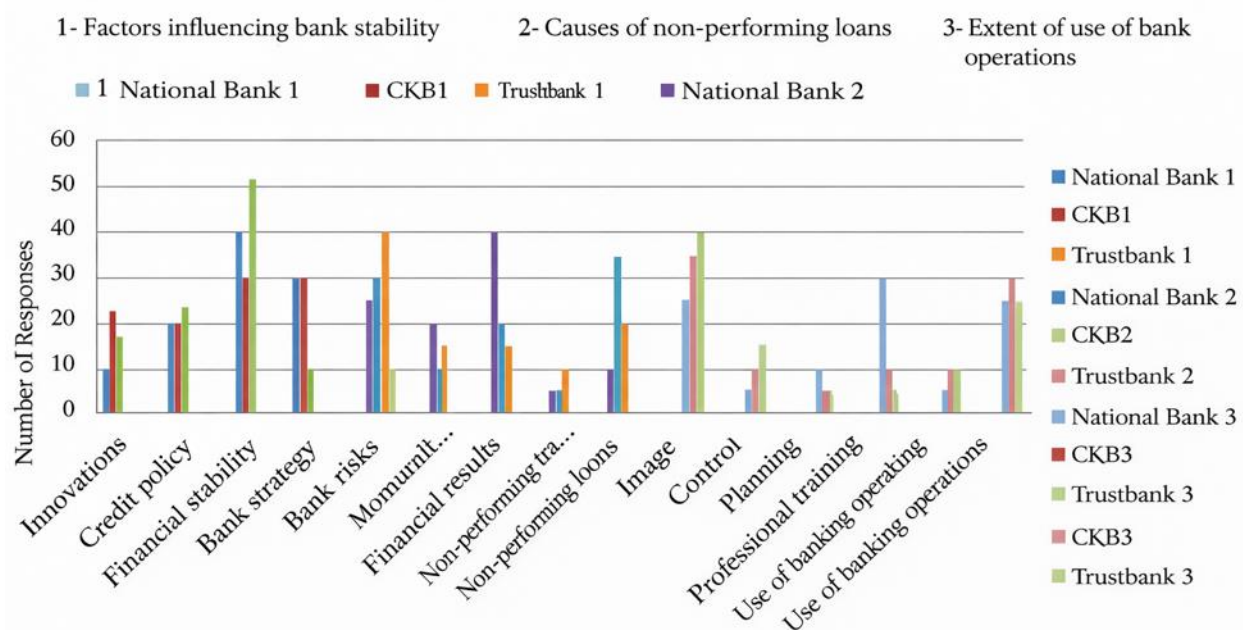


Figure 8. Survey Results from Bank Clients and Employees

The advancement of the financial services sector in our nation necessitates the implementation of innovations inside commercial banks' operations, alongside the optimization of these processes via effective bank management and the formulation of a distinct inventive strategy by each commercial bank. This, thus, aids in guaranteeing that competition within the financial services sector does not adversely affect banks' operations and their stability. A survey was administered to bank personnel and clients. (Figure 8).

The survey results indicate that fostering consumer trust in the banking system and sustaining bank stability predominantly rely on the effective management of asset and liability operations. A significant aspect influencing bank stability is non-performing loans, and the causes of their emergence were elucidated by bank staff.

At the National Bank for Foreign Economic Activity of the Republic of Uzbekistan, the main cause of non-performing loans was identified as weak credit monitoring. Employees of Uzsanoatqurilishbank, in turn, pointed out inappropriate actions by bank management related to

lending activities, while employees of Trustbank PJSC acknowledged that business plans play a key role in credit operations.

As a result of the questionnaire survey conducted among bank clients and employees, as well as the financial analysis of banks, directions for the effective management of asset operations were developed.

Table 3.

Proposals of Bank Employees and Clients for Bank Development

| Bank Employees                                                                                                      | Bank Clients                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Applying continuous innovative methods to improve employees' knowledge and skills                                   | Revising loan interest rates and simplifying loan application procedures                                                                           |
| Strengthening employee motivation (taking into account employees' contribution to bank development)                 | Creating favorable conditions for providing short-term loans to small business entities                                                            |
| Increasing the attractiveness of deposits by expanding types and raising interest rates                             | Expanding modern banking services and reducing paperwork                                                                                           |
| Attracting clients through offering modern innovative banking services                                              | Increasing the amount of cash withdrawals from ATMs                                                                                                |
| Introducing a balanced system for both the bank and clients by improving the mechanism for developing credit policy | Increasing deposit interest rates and carrying out formalities for depositors through modern (electronic) methods without requiring their presence |
| Simplifying loan processing procedures and introducing remote management                                            | Reducing commission fees for SWIFT operations                                                                                                      |
| Diversifying the client base by strengthening marketing and advertising activities                                  | Increasing the share of the secondary market in mortgage and auto loan lending                                                                     |
| Revising the bank's lunch break schedule                                                                            | Setting the bank's lunch break from 13:00 to 14:00                                                                                                 |

## Conclusion

In conclusion, it should be emphasized that expanding the range of innovative banking services and improving their quality creates a basis for increasing the efficiency of banks' operations and further broadening the scope of their services. The main objective of introducing innovative activities into the banking system is to reduce the cost of newly developed services. At the same time, this approach aims to strengthen banks' positions in the financial services market, expand their opportunities to capture a larger market share, and enhance the quality of services provided to customers to a higher level.

By expanding effective methods of managing bank assets, it becomes possible to improve the strategy for managing asset operations. Based on this, an innovative approach to asset operations management has been developed (Figure 9).

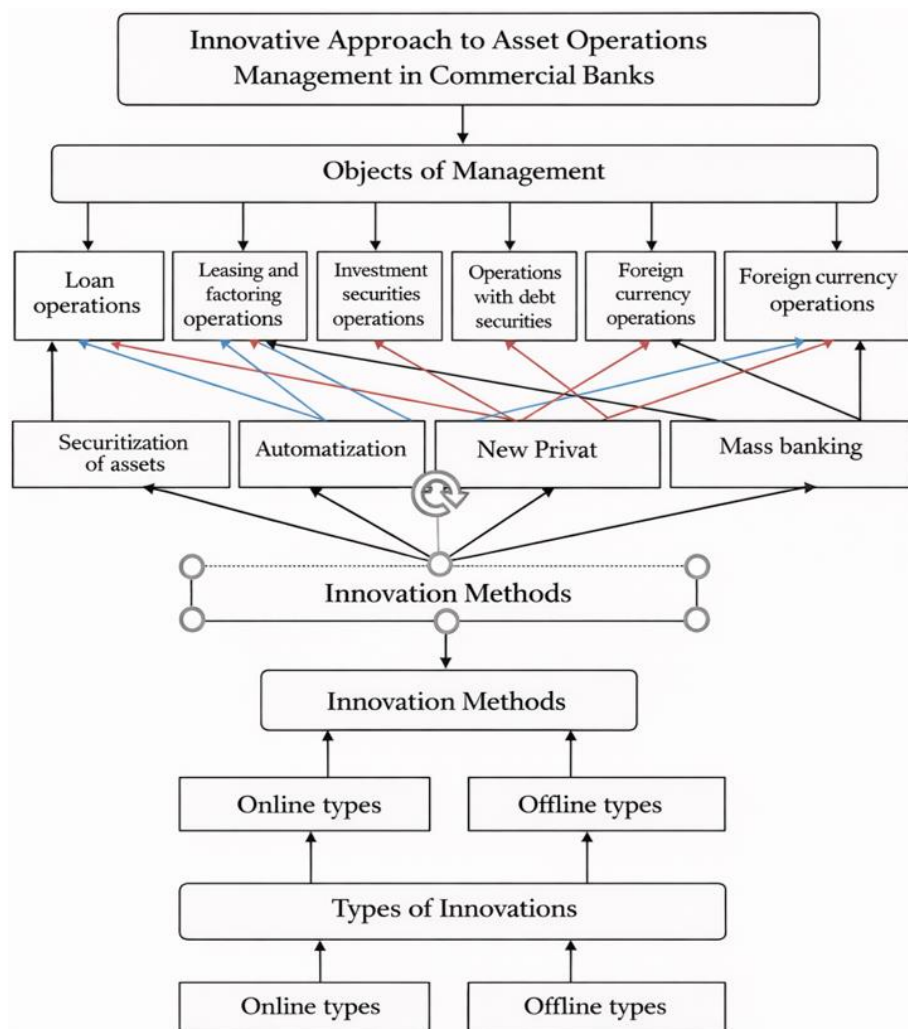


Figure 9. Innovative Approach to Asset Operations Management in Commercial Banks

The application of innovative service methods in commercial banks serves as a basis for shaping an innovative approach to asset operations management.

In the scientific article, the impact of asset operations in banks on economic development was assessed on the basis of economic models.

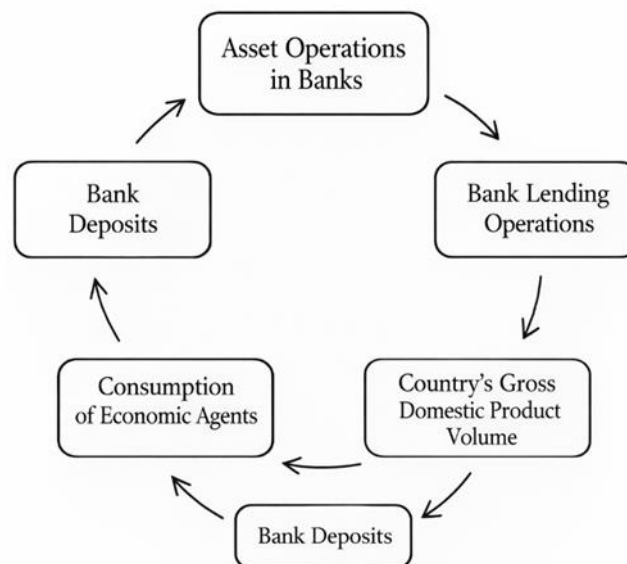


Figure 10. Impact of Asset Operations in Banks on Economic

To test the hypothesis presented in Figure 10, the Granger causality test was applied. The specificity of this method lies in determining the dependence of the endogenous variable on the exogenous variable through an annual lag based on a vector autoregression (VAR) model (Equation 1). Subsequently, the constructed VAR model was tested using the Fisher criterion to determine whether a causal relationship exists or not.

$$\begin{matrix} p & p \\ x_1(t) & a_{11}(j)x_1(t-j) & a_{12}(j)x_2(t-j) & E_1(t) \\ j1 & & j1 \\ p & & p \\ x_2(t) & a_{21}(j)x_1(t-j) & a_{22}(j)x_2(t-j) & E_2(t) \\ j1 & & j1 \end{matrix}$$

Based on the results of the Granger causality test, the development of regression models for the interrelationships shown in Figure 9 made it possible to quantitatively assess how changes in certain factors affect changes in other factors. Accordingly, at the initial stage, a correlation matrix was constructed to evaluate the degree of linear relationships among the economic indicators (Table 5).

Table 4.

Granger Causality Test between Bank Asset Operations, Aggregate Demand, and Aggregate Supply

| Null Hypothesis                                     | Obs | F-Statistic | Prob.  |
|-----------------------------------------------------|-----|-------------|--------|
| Credit does not Granger-cause Assets                | 12  | 1.56848     | 0.2736 |
| Assets do not Granger-cause Deposits                | 12  | 0.39376     | 0.6886 |
| Deposits do not Granger-cause Consumption           | 12  | 0.86720     | 0.4608 |
| Consumption does not Granger-cause Value Added (VA) | 12  | 4.94723     | 0.1558 |
| Value Added (VA) does not Granger-cause Credit      | 12  | 21.8222     | 0.2410 |

The built correlation matrix indicates that a multiple regression equation incorporating bank asset operations and components of aggregate demand and supply cannot be developed. Multicollinearity is present in the regression model, since the linear correlation among all variables ranges from 0.86 to 0.99, resulting in distortions and inaccuracies in the model's outcomes.

Table 5.

Correlation Matrix of the Relationship between Bank Asset Operations and Aggregate Demand and Aggregate Supply Indicators

| No. | Indicator name         | Indicator No. | 1    | 2    | 3    | 4    | 5 |
|-----|------------------------|---------------|------|------|------|------|---|
| 1   | Bank asset operations  | 1             | 1    |      |      |      |   |
| 2   | Bank credit operations | 2             | 0.98 | 1    |      |      |   |
| 3   | Gross value added      | 3             | 0.97 | 0.91 | 1    |      |   |
| 4   | Bank deposits          | 4             | 0.94 | 0.86 | 0.98 | 1    |   |
| 5   | Consumption            | 5             | 0.99 | 0.95 | 0.99 | 0.96 | 1 |

To represent the interrelationships shown in Figure 9, it is possible to construct pairwise

**regression models.** Based on several constructed regression matrices, the use of **neural networks** makes it possible to draw conclusions about how a change in one factor will affect the magnitude of change of that factor in the future. For this purpose, regression models must first be developed (**Table 6**).

Based on the results of **Table 6**, it can be noted that, after a certain period following the formation of economic relationships, it is appropriate to use a **neural model** to analyze the extent to which changes in bank asset operations affect bank asset operations themselves. For this purpose, each economic interrelationship was identified using the regression equations constructed in **Table 6**.

Table 6.

Regression Equations between Bank Asset Operations, Aggregate Demand, and Aggregate Supply

| Regression equations                      | R <sup>2</sup> | F-statistic | t-Student (t <sub>1</sub> ) | t-Student (t <sub>2</sub> ) |
|-------------------------------------------|----------------|-------------|-----------------------------|-----------------------------|
| Credit = Asset × 0.68 + 401.5             | 0.95           | 261.0       | 16.15                       | 3.75                        |
| Value Added (VA) = Credit × 6.19 + 8481.6 | 0.82           | 54.9        | 7.40                        | 2.87                        |
| Consumption = VA × 0.40 + 1203.5          | 0.98           | 897.7       | 29.96                       | 2.67                        |
| Deposit = Consumption × 0.38 – 1337.6     | 0.92           | 154.4       | 12.42                       | –3.48                       |
| Asset = Deposit × 1.21 + 2325.2           | 0.88           | 88.7        | 9.42                        | 5.05                        |

The results of the constructed neural model show that if the national economy follows the given development trend, a **1 percent increase in bank asset operations leads to a 0.77 percent increase in bank asset operations over the course of one year (Figure 11).**

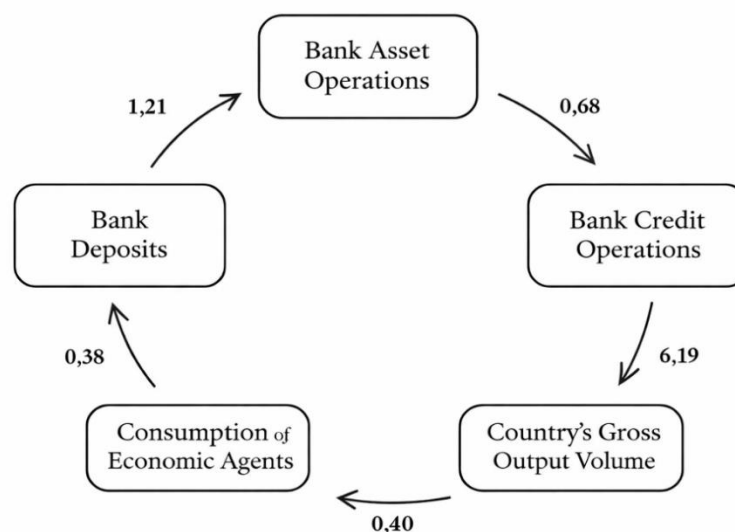


Figure 11. Neural Network Model of Bank Asset Operations

The regression equation constructed between bank credit operations and bank asset operations demonstrates a stable form. This conclusion is supported by the coefficient of determination being equal to **0.95**, the **Fisher criterion** amounting to **261.0**, and the **Student's t-statistics** being **16.15** and

–3.75, respectively. At the same time, according to the model results, under the condition that all other factors remain constant, a **1 percent change in bank asset operations leads to a 0.68 percent change in bank credit operations.**

The regression model illustrating the relationship between value added (as a proxy for aggregate supply) and bank credit operations indicates that fluctuations in bank credit account for 82 percent of the variation in value added, with the remaining 18 percent attributed to other factors. The elevated Fisher criteria, a measure of model stability, validates the robustness of the developed regression model. The Student's t-statistics, which demonstrate the stability of the model's constant parameters, also affirm the accuracy of the calculated parameters. The model results indicate that a 1 percent increase in bank credit results in a 6.19 percent rise in gross value added. The model's findings indicate that a 1 percent rise in gross value added leads to a 0.4 percent increase in aggregate demand among economic actors. The econometric study indicates that the developed model completely fulfills the criteria of an econometric model. The examination of the correlation between bank deposits and aggregate demand reveals that a 1 percent rise in consumption results in a 0.38 percent variation in bank deposits. A 1 percent rise in bank deposits leads to a 1.21 percent increase in bank asset operations.

## Conclusions and recommendations

As a result of conducting the scientific research, the following conclusions were drawn: Within the framework of improving the strategy for managing the assets of commercial banks, it is advisable to optimize banks' organizational structures, improve incentive mechanisms for bank governance involving shareholders—particularly large clients—and apply strategic planning methods when introducing new regulatory documents in the banking system, thereby protecting banks from excessive risk exposure.

We believe that managing banks' asset operations according to profitability enables the identification of income enhancement sources and financing decisions; the formulation of strategies to minimize non-income-generating assets within total asset operations; the establishment of primary asset diversification directions, particularly in securities; and the appropriate distribution of asset operations across regions, considering regional characteristics. These solutions address a variety of prevailing issues.

Based on the analysis of the opinions of bank employees and clients, the broader introduction of innovative service types to attract customers, as well as the transition to large-scale online documentation processes in banks in order to save customers' time, primarily contributes to increasing public and business entities' trust in the banking system. Moreover, it enhances the effectiveness of attracting customers to banks.

In order to ensure timely loan repayments, it is necessary to introduce an automatic payment system under which loan interest payments are automatically deducted from clients' accounts. This, in turn, helps prevent the emergence of non-performing loans.

In applying asset securitization, first of all, it is necessary to adopt a law "On Asset Securitization," expand public awareness of the securities market, and promote securitization practices among the population through mass media and online platforms in order to increase the attractiveness of resource mobilization. To ensure the successful implementation of securitization and to reduce investor risks, it is advisable to initially begin securitization through bonds issued against loans granted for investment projects approved under state targeted programs, as such loans generally have a lower risk level. Effective implementation of securitization enables commercial banks to positively address one of the most pressing issues today—resource constraints.

It is appropriate to introduce various innovative methods for managing asset operations. One of the methods proposed in this study is *New Privat*, which facilitates the introduction of modern service types into the banking system. This serves as a factor for attracting customers and increasing bank revenues. This system is primarily designed to attract large clients, whereby banks act as financial advisors in managing large clients' funds and generate profits through this role.

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