ENHANCING CREDIT RISK MANAGEMENT IN LENDING INSTITUTIONS OF UZBEKISTAN

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Abstract. *This study explores the current practices and challenges in managing credit risk within Uzbekistan's lending sector, with a focus on commercial banks. By analyzing regulatory frameworks, macroeconomic factors, and institutional practices, the research identifies key inefficiencies and proposes innovative strategies tailored to Uzbekistan's financial environment. Recommendations include leveraging advanced analytics, improving risk assessment methodologies, and fostering regulatory reforms to align with international best practices. The findings aim to contribute to more resilient lending systems and sustainable economic growth in Uzbekistan.*

Introduction

The lending institutions can operate successfully and improve their performances by mitigating these risks through pragmatic decision making. One of such risks which play important role on the company's performance is credit risk. The concept of credit risk refers to the potential loss that a bank or any lending party may incur due to the failure of a borrower to repay a loan or meet its financial obligations. Avery et al. (1996) has explained that when a borrower is unable to pay his debt partially or fully on the prescribed time period, it is referred to as credit risk.

Two of the main lending institutions that provide loans to borrowers are commercial banks and microfinance institutions (MFIs). While the origin of commercial banks date to 15th century[1], a modern form of microfinancing has roots to early 1970s when the Grameen Bank of Bangladesh was founded by Mohammad Yunus[2]. There are several differences between commercial banks and MFIs. The key ones are listed below:

- Microfinance institutions primarily serve low-income individuals, small businesses, and entrepreneurs who lack access to traditional banking services. On the other hand, commercial banks cater to a broader range of customers, including individuals, small and medium enterprises, and large corporations.
- Microfinance loans are generally smaller in size, often ranging from a few hundred thousand to a few million uzbek soums. According to the Presidential Decree of the Republic of Uzbekistan, PQ-364, dated November 10th, 2023, the maximum amount of microloan was set at 100 mln uzbek soums. Commercial bank loans can vary significantly in size, from small personal loans to large corporate financing.
- The collateral requirements are more flexible for MFIs compared to commercial banks. They can rely more on group guarantees or alternative forms of security rather than traditional assets like real estate.

[1] https://www.cobaltrecruitment.co.uk/blog/2019/01/the-five-oldest-banks-in-the-world?source=google.com
[2] https://microfinanceinfo.com/history-of-microfinance/

Literature review

Credit risk is an important concern for credit institutions because it can have a significant impact on their financial performance. Since they are in the business of lending money, credit risk is an inherent part of their operations. The commercial banks and other credit institutions' pursuit to increase profitability comes at the cost of higher credit risk. It is impossible for credit institutions to completely abolish the credit risk because this can be only achieved if the institution stops giving out loans. But we all know that the main source of credit institutions come from interest margin between deposit rate and loan rate. Therefore, it is essential for credit institutions to manage credit risk effectively to ensure their long-term sustainability and maximize their wealth. When dealing with credit risk, it is important to have a better understanding of non-performing loans (NPL). NPL generally refer to loans which do not generate income for a relatively long period of time, that is, the principal and/or interest on these loans has been left unpaid for at least 90 days (Laryea et. al, 2016).

After analyzing the previous literature, I concluded that impact of NPL on the profitability of banks is negative. Quite a few authors such as Kingu, Macha and Gwahula (2018), Anastasiou, Louri and Tsionas (2016), Akter and Roy (2017), and Petkovski, Kjosevski and Jovanovski (2018) have studied the impact of non-performing loans on the profitability of commercial banks. All these studies have found significant negative relationship between nonperforming loans and profitability indicators within various selected countries or regions.

Data and Methodology

After the bank failures in the US and Germany in 1974, the financial regulators of the G10 countries set up a committee to improve the quality of banking supervision at international level. Basel I, also known as the Basel Capital Accord, was formed in 1988. It provided a framework for managing credit risk through the risk-weighting of different assets. According to Basel I, assets were classified into five categories based on risk weights: 0%, 10%, 20%, 50% and 100%. The assets are classified into those different categories based on the nature of the debtor, as shown in Table 1.

Basel II, an extension of Basel I, was introduced in 2004. Basel II included new regulatory additions and was centered around improving three key issues – minimum capital requirements, supervisory mechanisms and transparency, and market discipline. Basel II created a more comprehensive risk management framework (See Picture 1). It did so by creating standardized measures for credit, operational, and market risk. It was mandatory for banks to use these measures to determine their minimum capital requirements.

Table 1. Classification of assets into different categories[3].

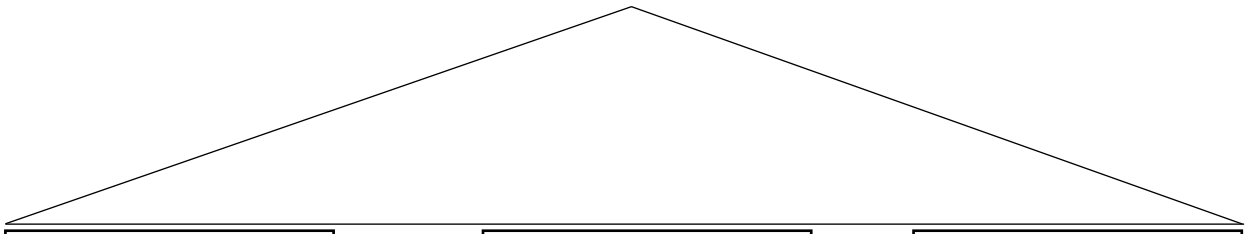
0% Risk Category	10% Risk Category	20% Risk Category	50% Risk Category	100% Risk Category

[3] Refer to Corporate Finance Institute:

https://corporatefinanceinstitute.com/resources/risk-management/basel-i/

Cash, government debt, Central Bank debt, and debt of governmental departments or organizations	Central Bank debt of countries with high inflation in the recent past	Development bank debts, OECD bank debt, non-OECD bank debt under one year of maturity, and non-OECD public sector debt	Residential mortgages	Private sector debt, non-OECD bank debt with maturity over a year, real estate, plant and equipment, and capital instruments issued at other banks.

The Global Financial Crisis of 2008 exposed the weaknesses of the international financial system and led to the creation of Basel III. The Basel III regulations were created in November 2010 after the financial crisis; however, they are yet to be implemented. Their implementation's constantly been delayed in recent years and is expected to occur in January 2025. Basel III identified the key reasons that caused the financial crisis. They include poor corporate governance and liquidity management, over-levered capital structures due to lack of regulatory restrictions, and misaligned incentives in Basel I and II. Basel III strengthened the minimum capital requirements outlined in Basel I and II (See Table 2). In addition, it introduced various capital, leverage, and liquidity ratio requirements.



Pillar 1: Minimum Capital Requirement

- Credit risk
  - Standard approach
  - Internal ratings based approach
    - foundation
    - advanced
- Operational risk
- Market risk

Pillar 2: Supervisory Review Process

- Sound internal processes to evaluate risk (ICAPP)
- Supervisory monitoring

Pillar 3: Market Discipline and Public Disclosure

- Periodic disclosure of
  - bank's risk profile
  - qualitative and quantitative information
  - risk management processes
  - risk management strategy
- The objective is to inform potential investors

Picture 1. The Pillars of BASEL II.

The desirability of the Basel III regulations and the effect of its new capital requirements on the profitability of commercial banks have been highly debated. Some literature argues that there are significant macroeconomic benefits from raising bank equity: higher capital requirements lower leverage and the risk of bank bankruptcies (Admati et al., 2010). On the other hand, there are some studies (BIS, 2010, Angelini et al., 2011), which argue that there could be significant costs of implementing a regime with higher capital requirements: higher capital requirements will increase banks the cost of equity financing relative to debt financing. The latter will induce banks to raise the cost of lending which will have negative effects on economic growth.

	Basel II	Basel III
1. Minimum Capital Requirements		
Common Tier 1 capital ratio (common equity = shareholders' equity + retained earnings)	2%* RWA	4.5%* RWA
Tier 1 capital ratio	4%* RWA	6%* RWA
Tier 2 capital ratio	4%* RWA	2%* RWA
Capital conservation buffer (common equity)	-	2.5%* RWA
Countercyclical buffer	-	0%-2.5%* RWA
2. Leverage Ratio		
Non-risk based leverage ratio	-	> 3%
3. Liquidity Requirements		
Liquidity Coverage Ratio		>100%

Table 2. Comparison of Basel II and Basel III requirements[4].

Conclusion

The main summary of this research is as follows:

- Effective credit risk management is essential in lending institutions' long-term stability and growth in the current economic climate. The global financial crisis of 2007-09 has underscored the significance of strong credit risk management for financial institutions, revealing the negative consequences of inadequate risk management practices.
- When assessing the credit risk, the financial professionals need to consider both judgmental and statistical approach. While the judgmental approach is based on the merit and experience of

[4] *Note:* RWA = risk-weighted assets.

credit analysts, the statistical approach focuses on estimating the credit risk using various statistical and machine learning methods.

- The credit risk managers conduct fundamental analysis to assess the creditworthiness of the borrower by calculating various financial ratios and monitor the credit rating published by the major credit rating agencies.
- Basel III is an internationally set of measures developed by the Basel Committee on Banking Supervision in response to the financial crisis of 2007-09. Following these measures improves the banks' ability to handle financial stress during economic downturns or unforeseen circumstances. There is much work to in banking and non-banking system of Uzbekistan to gradually adopt the latest standards of Basel III.
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