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TIJORAT BANKLARIDA RENTABELLIK KO‘RSATKICHLARI TAHLILINI TAKOMILLASHTIRISH

Annotatsiya. Mazkur maqolada “rentabellik”, “foydalilik”, “bank faoliyati samaradorligi”, “sof foiz marjasi” tushunchalari va uning mazmuni, turli ilmiy nashrlarda tushunchaga berilgan ta’riflar, mavzuning dolzarbligi, banklarning faoliyatini tahlil etish metodikasi keltirilgan. Tijorat banklari faoliyati samaradorligiga ta’sir etuvchi omillar o‘rganilgan. Davlat ulushi ishtirokidagi tijorat banklari, xususiylar tijorat banklari va xorijiy kapital ishtirokidagi tijorat banklari faoliyati samaradorligini baholashda qo‘llaniladigan ko‘rsatkichlar tizimi tadqiq etilgan. Tijorat banklari faoliyati samaradorligini ifodalaydigan ko‘rsatkichlar muallif tomonidan tizimlashtirilgan. Tadqiqotlar natijasida faoliyat samaradorligini ta’minlash bo‘yicha muallif yondashuvi shakllantirilgan hamda tavsiyalar ishlab chiqilgan.

Kalit so‘zlar: ROA, ROE, ROI, NIM, samaradorlik, iqtisodiy samaradorlik, bank faoliyati samaradorligi, moliyaviy faoliyat samaradorligi, samaradorlikning muhim ko‘rsatkichlari, omilli tahlil, mehnat unumdorligi.

IMPROVING THE ANALYSES OF PROFITABILITY INDICATORS OF COMMERCIAL BANKS

Abstract. This article discusses the concepts of “profitability”, “efficiency”, “bank performance” and “net interest margin” along with their meanings. It examines the definitions given to these concepts in various academic publications, the relevance of the topic and the methodology for analyzing the activities of banks. Factors influencing the performance of commercial banks are studied. The article explores the system of indicators used to assess the performance efficiency of state-owned commercial banks, privately-owned commercial banks and commercial banks with foreign capital participation. The author has systematized the indicators that express the performance efficiency of commercial banks. Based on the research results, the author has developed an approach to ensuring performance efficiency and provided recommendations.

Key words: ROA, ROE, ROI, NIM, efficiency, economic efficiency, efficiency of banking activity, efficiency of financial activity, important indicators of efficiency, factor analysis, labor productivity.

Introduction

The modern financial market is characterized by high volatility and a highly competitive environment, making the profitability of commercial banks one of the

most important aspects of their operations. Amid rapidly changing economic conditions and the implementation of new technologies, the task of increasing profitability becomes a priority for credit institutions. The relevance of the topic is driven by the need not only to optimize internal processes but also to enhance the competitiveness of banking services. Improving methods for analyzing profitability allows for a more accurate assessment of the financial health of banks and better predictions of their resilience to crises. In the context of globalization and digitalization, banks face increasing pressure to adapt to external economic shifts, regulatory changes and customer preferences. Profitability, therefore, becomes a critical indicator of a bank's overall efficiency and long-term viability. Key profitability indicators such as Return on Assets (ROA), Return on Equity (ROE), and the Net Interest Margin (NIM) are commonly used to assess a bank's financial performance.

Effective management of these indicators requires a multifaceted approach, including risk management, cost control, and revenue optimization. Technological advancements, such as the adoption of artificial intelligence and big data analytics, offer new avenues for banks to refine their profitability analysis. These tools help in identifying cost-saving opportunities, enhancing customer services, and providing tailored financial solutions that contribute to overall profitability.

Increased focus on sustainability and environmental, social and governance (ESG) factors also plays a role in modern banking profitability. Banks are increasingly evaluated not just on financial returns but also on their social and environmental impact, pushing for more sustainable practices while maintaining profitability.

By refining profitability analysis methods, banks can not only improve their financial stability but also enhance their ability to withstand economic fluctuations and market competition. This is essential for ensuring long-term sustainability in a dynamic financial market.

The main purpose of this paper is to improve the analysis of profitability indicators of commercial banks, which are essential for assessing financial performance and long-term sustainability. The paper aims to explore existing methodologies for profitability evaluation and propose enhancements to better assess the efficiency, stability and competitiveness of banks in a volatile financial environment. It also seeks to offer practical recommendations to help credit institutions improve their profitability while adapting to technological advancements and regulatory changes.

Literature review

The analysis of profitability in commercial banks has been a key area of study, employing traditional financial models and metrics to evaluate performance. This

section reviews the traditional approaches, previous research, global standards and the existing gaps in bank profitability analysis. Scholars have extensively studied the profitability of commercial banks, focusing on both internal and external factors that affect performance. Research has explored the impact of various determinants, including bank-specific factors (e.g., capital adequacy, liquidity, asset quality), industry conditions and broader macroeconomic variables. Several recent studies have contributed to the understanding of bank profitability:

M. O'Connell (2023) examined the interplay between bank-specific, industry-specific and macroeconomic determinants of profitability in the UK, highlighting the multifaceted nature of profitability analysis. F. Abbas, S. Ali and M. Ahmad (2023) explored how economic growth influences the relationship between capital, liquidity, and profitability, particularly in emerging economies, providing valuable insights into the dynamic factors at play. U. Juraev (2023) focused on Uzbekistan, studying the impact of non-performing loans on the profitability of commercial banks, which underscored the importance of loan quality management.

Globally, bank profitability is analyzed using established standards and frameworks that help ensure consistency and comparability across different financial institutions. Research by I. Adelopo, N. Vichou and K.Y. Cheung (2022) delved into capital, liquidity and profitability across European banks, offering comparative insights that can serve as benchmarks for other regions. Additionally, A.Y.H. Saif-Alyousfi (2022) analyzed bank profitability across 47 Asian countries, providing a broader regional perspective. Studies like A. Zahariev et al. (2022) have proposed advanced methods, such as Vector Error Correction Models (VECM) and Support Vector Regression (SVR), to address some of these limitations, offering more sophisticated approaches to profitability analysis. Moreover, research by Z. Khushnud and Z. Qingjie (2022) emphasized the stability of financing in Central Asian countries, drawing attention to regional differences that require further exploration.

Foreign scholars have long explored the profitability of commercial banks from both external (e.g., economic growth, regulatory environment) and internal (e.g., capital adequacy, asset management) perspectives. Understanding how these factors interact is essential for developing effective strategies to enhance profitability. "Bank-specific, industry-specific and macroeconomic determinants of bank profitability: evidence from the UK" by M O'Connell (2023) focused on external and internal determinants and their combined effect on profitability. "Does economic growth affect the relationship between banks' capital, liquidity and profitability: empirical evidence from emerging economies" by F. Abbas et al. (2023) explored the role of economic growth as an external factor influencing internal bank operations. "The impact of non-performing loans on bank profitability: Evidence from commercial banks of Uzbekistan" by U. Juraev (2023) highlighted

how internal challenges like non-performing loans affect profitability, particularly in emerging markets. In terms of measures to improve bank profitability, Liang Xiaoming (2019) pointed out that commercial banks should scientifically allocate existing resources, reasonably control the income and expenditure of commercial banks' operations and reduce non-interest costs. Li Lifang (2020) pointed out that under the new situation, commercial banks should optimize internal management while paying attention to talent training. To sum up, the profitability evaluation system of commercial banks is related to many indicators.

In both domestic and international studies on bank efficiency, input-oriented models are preferred by most scholars. This is due to the common challenge faced by banks, where inputs are high relative to outputs. This literature review identifies the importance of adopting a multi-faceted approach to understanding bank profitability, emphasizing the need for comprehensive models that integrate diverse factors. Further research should aim to address existing gaps, especially in emerging economies, to develop a more holistic understanding of commercial bank profitability.

Research methodology

The methodology of this research paper involves a detailed analysis using a combination of quantitative and qualitative approaches, with a specific focus on "O'zmilliybank" (National Bank for Foreign Economic Activity of the Republic of Uzbekistan) as a case study. This allows for an in-depth examination of profitability indicators within the context of a leading commercial bank in Uzbekistan. The following sections outline the methodology and scope of the research:

- **Data Collection.** The research gathered data from multiple sources, including financial statements, annual reports and official publications of "O'zmilliybank". Key documents such as balance sheets, income statements and profit & loss accounts were analyzed to obtain relevant financial data. Additionally, secondary sources like industry reports, market analysis and previous academic studies were used to enrich the research.

- **Quantitative Analysis.** Quantitative methods were employed to calculate and analyze key profitability indicators such as Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM) and Net Profit to Expenses Ratio. Statistical tools were used to process the data, ensuring precision and enabling comparison over multiple years. This analysis helped in understanding the financial performance of "O'zmilliybank" and identifying areas of strength and potential improvement.

- **Qualitative Analysis.** Qualitative analysis was employed to interpret the findings from the quantitative analysis. This involved assessing non-numerical data such as management practices, market conditions and regulatory environments that

might influence the profitability of commercial banks. Interviews with industry experts and reviews of bank policies provided additional insights to support the data.

- **Time Series Analysis.** A time series analysis was conducted to track changes in profitability indicators over time. This method allowed the research to identify trends, cyclical patterns and anomalies in the performance of commercial banks. Historical data was used to analyze the consistency of profitability and to forecast future performance based on past trends.

- **Comparative Analysis.** Comparative analysis was used to benchmark the performance of different banks. This method helped to identify best practices and highlight discrepancies between banks with varying profitability levels. By comparing the financial ratios and performance metrics of multiple banks, the study was able to draw conclusions on what factors contribute to higher profitability.

- **Discussion.** The findings from the data analysis were discussed in detail to provide a comprehensive understanding of the factors influencing profitability in commercial banks. The discussion integrated both quantitative and qualitative results to offer a balanced perspective on the banks' performance. Key insights were drawn and practical recommendations were made for improving profitability.

The methodology ensures a systematic and thorough analysis of commercial banks' profitability indicators. By combining various research methods, the study provides a holistic view of the factors affecting the financial performance of banks and it helps in formulating strategies to enhance profitability and efficiency in the banking sector.

Analysis and results

The term "efficiency" is derived from the Latin word "effectus", which means "action" or "performance". In the context of banking, the main goal of determining the level of economic efficiency is to develop recommendations for optimizing operations. By measuring and analyzing efficiency, banks can identify areas of improvement, streamline processes, reduce costs and enhance overall profitability. Ultimately, achieving a higher level of economic efficiency ensures better resource utilization, strengthens competitiveness and supports sustainable growth.

Return on assets (ROA) is usually calculated by dividing a company's net profit by the average total assets:

$$\text{ROA} = \text{Net profit} / \text{Total Assets}$$

To calculate ROE, divide the company's net profit by its average shareholders' equity:

$$\text{ROE} = \text{Net profit} / \text{Shareholders' equity}$$

The formula for calculating the ratio of net profit to expenses is:

$$\text{Net Profit to Expenses Ratio} = \text{Net profit} / \text{Total Expenses} \times 100$$

This ratio shows how much profit a company makes for every unit of currency it spends. A higher ratio indicates greater efficiency in generating profit from expenses.

Based on the financial data of the National Bank for Foreign Economic Activity of the Republic of Uzbekistan for the period ending in June 2023, the key profitability indicators for the bank have been calculated as follows:

1. Return on Assets (ROA):

$$\text{ROA} = 1\,193\,615\,884 / 116\,685\,093\,342 = 0.010229 \text{ or } 1.02\%$$

2. Return on Equity (ROE):

$$\text{ROE} = 1\,193\,615\,884 / 17\,571\,202\,186 = 0.06793 \text{ or } 6.79\%$$

3. Net Profit to Expenses Ratio:

$$\text{Net Profit to Expenses Ratio} = 1\,193\,615\,884 / 4\,609\,678\,806 \times 100\% = 25.89\%$$

This shows that the net profit is 25.89% of the total expenses.

Based on the financial data for the period ending in June 2024, the key profitability indicators for the bank have been calculated as follows:

1. Return on Assets (ROA):

$$\text{ROA} = 944\,952\,232 / 130\,092\,870\,478 = 0.0073 \text{ or } 0.73\%$$

2. Return on Equity (ROE):

$$\text{ROE} = 944\,952\,232 / 18\,554\,473\,938 = 0.0509 \text{ or } 5.09\%$$

3. Net Profit to Expenses Ratio:

$$\text{Net Profit to Expenses Ratio} = 944\,952\,232 / 5\,999\,874\,920 \times 100\% = 15.75\%$$

Table 1

Profitability indicators of the National Bank for Foreign Economic Activity of the Republic of Uzbekistan

Indicators	June 2023	June 2024	Year- End 2022	Year- End 2023
ROA (%)	1.02	0.73	2	1.34
ROE (%)	6.79	5.09	14.71	9.62
Profitability(%)	25.89	15.75	31.69	17.04

Source: <https://nbu.uz/uz/about-bank/annual-reports/>

The same information, when examined in the case of the Joint-Stock Commercial Bank Infinbank, yielded the following indicators:

Table 2

Profitability indicators of the Joint-Stock Commercial Bank Infinbank

Indicators	June 2023	June 2024	Year- End 2022	Year- End 2023
ROA (%)	2.73	0.91	2.73	2.62

ROE (%)	21.68	7.76	21.68	21.22
Profitability(%)	17.17	9.44	17.17	14.69

Source: <https://www.infinbank.com/uz/about/statements/>

In the case of JSC “KDB Bank Uzbekistan,” the relevant information is presented in the accompanying table:

Table 3

**Profitability indicators of the Joint-Stock Company KDB Bank
Uzbekistan**

Indicators	June 2023	June 2024	Year-End 2022	Year-End 2023
ROA (%)	2.33	2.82	2.40	4.87
ROE (%)	17.89	16.00	23.53	32.83
Profitability(%)	198.08	182.38	112.37	183.81

Source: <https://www.kdb.uz/en/investors/financial-statements>

From the data shown in Tables, we can conclude that the bank’s profitability indicators have fluctuated. The income of commercial banks is divided into two categories: interest income and non-interest income. Interest income includes earnings from interest on short-term and long-term loans provided to customers, as well as higher interest charges imposed on clients who fail to repay loans on time. Additionally, income from operations involving securities and various investments falls under this category. On the other hand, non-interest income consists of fees received for services, as well as income from trading and foreign exchange operations. When analyzing the financial performance of commercial banks, it is essential to closely examine the composition and changes in these sources of income, as they represent the primary contributors to the bank’s profitability.

The expenses of commercial banks are also categorized into interest expenses and operating expenses. Interest expenses include payments on deposits, loans obtained and payments for securities, among other similar costs. Operating expenses, on the other hand, cover costs related to services provided to the bank (such as transportation, water, gas, electricity), employee salaries and administrative and management expenses. In the financial analysis of banks, it is important to examine the necessity of these expenses, how they have changed over time and the extent to which cost-efficiency measures have been applied. In summary, the financial performance analysis of commercial banks must be closely linked with the analysis of their income and expenses, ensuring a comprehensive understanding of their profitability and cost management.



Figure 1. Profit or Loss

Factor analysis is a statistical method that helps identify underlying relationships between variables by grouping them into factors. This technique is particularly useful in the context of analyzing profitability indicators of commercial banks, as it can simplify complex data sets and reveal key drivers that significantly impact bank performance.

Labor productivity refers to the efficiency with which a bank's workforce produces goods or services within a given period. In the banking industry, this can be measured by assessing the output generated by employees, such as the number of transactions processed, the volume of loans disbursed, or revenue earned per employee. Higher labor productivity indicates efficient use of human resources, which is vital for improving profitability and maintaining a competitive edge. Improving labor productivity in commercial banks involves several strategies, including training, technological adoption, process optimization, and effective workforce management. Investing in the professional development of employees can enhance their skills, leading to faster and more accurate service delivery.

The profitability indicators are influenced by internal and external factors. Internal factors include the enterprise's production capacity, equipment, use of modern production technologies, personnel capabilities, labor productivity, supply chain efficiency, pricing strategies, capital structure, product quality, cost of production, profit volume by activity type, and the turnover of working capital. External factors consist of the overall economic environment in the country, tax policy, supply and demand levels, the number of competitors, and the product's life cycle in the market (Abdujaborova, M. T., 2024).

Conclusion

This research has provided a comprehensive analysis of the profitability indicators of commercial banks, with a specific focus on "O'zmilliybank" as a case study. By utilizing both quantitative and qualitative methods, the study has explored the key factors that influence bank profitability, including internal management practices, external economic conditions and regulatory frameworks.

The findings highlight that traditional profitability metrics, such as Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM), remain

essential tools for evaluating a bank's financial health. However, these metrics must be supplemented with more sophisticated models that consider external variables, such as economic growth, market competition and regulatory changes, to obtain a holistic view of profitability.

The analysis also revealed that profitability in commercial banks is affected by a combination of internal and external factors. Efficient management of assets, capital adequacy and cost control are crucial internal factors, while external elements, such as macroeconomic stability and regulatory policies, play a significant role in shaping financial performance. For "O'zmilliybank", the study identified specific areas of strength, including effective asset utilization and cost management, as well as areas where improvements can be made, such as reducing non-performing loans and enhancing revenue diversification.

Moreover, the comparative analysis with other banks has shown that "O'zmilliybank"'s performance aligns with global trends, though there are opportunities to adopt best practices from international peers, particularly in areas like digital transformation and risk management. The use of time series analysis has provided insights into the bank's performance over time, allowing for a better understanding of long-term trends and future projections.

In conclusion, the research underscores the importance of a multi-dimensional approach to profitability analysis in commercial banks. For banks to remain competitive and sustainable, they must not only focus on traditional financial indicators but also address external challenges and leverage opportunities in emerging markets. Future research could expand on this study by incorporating more advanced analytical tools and exploring the impact of digital banking and financial technologies on profitability. By understanding the intricate dynamics of profitability, banks can make informed decisions to enhance their operational efficiency, strengthen their financial performance and sustain growth in an increasingly complex and competitive environment.

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