

CREDIT RISK MANAGEMENT IN INTERNATIONAL BANKING PRACTICE

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Introduction. Credit risk management is one of the most vital functions of international banking operations. Across the globe, banks face diverse challenges in terms of credit risk management, which calls for developing effective credit risk management strategies. This article provides an overview of the features of credit risk management commonly observed in international banking practices and the methods and techniques used to manage and mitigate credit risk exposure. Credit risk is defined as the likelihood of a borrower failing to repay a loan on time. Different factors such as market conditions, national policies, and macroeconomic environments make assessing credit risk a complex undertaking in international banking. Credit risk characteristics vary depending on macroeconomic factors and borrower-specific factors such as credit history, payment schedules, and financial ratios. Banks use different methodologies to assess credit risk, including top-down, bottom-up, and blended approaches. The most commonly used techniques include credit ratings, analysis of financial statements, market-based methods, and internal credit assessments. Credit risk is the risk of the bank's potential loss, which the bank may face if the borrower is unable to fully or partially fulfill its obligations. The following factors affect the level of credit risk: the economic and political situation of the country or region, i.e. macro and microeconomic factors, the crisis of the transitional economy, the current state of the banking system formation, etc. the concentration of credit activity in individual branches and the level of sensitivity to changes in the economy, borrower's creditworthiness, reputation, and type of borrower by law form, the concentration of credit activities in understudied, new, non-traditional areas of lending (leasing, factoring, etc.), the share of new and recently engaged customers about whom the bank does not have sufficient information, accepting illiquid or rapidly depreciating assets as collateral or inability to obtain adequate collateral for a loan, diversification of credit portfolio, a frequent or significant change in the bank's policy of granting loans and forming a loan and securities portfolio, types, forms, amounts of loans granted, and their security, the portion of loans and other bank contracts with customers experiencing certain financial difficulties. [Makeev, 2007, 85]

Methodology. The research was based on a qualitative research methods approach. A case study was chosen as the most appropriate research strategy. Descriptive research was used to collect detailed information. The main sources of data were financial re-

ports, annual reports, textbooks, articles, and company publications that included brochures and magazines.

Literature review. The research was done based on the study and systematic analysis of the works of domestic and foreign authors related to the theory of management and finance, as well as banking and financial credit activities.

Credit is one of the many factors that can be used by a firm to influence demand for its products. According to Kaaya [Kaaya, 2013, 55-63], firms can only benefit from credit if the profitability generated from increased sales exceeds the added costs of receivables. Credit is further defined as a process whereby possession of goods or services is allowed without spot payment upon a contractual agreement for later payment. Timely identification of potential credit default is important as high default rates lead to decreased cash flows, lower liquidity levels, and financial distress. In contrast, lower credit exposure means an optimal debtor's level with reduced chances of bad debts and therefore financial health. According to Krahenen [Krahenen, 2013, 12-17] in today's business environment risk management and improvement of cash flows are very challenging. According to Markowitz [Markowitz, 1952, 77-97] credit risk refers to the risk that a borrower will default on any type of debt by failing to make payments which it is obliged to do. The risk is primarily that of a lender and includes lost principal and interest, disruption to cash flows, and increased collection costs. The loss may be complete or partial and can arise in several circumstances. Credit risk management is very important for banks as it gives an idea of how much exposure do, they have with counterparties vs. how much Counterparty exposure is there against the contracts. It is important to assess the counterparty risk and have some mitigation strategies in place.

Credit risk helps banks adjust their capital and deals in the market considering the other party may default. Credit risk leads to market risk as it reduces the liquidity of instruments and also to systemic risk. Thus, managers are advised to employ a modern risk management technique to diversify the earning activity of the bank.

Scientific novelty. To reduce the losses of the banks and to improve the financial situation of the lender or the investor, the credit risk was carefully studied, as a result of which different approaches to manage and mitigate the credit risks were brought up.

Different countries have different credit risk management strategies and practices. From the experience of the studied countries, it was found that due to political instability and poor economic management, non-performing loans become a primary problem for banks in developing markets. Meanwhile, banks in developed markets rely more on complex financial instruments and ratings.

Analysis. Credit risk is the risk of loss that a lender or investor incurs due to the failure of a borrower to repay a debt. It is a major risk faced by financial institutions and

other firms that lend to customers on credit terms. Credit risk arises when a borrower does not fulfill its financial obligations, including loan payments or interest payments, on time or fully. The probability of default, loss severity, exposure level, contagion risk, portfolio diversification, correlation risk, and credit risk management are some characteristics of credit risk that are important to understand.

The probability of default is the likelihood that a borrower will fail to repay its debt obligations. This can be assessed by evaluating the borrower's credit score, financial statements, and payment history. Loss severity refers to the amount of loss that an organization may incur if a borrower defaults. This can be calculated based on the borrower's outstanding debt, the recovery rate, and any collateral that may be available. The exposure level is the amount of money that a lender has at risk if a borrower defaults. This can be calculated based on the amount of the loan, interest, and any relevant fees, and should be in line with the organization's risk appetite. Contagion risk refers to the risk that a default by one borrower or counterparty will lead to a chain reaction of failures by other borrowers. This can occur when there are linkages between borrowers or counterparties that result in systemic risk. Portfolio diversification refers to the use of strategies to manage credit risk by investing in a diversified portfolio of loans or other credit assets. This can help to reduce the overall risk of portfolio losses. Correlation risk is the risk that defaults or losses occur simultaneously across different loans or asset classes. This can be mitigated by investing in a diversified portfolio of assets with low correlations to each other. Credit risk management refers to the practices employed by financial institutions and other firms to manage credit risk. This may include policies and procedures for credit approvals, monitoring of borrower performance, and strategies for managing exposure to different types of credit risk. Credit risk is a major concern for lenders and investors, and it is important to understand the characteristics of credit risk to manage it effectively. Various approaches can be used to manage and mitigate credit risk, including portfolio diversification, credit risk assessment, and credit risk management policies and procedures. A thorough understanding of credit risk can help to reduce losses and ensure a lender or investor's financial stability.

Credit risk management strategies vary across different regions. International banks usually adopt policies that can help manage risk exposure across their worldwide operations. In general, the overall architecture of a robust credit risk management program should include effective credit policies, rigorous credit review and approval processes, sensitive monitoring systems, and a well-functioning reporting system. Effective credit policies must take a holistic approach to understand the underlying economic and cyclical factors that influence the credit environment. Review and approval processes should be robust, with rigorous credit analysis that examines the creditworthiness of borrowers. Monitoring systems should be attuned to detecting warning signs early, while

the reporting system should provide management at all stages of the organization with meaningful information that includes both credit and economic performance indicators.

Credit risk management is critical to international banking practice, as banks and other lenders assume significant risks when doing business across borders. International banking is complex, and credit risk management must adapt to the changing international environment and regulatory requirements. In international banking practice, credit risk is managed in these ways: credit risk assessment, diversification, credit risk rating models, limits, collateral, hedging, international regulations, monitoring, and review.

The process of assessing credit risk in an international banking context is complex and requires additional considerations. Banks must evaluate the risks associated with political, economic, and cultural factors and the borrower's creditworthiness, legal frameworks, and currency risks. Diversification is one way to manage credit risk for international banks. International banks aim to diversify their portfolios by lending to different countries, industries, and sectors to spread the risks. Credit risk rating models are used to evaluate creditworthiness in international banking. These models assign a credit rating to a borrower based on various factors, including financial statements, cash flow analysis, and risk management assessments. Credit limits are set based on the borrower's creditworthiness, type of loan, and other factors. Collateral is also used to reduce credit risk by providing a guarantee in the event of a default. Hedging is a risk management strategy that is used to manage currency and interest rate risks. International banks use financial instruments such as forward contracts, futures contracts, and options to hedge against currency and interest rate fluctuations. International banking regulations provide guidelines for credit risk management practices. Compliance with regulations such as Basel III, which introduced stricter capital and liquidity requirements, and the Dodd-Frank Act, which implemented significant reporting and disclosure requirements, is required to ensure banking safety and soundness. Regular monitoring and review of credit risk management practices are essential for ensuring the effectiveness of the program and identifying potential areas of improvement. Banks must regularly review their credit portfolio and credit rating models to ensure they remain aligned with the bank's risk appetite.

Credit risk management in international banking practice involves additional complexities compared to domestic banking. Banks must evaluate risks associated with political, economic, and cultural factors and adjust their credit risk management practices accordingly. A combination of strategies, including diversification, credit risk rating models, credit limits and collateral, hedging, compliance with regulations, and regular monitoring and review, can help to minimize credit risk and ensure the stability of international banking institutions. Credit risk management strategies and practices vary from country to country. This can be attributed to differences in macroeconomic conditions among other factors. For instance, in emerging markets, the primary issue for

banks is non-performing loans, and this trend is exacerbated by political instability and poor economic governance. In contrast, more mature markets have higher levels of risk concentration, and banks rely more on complex financial instruments and ratings.

United States. In the United States, credit risk management practices are highly regulated under the Dodd-Frank Act and other regulatory frameworks. Banks must comply with strict capital, liquidity, and leverage requirements and perform regular stress tests to detect potential risks. The use of financial instruments, such as derivatives and securitization, is also prevalent. Credit risk management in the United States is characterized by a heavily regulated framework, which is aimed at ensuring financial stability and minimizing the risk of a financial crisis. Some key characteristics of credit risk management practices in the United States are:

Regulatory Framework: Credit risk management practices in the United States are primarily regulated by the Federal Reserve, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation (FDIC). These regulators work to ensure that financial institutions comply with regulatory guidelines and meet minimum capital adequacy ratios.

Stress Testing: One of the key features of credit risk management in the United States is stress testing. Financial institutions must regularly conduct stress tests to assess their ability to withstand a severe economic downturn. These stress tests evaluate the bank's capital adequacy, liquidity, and risk management practices.

Capital Adequacy and Liquidity Requirements: Regulators in the United States set strict capital adequacy and liquidity requirements for financial institutions. Banks must maintain an adequate level of capital to absorb potential losses and meet minimum liquidity requirements to ensure they can meet their obligations during times of stress.

Comprehensive Risk Management Framework: Financial institutions in the United States are required to implement a comprehensive risk management framework, which includes policies and procedures to assess and manage credit risk. This framework includes risk identification, measurement, monitoring, and control, as well as internal controls and compliance policies.

Credit Risk Rating Models: Credit risk rating models are widely used by financial institutions in the United States to assess borrower creditworthiness. These models use a combination of quantitative and qualitative factors to assign a credit rating to a borrower, including financial statements, cash flow analysis, and risk management assessment.

Risk-Based Pricing: Risk-based pricing is another characteristic of credit risk management in the United States. Financial institutions use risk-based pricing to set interest rates based on the borrower's credit risk. This pricing strategy aims to ensure that borrowers with higher credit risks pay higher interest rates to compensate for the increased risk.

In conclusion, credit risk management in the United States is characterized by a heavily regulated framework that emphasizes stress testing, capital adequacy, and liquidity requirements, comprehensive risk management, and the use of credit risk rating models. These practices aim to ensure the stability of financial institutions and minimize the risk of the financial crisis, both domestically and internationally.

United Kingdom. In the United Kingdom, credit risk management practices are also heavily regulated under the Prudential Regulation Authority (PRA) and Financial Conduct Authority (FCA). Banks are required to have a robust risk management framework, internal controls, and compliance policies. The PRA sets strict capital and liquidity requirements, and stress tests are conducted regularly to assess the bank's resilience.

Regulatory Framework: The UK has a robust regulatory framework to oversee credit risk management activities. The Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA) are responsible for ensuring that financial institutions adhere to best practices in credit risk management.

Credit Risk Assessment: Credit risk assessment is a crucial part of credit risk management. In the UK, financial institutions use a range of techniques such as credit ratings, financial statement analysis, and credit scoring to assess the creditworthiness of borrowers. The credit risk assessment process helps to determine the amount of credit to be extended and the terms and conditions of the credit.

Risk Mitigation Strategies: Financial institutions in the UK implement a range of risk mitigation strategies to manage credit risk. These strategies include diversification of lending portfolios, setting credit limits, collateralization of loans, and use of credit derivatives such as credit default swaps.

Stress Testing: Stress testing is an essential part of credit risk management in the UK. Financial institutions are required to conduct regular stress tests to assess their ability to withstand adverse economic conditions and credit losses.

Credit Risk Monitoring: Financial institutions in the UK closely monitor credit risk to identify early warning signals of potential credit losses. This includes regular reviews of credit portfolios, monitoring changes in credit ratings and financials of borrowers, and monitoring macroeconomic conditions that may impact credit risk.

Credit Risk Reporting: Financial institutions in the UK are required to report their credit risk exposures to regulators and investors. This includes regular reporting of credit risk metrics such as default rates, loss ratios, and credit risk capital ratios.

Overall, credit risk management in the UK is well-regulated and characterized by robust risk assessment, risk mitigation strategies, stress testing, monitoring, and reporting.

China. In China, the state-owned banking system heavily influences credit risk management practices. The government implements policies to control the country's

debt levels and closely monitors the banks' compliance with regulatory requirements. The use of financial instruments such as derivatives, are limited, and risk management practices are focused on creditworthiness assessments and collateral requirements.

Centralized Regulatory Framework: Credit risk management in China is overseen by a centralized regulatory framework that includes the People's Bank of China (PBC), the China Banking and Insurance Regulatory Commission (CBIRC), and the China Securities Regulatory Commission (CSRC). These regulatory authorities work together to ensure that financial institutions adhere to best practices in credit risk management.

Credit Risk Assessment: Financial institutions in China use a variety of tools and techniques, such as credit ratings, financial statement analysis, and credit scoring, to assess the creditworthiness of borrowers. Credit risk assessment in China places a strong emphasis on collateralization of loans, which helps to mitigate credit risk.

Government Support: The Chinese government provides support to financial institutions by backing up some of their loans. This means that in case of default, the government will cover a certain percentage of the losses incurred by the financial institution.

Risk Mitigation Strategies: Financial institutions in China employ a range of risk mitigation strategies to manage credit risk. These strategies include diversification of lending portfolios, setting credit limits, collateralization of loans, and use of credit derivatives such as credit default swaps.

Stress Testing: Stress testing is an essential part of credit risk management in China. Financial institutions are required to conduct regular stress tests to assess their ability to withstand adverse economic conditions and credit losses.

Credit Risk Monitoring: Financial institutions in China closely monitor credit risk to identify early warning signals of potential credit losses. This includes regular reviews of credit portfolios, monitoring changes in credit ratings and financials of borrowers, and monitoring macroeconomic conditions that may impact credit risk.

Credit Risk Reporting: Financial institutions in China are required to report their credit risk exposures to regulators and investors. This includes regular reporting of credit risk metrics such as default rates, loss ratios, and credit risk capital ratios.

Overall, credit risk management in China is characterized by a centralized regulatory framework, strong collateralization practices, government support, stress testing, monitoring, and reporting.

Japan. In Japan, credit risk management practices are also highly regulated by the Financial Services Agency. Regulatory requirements focus on risk management, internal controls and compliance. Banks are required to disclose risk management policies and regularly conduct stress tests. The use of derivatives is limited.

Regulatory Framework: The Financial Services Agency (FSA) is the primary regulatory body responsible for overseeing credit risk management in Japan. The FSA

works to ensure that financial institutions adhere to best practices in credit risk management and follow regulations set by the government.

Credit Risk Assessment: Financial institutions in Japan use various methods to assess credit risk, including credit ratings, financial statement analysis, and credit scoring. They also place a strong emphasis on character evaluation, taking into account the borrower's reputation and credit history.

Risk Mitigation Strategies: Mitigation strategies in Japan include diversifying lending portfolios, setting appropriate credit limits, and carefully selecting collateral. The use of credit derivatives such as credit default swaps is not as prevalent in Japan as in other countries.

Stress Testing: Stress testing is an important part of credit risk management in Japan. Financial institutions are required to undertake regular stress tests to assess their ability to withstand adverse economic conditions and credit losses.

Credit Risk Monitoring: Financial institutions in Japan closely monitor credit risk to identify potential credit losses early on. Monitoring includes regular reviews of credit portfolios, tracking changes in credit ratings and financials of borrowers, and monitoring macroeconomic conditions that may impact credit risk.

Credit Risk Reporting: Financial institutions in Japan are required to report their credit risk exposures to regulators and investors. Reporting includes credit risk metrics such as default rates, loss ratios, and credit risk capital ratios.

Overall, credit risk management in Japan is characterized by a strong regulatory framework, a focus on character evaluation, careful risk mitigation strategies, regular stress testing, and careful monitoring and reporting.

Developing countries. Credit risk management practices in developing countries are often less developed due to weaker regulatory frameworks, limited infrastructure, and political instability. Banks are more likely to rely on traditional methods such as credit assessments, collateral, and guarantees. The use of financial instruments is limited due to a lack of liquidity and transparency in financial markets.

Credit risk management in developing countries faces unique challenges due to a lack of developed financial infrastructure and limited access to information. Here are some characteristics of credit risk management in developing countries:

Limited Credit Information: Many borrowers in developing countries lack a credit history or financial records, making it difficult for lenders to assess creditworthiness. Financial institutions in developing countries typically rely on non-traditional sources of information such as community reputation, references, and local knowledge.

Informal Lending Practices: Informal lending practices are common in developing countries, with loans often provided by family or friends. These informal lending prac-

tices are not regulated by formal authorities and may not adhere to best practices in credit risk management.

Lack of Collateral: Collateral is often a critical component of credit risk management, but in many developing countries, borrowers lack sufficient collateral to secure loans. This lack of collateral increases the risks for financial institutions.

Political Risk: Developing countries often face political risks, including unstable governments, uncertain legal systems, and corruption. This political risk can increase credit risk for lenders and make it challenging to enforce loan agreements.

Limited Regulatory Oversight: Developing countries may have limited regulatory frameworks and weak financial institutions, making it difficult to implement effective credit risk management practices.

Need for Innovative Solutions: Given the unique challenges faced by developing countries, credit risk management requires innovative solutions tailored to local conditions. These solutions may include partnerships with microfinance institutions, the use of mobile and digital technology to gather credit information, and alternative risk assessment models.

Overall, credit risk management in developing countries is characterized by limited credit information, informal lending practices, lack of collateral, political risk, limited regulatory oversight, and the need for innovative solutions. In conclusion, credit risk management practices vary across different countries, influenced by regulatory frameworks, cultural differences, and economic development. Developed countries such as the United States and the United Kingdom have more sophisticated risk management frameworks that are highly regulated. In contrast, developing countries rely more on traditional methods of risk management due to regulatory and infrastructure limitations. Regardless of the country, effective credit risk management is essential to maintain the financial stability of banks and reduce the risk of the financial crisis.

Conclusion. Managing credit risk in today's rapidly changing global economy presents significant challenges, requiring financial institutions to be agile and responsive to emerging trends and risks. To be effective in credit risk management, institutions must be proactive, sophisticated, flexible in their approach, leveraging advanced technologies and global expertise to manage an increasingly complex and dynamic risk environment.

In conclusion, credit risk management is a critical function that forms the basis for sustainable banking operations. This article establishes the importance of developing effective credit risk management strategies and the techniques that are typically utilized to manage and mitigate credit risk exposure. Given the constantly changing global environment, stakeholders need to remain vigilant and proactive in managing credit risk effectively. Banks must continue to invest in robust credit risk management practices to ensure long-term sustainability.

References:

1. Makeev S.R. Denezhno-kreditnaja politika: teorija i praktika. M.: Jekonomist", 2007, str. 85
2. Bhatia, M. (2020). Managing Credit Policy for Post COVID-19 Business Environment. The South East Journal of Management, 14(2)
3. Dhillon, P.S. & Dhillon, S.K. (2021). Credit Risk Management in Banks: Implications for Credit Policy Development. Global Business Review, 22(3)
4. Kaaya, I.A. (2013) Credit Risk and Commercial Banks Performance in Tanzania. Research Journal of Finance and Accounting, 4, 55-63
5. Krahnert, J.A. (2013) The Basel II Reform and Retail Credit Markets. Journal of Commercial Bank Lending, 36, 12-17
6. Markowitz, H. (1952) Portfolio Selection. Journal of Finance, 7, 77-97

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The problem of risk in banking practice is very important because the process of making managerial decisions in conditions of information uncertainty is strongly related to it. The risk encountered in banking practice is the risk of the bank suffering tangible losses or the possibility of their occurrence in the event of the emergence of unpredictable, basically negative, and sudden situations. Since the risk is combined with unpredictable situations, it can fundamentally disintegrate the given banking institution. A standardized approach to credit risk involves setting asset risk weights by the supervisory authority based on ratings assigned to borrowers by independent rating organizations. The rating expresses the agency's opinion about the borrower's future abilities and intentions to make payments and repay the principal and interest to the lenders on time and in full. The main goal of rating systems is to assess the borrower's creditworthiness as accurately as possible. Credit ratings are usually assigned and published by specialized rating agencies. Most banks also perform internal ratings to improve credit risk management. Banks usually use different classification scales, which, as a rule, contain 5-10 risk levels. It is obvious that when assessing banking risks, it is not possible to apply uniform approaches for all banks, because each bank has its unique organizational structure, current and summary indicators, preferred financial policy, and external economic, legal, and political environment in which it operates. These and many other factors influence the choice of risk assessment methods and the assessment results. From this point of view, preference was given to the study of international experience and conducting comparisons.