

THE IMPACT OF DIGITALIZATION OF BANKING SERVICES ON THE FINANCIAL STABILITY OF COMMERCIAL BANKS

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Abstract: This scientific thesis analyzes the impact of the digitalization of banking services on the financial stability of commercial banks based on empirical data. The study examines loan portfolio quality, non-performing loans (NPLs), capital adequacy, liquidity indicators, and risk concentration in connection with the development of digital banking services. The results of the analysis indicate that digital lending, online microloans, and remote banking services, while enhancing banks’ operational efficiency, also emerge as factors that intensify credit and liquidity risks.

Keywords: Digital banking services, financial stability, credit risk, non-performing loans, liquidity, capital adequacy, commercial banks.

Introduction

In recent years, digitalization processes in the banking sector have accelerated significantly, with most lending, payment, deposit, and service operations being carried out through remote platforms. In the banking system of Uzbekistan, online lending, mobile banking, and digital identification have been widely implemented. These developments contribute to reducing banks’ operational costs and expanding customer outreach.

However, alongside digitalization, new risks affecting banks’ financial stability have emerged, including deterioration in loan portfolio quality, an increase in the share of non-performing loans, and growing liquidity mismatches. As of May 1, 2025, a significant portion of commercial banks’ loan portfolios consists of loans issued through remote channels and government programs.

Methodology

The following research methods were employed in the study:

- statistical analysis based on official bank reports;
- comparative analysis of loan portfolios and risk indicators;
- structural analysis of the dynamics of non-performing loans (NPLs);
- assessment of liquidity and capital adequacy indicators.

The primary data source was the bank risk report as of May 1, 2025.

Loan Portfolio and Key Indicators (as of May 1, 2025)

Indicator	Value
Total loan portfolio	12,989.1 billion UZS
Share of loans in total assets	72.5%
Non-performing loans (NPLs)	422.2 billion UZS
NPL ratio	3.25%
Regulatory capital adequacy	14.66%

According to the data source, loans issued through digital channels and government programs served as the main drivers of loan portfolio growth. However, the volume of non-performing loans also increased compared to the beginning of the year.

Analysis and Discussion

The process of digitizing banking services is generating deep structural changes in the financial activities of commercial banks. Although the widespread introduction of remote lending, online microloans, and digital banking products has led to rapid growth in the volume of the loan portfolio, this process has simultaneously intensified risks that directly affect banks' financial stability.

According to reporting data, as of May 1, 2025, the total volume of the bank's loan portfolio amounted to 12,989.1 billion UZS, accounting for 72.5 percent of total assets. This indicator demonstrates that lending remains the core activity of the bank. The high share of the loan portfolio is largely explained by the expansion of digital credit products, as lending through remote services has been increasing at a rapid pace.

Loan Portfolio Quality and Digital Lending

One of the main challenges of digital lending is related to the quality of the loan portfolio. As of May 1, 2025, the volume of non-performing loans (NPLs) reached 422.2 billion UZS, accounting for 3.25 percent of the total loan portfolio. This figure shows an upward trend compared to the beginning of the year.

Loan Portfolio and Non-Performing Loans Indicators (as of May 1, 2025)

Indicator	Amount
Total loan portfolio	12,989.1 billion UZS
Non-performing loans (NPLs)	422.2 billion UZS
NPL ratio	3.25%
Share of government program loans in NPLs	64.3%
Share of commercial loans in NPLs	35.7%

The table indicates that the majority of non-performing loans are attributable to government programs and loans issued in digital form. This situation suggests that borrower assessment mechanisms in the digital lending process are not sufficiently well-developed.

Online Microloans and Risk Level

One of the aspects highlighted in the report is the high share of non-performing loans in online microloans. Within the retail loan portfolio, the NPL ratio for online microloans reached 49.62 percent, which is recorded as the highest level compared to other credit products.

Retail Credit Products by NPL Ratio

Credit product	NPL ratio (%)
Microloan (online)	49.62
Consumer loan	16.91
Auto loan	5.03
Microcredit	4.98
Mortgage loan	0.73

This table shows that loans issued in a fully digital, remote format pose the highest credit risk for banks. Such a situation negatively affects banks' financial stability and increases the need to create additional provisions.

Currency Structure and Digital Lending

A total of 56.3 percent of the loan portfolio is denominated in foreign currency, making the bank highly sensitive to foreign exchange risk. The growth of lending through digital services also contributes to maintaining a high share of foreign currency loans. Under conditions of instability in international financial markets, this situation may adversely affect the stability of bank capital.

Liquidity and Digital Services

As lending through digital banking services accelerates, maturity mismatches between bank assets and liabilities are becoming more pronounced. According to the results of GAP analysis, negative liquidity gaps have been observed in certain maturity intervals, which places pressure on the bank's ability to meet its short-term obligations.

Key Liquidity Indicators

Indicator	Status
Loans-to-deposits ratio	256.4%
Banking system average	169%
Share of highly liquid assets	Downward trend
GAP by certain maturities	Negative

These indicators show that the sharp increase in digital lending has intensified the credit burden relative to the bank's deposit base.

Capital Adequacy and Stability

As a positive aspect, the bank's regulatory capital adequacy ratio stands at 14.66 percent, remaining above the established minimum requirement. This indicates that risks associated with digital services are partially covered by the bank's capital. However, if the growth of non-performing loans continues, there is a potential risk of increased pressure on capital in the future.

Conclusion

The results of the study indicate that the digitalization of banking services not only enhances the operational efficiency of commercial banks but also intensifies risks affecting financial stability. In particular, online lending and loans allocated under government programs contribute to an increase in the share of non-performing loans. Therefore, in the process of developing digital banking services, special importance should be given to credit risk management, maintaining liquidity balance, and strengthening capital adequacy.

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