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DESCRIPTIVE ANALYSIS OF THE NON-PERFORMING LOANS IN UZBEKISTAN

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O'ZBEKISTONDA MUAMMOLI KREDITLARNING TASVIRIY TAHLILI

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ОПИСАТЕЛЬНЫЙ АНАЛИЗ ПРОБЛЕМНЫХ КРЕДИТОВ В УЗБЕКИСТАНЕ

Annotation. This article analysis the accumulation of NPLs in the banking system of Uzbekistan and its importance in the banking sector in recent time. The study outlines the reasons of NPL and its consequences on banking performance in Uzbekistan and distinguishes the need to deeper analysis of this phenomenon.

Key words: non-performing loans, commercial banks, state-owned banks, bad management credit system, risk management

Annotatsiya. Ushbu maqolada O'zbekiston bank tizimida muammoli kreditlar to'planishi va uning so'ngi davrda bank sektoridagi ahamiyati tahlil qilinadi. Tadqiqotda muammoli kreditlar sabablari va uning O'zbekiston bank faoliyatiga ta'siri ko'rsatilgan va bu hodisani chuqurroq tahlil qilish zarurati ko'rsatib berilgan.

Tayanch so'zlar: Muammoli kreditlar, tijorat banklari, davlat banklari, yomon kredit boshqaruv tizimi, risklarni boshqarish

Аннотация. В данной статье анализируется накопление проблемных кредитов в банковской системе Узбекистана и их значение в банковском секторе в последнее время. В исследовании обозначены причины возникновения проблемных кредитов и

их последствия для банковской деятельности в Узбекистане, а также отмечена необходимость более глубокого анализа этого явления.

Ключевые слова: Проблемные кредиты, коммерческие банки, государственные банки, плохое управление кредитной системой, управление рисками

Introduction

In the field of financial economics, non-performing loans (NPLs) at commercial banks are an important subject of study. Non-performing loans, which are defined by late or defaulting payments, have arisen as a key problem in the financial industry owing to the possible consequences for both individual banks and the whole economy. The interweaving consequences of NPLs have aroused the interest of scholars, regulators, and financial institutions alike, since they hold the key to understanding the complex processes that influence financial stability and growth.

The economic relevance of NPLs stems not only from their immediate influence on bank financial health, but also from their broader implications for capital allocation, loan availability, and general economic viability. NPLs can reduce bank profitability, deplete capital buffers, and limit lending capacity, all of which can have an impact on the economy as a whole, including investment, consumption, and employment.

This study analyzes the fraction of commercial banks and their involvement in the financial sector, as well as to examine the NPL trends of commercial banks in Uzbekistan between 2016 and 2023. By developing a better knowledge of these processes, we want to equip policymakers, regulators, financial institutions, and stakeholders with practical insights to help them achieve sustainable financial systems and healthy economic growth.

Literature review

Banks today play an important role in the financial system, providing different financial loans to both enterprises and people. These financial entities, which include chartered banks, trust and mortgage firms, and credit unions, receive deposits and provide loans [5]. There are conceptual frameworks for understanding bank loans, which are commonly referred to as loan theory and NPLs are the crucial and negative part of the loan theory.

Defaulted loans have far-reaching consequences for the economy as a whole, not just for individual banks' earnings. As a result, cautious financial institutions emphasize both the quality of their loans and the efficacy of their risk management procedures. According to Alihodzic and Halil Eksi [1], credit quality plays a critical role in the bank credit system.

A loan becomes non-performing when the payments of interest and principal have past their due by 90 days or more, or at least 90 days of their interest payments have been capitalized, refinanced or delayed by the agreement, or when there are other good reasons to doubt that payments will be made in full [2]. Non-performing commercial bank loan is one in which the borrower has defaulted or has failed to make any scheduled loan payments for more than 90 days [4].

NPLs serve as a key metric for gauging credit risk, directly impacting the banking system and reflecting the credit quality of a country's banking sector and economy. A high level of NPLs directly influences the overall financial performance of banks [3], while the level of financial sector

development also affects bank performance [11]. Thus, policymakers must grasp the role of financial development in the persistence of non-performing loans. Additionally, NPLs constrain new lending, as banks with substantial NPLs face limitations in issuing new credit. NPLs are indicative of banks' performance standards, with a high NPL ratio suggesting high risk of loss if outstanding loan amounts remain unpaid, while a low ratio implies minimal threat to the bank [10]. Higher NPL rates may erode banking operations' efficiencies in terms of profitability, leading to decline in net income that impacts shareholders' equities and the bank's dividend-paying capacity in the long term [6].

Meeker and Gray (1987) analyzed USA commercial banks and investigated that NPL information is significantly useful in explaining the ratio of weighted classification of risky loans to total loans [8]. Moreover, they did not pay attention to the other internal and external factors. In that year, Keeton and Morris did the descriptive analysis of USA commercial banks. They focused on economic conditions and stated that NPL losses depend on regional economics. Furthermore, they studied NPLs by sectors such as agriculture, energy, industry, service and the performance of borrowers and the

quality of credit management are considered as the reasons of NPLs [7]. Their study focused on comparative analysis and any correlation or regression analysis was not used by authors.

Research methodology

To analyze the performance of commercial banks in Uzbekistan in terms of NPL, descriptive and comparative analysis methods for time-series data set were applied like that Meeker and Gray (1987) and Keeton and Morris (1987). Firstly, quarterly NPL ratio and outstanding loans of 32 Uzbekistan commercial banks for eight yearly period between 2016 and 2023 was collected, in the second step, graphical and numerical methods to summarize the trends of banking sector were used and given an initial conclusion for the banks risk management in Uzbekistan.

Results and Discussion

The banking system of Uzbekistan is structured around a two-tier system, consisting of the Central Bank of the Republic of Uzbekistan (CBU) as the primary regulatory authority and a network of commercial banks operating within the country.

Table 1.

Number and structure of credit institutions (in the beginning of years)

Years	2017	2018	2019	2020	2021	2022	2023	2024
Total number of credit organizations	103	104	121	147	160	177	199	204
Commercial banks, of which:	27	28	29	30	32	33	32	35
State-owned banks	10	11	13	13	13	12	12	10
Other banks	17	17	16	17	19	21	20	25
Non-bank credit organizations	76	76	92	117	128	144	167	169

Source: Author computation based on data from CBU.

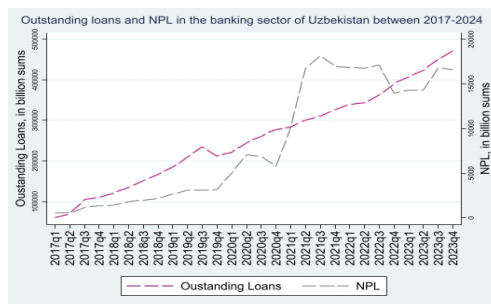
In 2024, the commercial banking system, constituting an integral component of the Uzbek banking framework, currently encompasses 35 licensed banks, increased for almost 30 percent in numbers especially in the number of non-state-owned banks from 2017 (17 to 25 correspondingly) (see Table 1).



Picture 1. Share of NPLs in outstanding loans of the banking sector in Uzbekistan, percent

Source: Author computation based on data from CBU.

Since 2017, the quarterly NPL accumulation in the banking sector had gone up steadily at around 0.5 percent, before experiencing a sharp increase by almost twice and reaching its first peak in the 2nd quarter of 2020 (2.9 percent). During the next following year, the NPL ration in outstanding loans rose very rapidly and got its second peak at 5.8 percent because of post pandemic circumstance (3rd quarter of 2021). Finally, the numbers decreased significantly by 40 percent as the economy began to recover and develop policies against the slowdowns resulted from Covid-19 (3.5 percent 4th quarter of 2023) (see Picture 1).



Picture 2. Trend in outstanding loans and NPL accumulation of the banking sector in Uzbekistan, in billion sums

Source: Author computation based on data from CBU.

The loan portfolios of both public and commercial banks have worsened, with a significant share of loans given several deferrals due to COVID-19 from 2020 to 2021. While the Central Bank has increased its supervision to guarantee correct identification and disclosure of Non-Performing Loans (NPLs), problems remain. As depicted in Picture 2, the trend in both outstanding loans and NPL accumulation of banking sector in Uzbekistan shows the same increasing trend, which signifies as the amount of loans by commercial banks increases, accumulation of NPLs also rises correspondingly through the examined period, with a high degree of accumulation in NPL during the pandemic as it put financial difficulties in a large number of loan holders. The NPL ratios could rise even more as the effects of previous periods of rapid credit expansion become fully apparent amid Covid-induced risks, alongside potential spillover risks from the conflict in Ukraine. Moreover, Uzbekistan faces exposure to numerous natural disasters and the risks of climate change, which could lead to a significant and potentially rapid increase in NPLs in the absence of sufficient risk management practices and insurance mechanisms [12].

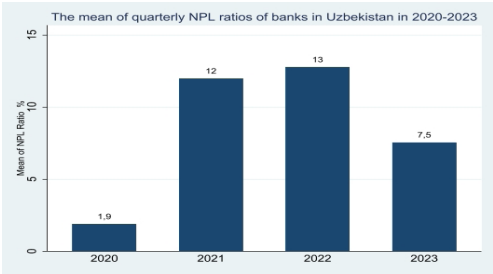
Table 2.
Summary statistics for the annual growth of quarterly outstanding loans and NPL, percent

Vari-ables	Mean	Max	Min
Annual loan growth (quarterly)	33.6	102.3 (in Q1, 2018)	11.1 (in Q3, 2020)
NPL growth (quarterly)	76.7	219 (in Q2, 2018)	-17.6 (in Q4, 2022)

Source: Author computation based on data from CBU.

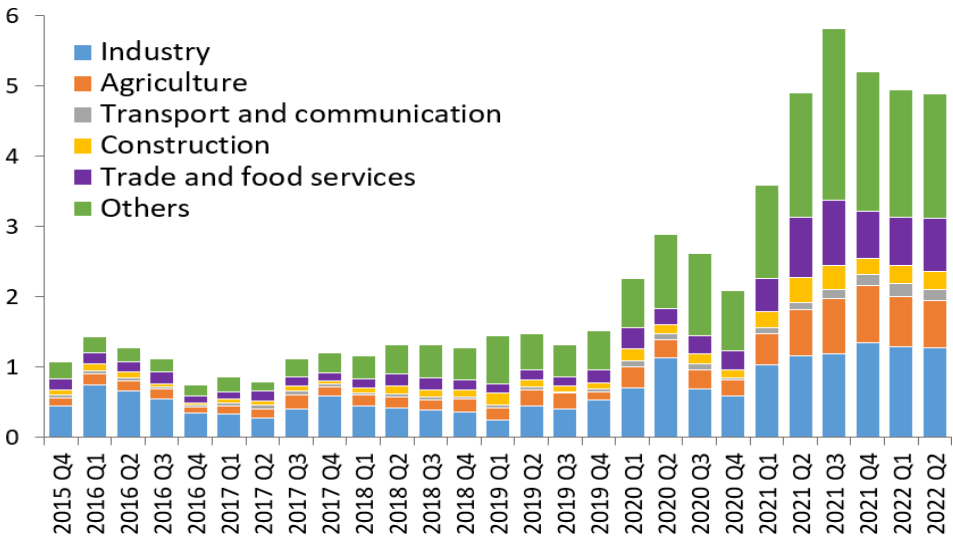
Annual growth of outstanding loans and NPL for the period of 2017-2024 years were calculated as the ratio of a quarter to a previous year quarter because of outstanding loans and NPLs are quickly changeable indicators. According to statistical analysis, highest annual growth of quarterly loans

was by 102.3 percent in 1st quarter of 2018 compared to 1st quarter of 2017 and the lowest was in 3rd quarter 2020 for 11.1 percent. Accordingly, annual highest growth of quarterly NPL experienced to increase by 219 percent in 2nd quarter of 2018 compared to 2nd quarter of 2017, and with a minimum decrease for 17.6 percent in 4th quarter of 2022 compared to 4th quarter of 2021 (see Table 2).



Picture 3. The mean of quarterly NPL ratio of banks in Uzbekistan in the period of 2020-2023

Source: Author computation based on data from CBU.



Picture 4. NPL Decomposition by Sectors, percent

Source: Author computation based on data from CBU.

Picture 3 represents how the quarterly mean of NPL ratio had been changed since 2020 for 32 banks of Uzbekistan. In 2020, initially the numbers were quite low, with only 1.9 percent. However, the statistics changed rapidly for subsequent amount, an increase for almost 6 times in two consecutive years (12 percent and 13 percent respectively) as a result of post COVID-19 situation. Finally, the figures became reaching recovery and the quarterly mean of NPL ratio showed 7.5 percent in 2023.

Overall, during the past a 7-year period (2016-2022), industrial sector of the economy was the largest contributor to the NPL accumulation by state-owned and other banks. The next significant sector in NPL decomposition was agriculture. However, from Q1 2020, when the pandemic began, other sectors' contributions, including loans to individuals (trade and food, construction respectively), started to rise up. During the whole examined period, transport and communication sector has contributed the least percentage to NPL (See Picture 4).

Conclusion

During the last seven years, the number of commercial banks and non-bank credit

organizations increased significantly in Uzbekistan. This is good process in the view of using inactive funds and giving organizations and people more opportunities in funding their business projects. Moreover, it may cause to enhance the risk of repayments, as well as, accumulation of NPLs in financial sector because of investing more funds to the ineffective businesses. Analytical data shows that there is a positive relationship between outstanding loans and NPLs. It means that to increase in the total outstanding loans of commercial banks causes a rising trend in NPL in this period. There are the other factors that are unexplored in this research, resulting in the increasing NPL in banking sector such as bad management credit system, moral hazard, overpriced business projects, the role of government in preferential loans and so on. It is a signal to think about the nature of NPL and to analyze it with econometrical models (Random effect, Fixed effect, GMM) for getting more feasible results. These types of econometric models will be applied in the next researches.

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