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EVALUATING THE MULTIPLICATIVE EFFECT OF CREDIT RISKS ON THE FINANCIAL STABILITY OF COMMERCIAL BANKS

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ABSTRACT:

This thesis investigates the theoretical and methodological foundations of credit risks, one of the most critical financial hazards affecting commercial banks' operations, and analyzes their impact on banking stability. The adverse consequences of increasing credit risk levels on bank capital adequacy, liquidity, and profitability are demonstrated through multiplicative economic models and the international Basel III framework. Concluding the research, practical recommendations have been developed to effectively manage credit risks and reduce the share of non-performing loans (NPLs) in the national banking system.

INTRODUCTION. In a market economy, loans constitute the main part of commercial banks' assets. The banking system performs the function of financial intermediation by accumulating temporarily idle funds and redistributing them to sectors in need of capital. This process is inherently associated with various risks, among which credit risk occupies a central position due to its scale and the scope of potential financial losses it can cause. Under the conditions of increasing integration in global financial markets and the digitalization of banking services, the quality of credit risk management determines the systemic viability of banks. International financial crisis experiences have repeatedly proven that credit risks spiraling out of control leads to the deterioration of asset quality on the bank's balance sheet, an increase in loan loss provisions, and ultimately to bankruptcy cases. Therefore, theoretically investigating the economic substance of credit risks and evaluating the mechanisms of their impact on banking activities carries significant scientific and practical relevance.

METHODS. In the course of the research, conceptual approaches to studying the problem of credit risk were comparatively analyzed. Specifically, J. Sinkey's concept of asset value changes, J. Stiglitz and E. Weiss's theory of information asymmetry, F. Jorion's market risks and

Value at Risk (VaR) methodology, as well as the scientific views of local scholars such as Sh. Abdullaeva, A. Omonov, and U. Azizov were systematized. In quantitatively assessing credit risk, the Internal Ratings-Based Approach (IRB) based on the recommendations of the International Basel Committee (Basel II, Basel III) and the Expected Credit Loss (ECL) calculation methodology of the IFRS 9 standard were utilized. The following formula was applied as the fundamental mathematical model for quantitative calculation: $\text{EL}=\text{PD}\times \text{LGD}\times \text{EAD}$ Here, EL represents expected loss, PD denotes probability of default, LGD signifies loss given default, and EAD stands for exposure at default.

RESULTS. As a result of the conducted research, the internal types of credit risk and their manifestation characteristics were classified. Accordingly, the credit risk system is divided into default risk, downgrade risk, concentration risk, cross-border (country) risk, collateral (secured) risk, currency, and interest rate risks. In accordance with international Basel III requirements, it was established that while "EL" is a normal hazard expected by the bank and covered by reserves, random and unexpected losses (UL) occurring beyond this indicator must be covered by the bank's internal equity capital. It was determined that an increase in credit risks exerts a chained and multiplicative negative impact on the financial condition of a commercial bank, and this impact mechanism was grouped into 4 main directions: reduction of interest income and decrease in profitability (ROA); liquidity crisis due to disruptions in cash flows; violation of regulatory capital adequacy ratios (H1/K1) set by the Central Bank; and the deterioration of investor confidence and international ratings (reputational risk).

DISCUSSION. When discussing the views of economic scholars, it was confirmed that the "adverse selection" effect emphasized by J. Stiglitz also occurs in national banking practice; namely, excessively raising interest rates with the aim of mitigating risk increases the concentration of problematic clients. As noted by local scholar A. Omonov, national banking practice features a system of excessively lending to certain large sectors of the economy (construction, agriculture), which gives rise to sector concentration risk. The analysis of the Uzbek banking system practice indicates that in some instances, insufficiently effective credit monitoring, overvaluation of collateral values above real market rates, and inaccurate forecasting of borrowers' cash flows are causing the growth of non-performing loans (NPLs). Concurring with U. Azizov, banks should rely not only on borrowers' historical financial statements but rather on methods of forecasting future cash flows and stress testing.

CONCLUSION. Credit risk is an inseparable part of banking activity, and the main strategy of a bank should be the early forecasting of risk rather than its complete elimination. Based on theoretical and practical analyses, the implementation of the following measures was deemed appropriate for effective credit risk management in commercial banks:

1. Improving the internal rating system of borrowers and widely introducing digital scoring models.

2. Developing Artificial Intelligence-based Early Warning Systems (EWS) and fully automating credit monitoring.

3. Reducing systemic vulnerability by strictly establishing concentration limits across economic sectors and large borrowers.

Summary Comparative Table of Credit Risk Components:

Credit Risk Type	Manifestation Characteristic	Impact on Bank Activity / Consequence
Default Risk	Total inability of the debtor to fulfill their obligations and bankruptcy.	Direct net financial loss incurred by the bank.
Downgrade Risk	Deterioration of the client's financial position leading to a drop in internal/external ratings.	Increase in ECL (expected credit loss) and provisions under IFRS 9.
Concentration Risk	Accumulation of credit funds in a single sector or in the hands of large individuals.	Systemic vulnerability and chained negative impact during a crisis in that sector.

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