



## Application of International Standards (IFRS 9, Basel III) in Assessing the Quality of the Loan Portfolio: Experience and Prospects for Banks in Uzbekistan

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Annotatsiya

The article examines the theoretical and practical aspects of applying international standards IFRS 9 and Basel III in assessing the quality of the loan portfolio. Special attention is paid to the shift from traditional loss accounting methods to the expected credit loss (ECL) model, as well as to the tightening of capital and liquidity requirements for banks in line with the Basel Accords. A review of foreign experience in implementing these standards is provided, along with the main problems of their adaptation in the banking system of Uzbekistan, including limited statistical data, staff shortages, and technological barriers. As a result of the research, directions for improving bank risk management are proposed: the development of scoring and stress-testing models, the use of digital solutions and Big Data, as well as strengthening the institutional and regulatory framework. The findings can be used both for academic purposes and in the practice of commercial banks when modernizing credit risk management systems.

Kalit so'zlar | loan portfolio; risk management; IFRS 9; Basel III; expected credit loss (ECL); banking system of Uzbekistan; stress testing; financial stability.

### Introduction

The loan portfolio is both a key source of profitability and the main source of risks for any commercial bank. Its quality directly affects the financial stability of the banking system, the level of trust among clients and investors, and the stability of the economy as a whole. In the context of increasing competition, digitalization of the financial sector, and growing macroeconomic uncertainty, improving credit risk assessment methods and enhancing the quality of the loan portfolio becomes particularly important.

International Financial Reporting Standards (IFRS 9) and the Basel Committee on Banking Supervision requirements (Basel III) form the modern methodological framework for credit risk management. Unlike traditional approaches based on historical default data, IFRS 9 requires calculating expected credit losses (ECL), taking into account forecasted macroeconomic factors. Basel III, in turn, sets stricter

requirements for banks' capital and liquidity, encouraging the development of risk-oriented management models.

For banks in Uzbekistan, the implementation of these standards is not only a matter of enhancing the transparency and comparability of financial reporting but also an important step towards integration into the global financial system. At the same time, the adaptation process faces several challenges: limited statistical data, a shortage of qualified professionals, and the need to modernize IT infrastructure and analytical tools.

The purpose of this article is to analyze the experience of applying IFRS 9 and Basel III in assessing loan portfolio quality, to identify the problems of their implementation in the banking system of Uzbekistan, and to outline prospects and practical recommendations for further improving risk management.

### **Literature Review**

R. Merton emphasizes that the transition from the incurred-loss model to the expected credit loss (ECL) model allows banks to better account for potential risks and reduce earnings volatility [1]. J. Bouvatier and M. Lepetit (Université de Limoges, France) demonstrate that the introduction of IFRS 9 contributes to earlier recognition of losses and strengthens banks' resilience to crisis shocks [2].

A number of researchers highlight the role of Basel III in strengthening banks' capital bases. Reports from the Bank for International Settlements (BIS) indicate that new capital and liquidity requirements reduce the likelihood of systemic crises but increase regulatory costs [3]. Kashyap, Rajan, and Stein stress that Basel III encourages banks to apply risk-oriented models and pursue more diversified credit policies [4].

The experience of developing countries confirms that adapting international standards encounters institutional barriers. Studies on Kazakhstan (Lee, Kim, Hong & Yoon, 2015) showed that the implementation of Basel III enhanced banking discipline but revealed a shortage of reliable data and the need for IT modernization [5]. Similar conclusions were drawn by Georgian researchers, who emphasized the lack of human resources for applying complex risk models [6].

In Uzbekistan, this issue has been covered only to a limited extent. Publications by Abdurassulov (2022) and Khozhimatov (2023) point to the need for phased implementation of IFRS 9 and Basel III, as well as the role of the Central Bank in providing methodological support to commercial banks [7]. However, such aspects as integrating forecasted macroeconomic scenarios into ECL calculations, introducing early warning systems, and using Big Data for credit risk analysis remain understudied.

### **Methods**

The methodological basis of the study rests on IFRS 9, which requires the application of the expected credit loss (ECL) model, and the Basel Accords (Basel III), which strengthen requirements for banks' capital and liquidity. Comparative and regulatory analysis methods were used to align foreign implementation practices with the current situation in Uzbekistan's banking sector. Secondary data analysis was also applied, including statistical materials on the structure and dynamics of loan portfolios, publications from international financial institutions (BIS, IMF, World Bank), as well as official reports from individual commercial banks. Systematization and

generalization methods were used to identify the main problems and prospects for adapting international standards in national banking practice. This comprehensive approach allowed for examining both theoretical and applied aspects of IFRS 9 and Basel III implementation and for formulating practical recommendations for improving risk management in Uzbekistan's banks.

### **Results**

The analysis showed that the implementation of IFRS 9 and Basel III significantly influences credit risk management practices and the assessment of loan portfolio quality. In countries with developed financial systems, the transition to the ECL model facilitated earlier recognition of potential losses and increased banks' resilience to macroeconomic shocks. For example, the experience of the EU and the USA demonstrates that IFRS 9 enhanced the transparency of financial reporting and brought credit risk assessment closer to actual market conditions.

However, in developing countries, including those in Central Asia, adapting international standards poses challenges. Evidence from Kazakhstan and Georgia shows that the most significant obstacles are limited statistical data, a lack of skilled professionals, and high IT modernization costs. These trends are also evident in Uzbekistan's banking system.

### **Discussion**

The results show that applying IFRS 9 and Basel III can significantly enhance banking system stability and loan portfolio quality. Yet their adaptation in national practice is hindered by multiple challenges, requiring a more flexible, phased approach.

The absence of comprehensive default data hampers the development of accurate PD, LGD, and EAD models. Outdated IT systems further limit the integration of advanced analytical tools based on Big Data and predictive analytics. Human resources also remain a major bottleneck, as few specialists in Uzbekistan possess the necessary expertise in financial mathematics, statistics, and data analysis.

Nevertheless, gradual implementation has already yielded positive outcomes. Stricter provisioning requirements have made banks' credit policies more conservative and transparent, while risk-based capital standards have improved investor trust. The Central Bank of Uzbekistan is taking steps to harmonize national regulations with international practices, which lays a foundation for further integration.

### **Conclusion**

The study confirmed that adopting IFRS 9 and Basel III is essential for improving loan portfolio quality and ensuring the stability of Uzbekistan's banking system. These standards enable a transition from retrospective risk assessment methods to more forward-looking approaches, based on ECL modeling and capital management under stress scenarios.

However, the adaptation process is challenged by limited data availability, underdeveloped IT infrastructure, and a shortage of skilled professionals. These factors slow the adoption of advanced risk models and reduce the effectiveness of international approaches.

Even so, progress is evident: stricter provisioning, phased adoption of risk-based capital standards, and efforts by the Central Bank to align regulations with global practices provide a strong basis for modernization.

Practical recommendations:

1. Establish a unified credit information database, including a centralized default registry, to improve the accuracy of risk models.
2. Promote digitalization and adopt analytical platforms integrating Big Data and forecasting models.
3. Prioritize human capital development in risk management through cooperation with international educational centers and training programs.

**Table 1. Comparative analysis of IFRS 9 and Basel III implementation**

Indicator	International practice (EU, USA)	Uzbekistan
Loan loss provisioning	Fully formed, based on expected losses	Formed mainly under incurred-loss model
Use of ECL model	Widely applied, integrated with macroeconomic forecasts	In early stages, applied partially
Stress testing & scenario analysis	Regular and mandatory in risk management	Partial, mainly liquidity stress tests
Compliance with capital standards	Full compliance with strict Basel III requirements	Compliance with CBU standards, less strict than Basel III
Availability of default statistics	Extensive historical databases	Limited database, insufficient default statistics
IT infrastructure	Advanced digital and analytical platforms	Requires modernization
Human resources	Established risk management expertise	Shortage of specialists in advanced risk models

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