

Optimization Paths of Risk Management Mechanisms for Commercial Banks in the Context of Financial System Reform

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ABSTRACT

Against the backdrop of financial system reform, the optimization of risk management mechanisms in commercial banks is of paramount importance. Currently, commercial banks have established a multi-layered risk management framework, yet they still face challenges such as the impact of fintech, insufficient data quality, and poor internal coordination. Optimization strategies include leveraging big data and artificial intelligence technologies to enhance the precision of risk assessment, improving internal governance to strengthen interdepartmental collaboration, and expanding risk management tools to bolster risk hedging capabilities. Practical evidence demonstrates that these measures effectively improve banks' ability to identify and manage risks, reducing non-performing loan ratios and market risk losses. In the future, commercial banks must continue to deepen risk management reforms to adapt to market changes and ensure the stable operation of the financial system.

KEYWORDS

financial system reform; commercial banks; risk management mechanisms; optimization paths; case studies

With the increasing complexity of financial markets and the rapid development of fintech, commercial banks are facing unprecedented opportunities and challenges. Conducting an in-depth analysis of the current state of risk management mechanisms, identifying existing problems and shortcomings, and exploring effective optimization strategies are of significant importance for enhancing the risk prevention and control capabilities of commercial banks and strengthening their market competitiveness. By showcasing the practical effects of optimization strategies through case studies, this paper provides references and directions for the continuous improvement of risk management mechanisms in commercial banks, offering both theoretical and practical value.

1 Analysis of the Current State of Risk Management Mechanisms in Commercial Banks

The risk management mechanisms of commercial banks are a critical safeguard for the stable operation of the financial system, and their importance has become increasingly prominent with the advancement of financial system reform. In the current financial environment, commercial banks have made certain progress in risk management mechanisms, but they also face numerous new challenges and issues. From the perspective of the risk management framework, commercial banks have established a relatively comprehensive multi-layered risk management structure covering credit risk, market risk, operational risk, and other dimensions.

In terms of credit risk management, banks employ stringent customer credit evaluation systems and advanced risk assessment models to conduct comprehensive evaluations of borrowers' creditworthiness, thereby effectively identifying and controlling credit risks. For market risk management, banks utilize sophisticated quantitative models and risk monitoring systems to track and analyze real-time fluctuations in market factors such as interest rates and exchange rates, addressing uncertainties posed by market risks. In operational risk management, banks mitigate operational risks by refining internal processes, enhancing employee training, and establishing risk early-warning mechanisms.

However, despite the progress made in building risk management mechanisms, commercial banks still encounter several issues. With the rapid evolution of financial markets and the continuous emergence of financial innovations, the types and complexity of risks faced by banks are increasing. Traditional risk management models and methods may prove inadequate in addressing emerging risks. For instance, the rapid development of fintech has significantly altered banks' business models and risk profiles, yet some banks' risk management mechanisms have not kept pace with these changes, resulting in insufficient capabilities to identify and control new risks.

In risk management practice, banks face numerous challenges, with data quality, information asymmetry, and interdepartmental coordination being particularly prominent. Deficiencies in data management systems lead to incomplete data collection and poor data quality, undermining the accuracy of risk assessments. Inefficient information flow between banks and clients, as well as among internal departments, results in untimely sharing and underutilization of risk information. Unclear departmental responsibilities and inadequate communication mechanisms further hamper the efficiency and effectiveness of risk management.

Financial system reform has heightened regulatory requirements, with supervisory authorities intensifying oversight of

indicators such as capital adequacy ratios and risk provisions. While banks must comply with regulatory requirements, some institutions adopt a passive, perfunctory approach, failing to translate regulatory demands into practical risk management measures. This highlights the urgent need for optimization and improvement.

2 Existing Problems and Challenges in Commercial Banks' Risk Management Mechanisms

Under the backdrop of financial system reform, the risk management mechanisms of commercial banks face numerous pressing problems and challenges. As the financial market environment grows more complex and financial innovation accelerates, the limitations of traditional risk management models are becoming increasingly apparent.

On one hand, heightened volatility in financial markets, interest rate liberalization, exchange rate fluctuations, and the rapid development of financial derivative markets have made the market risks faced by commercial banks more complex and variable. The increased dynamism and interconnectedness of market risks demand more precise risk measurement and monitoring capabilities from banks. However, the risk assessment models of some banks still fall short in handling high-frequency data and complex risk scenarios, making it difficult to accurately and timely reflect changes in market risks.

On the other hand, the widespread application of fintech poses new challenges to the risk management mechanisms of commercial banks. Fintech companies, leveraging their technological advantages and innovative models, have rapidly penetrated the financial services sector, intensifying market competition.

Commercial banks are confronted with multiple challenges during their digital transformation process, including rapid technological obsolescence and significant pressures regarding data security and privacy protection. The advancement of financial technology has fundamentally altered customer behaviors and financial transaction patterns, rendering traditional risk assessment methodologies and customer identification approaches increasingly inadequate. While maintaining prudent operations, banks must proactively adapt to fintech-driven transformations by elevating their risk management capabilities through digitalization.

However, substantial issues persist in the internal coordination and implementation of risk management mechanisms within commercial banks. Ambiguous division of responsibilities among departments and difficulties in balancing risk management with business development objectives remain prevalent. The current information-sharing framework between risk management departments and business units proves insufficient, resulting in untimely and inaccurate risk information transmission that ultimately compromises the scientific validity and effectiveness of risk management decisions.

In operational practice, some banks exhibit formalistic and superficial implementation of risk management systems, significantly undermining their actual risk prevention effectiveness. Moreover, macroeconomic uncertainties present formidable challenges - uneven global economic recovery and ongoing domestic economic restructuring have elevated credit risks for both corporate and individual clients. Notably, credit risk exposure is no longer confined to traditional lending businesses but may permeate other banking sectors amid economic downturns.

3 Optimization Strategies and Demonstrated Outcomes of Commercial Banks' Risk Management Mechanisms

The cornerstone of optimization lies in establishing a more scientific and dynamic risk assessment framework. Commercial banks should incorporate advanced technologies such as big data analytics and AI algorithms to enhance the precision and timeliness of risk identification. These technological solutions enable comprehensive processing of massive datasets to uncover latent risk factors, thereby providing multidimensional perspectives for risk evaluation. Concurrently, banks must strengthen data governance to ensure information quality and integrity as reliable foundations for risk assessment. Through systematic optimization, financial institutions can more accurately discern evolving trends in market, credit, and operational risks, facilitating the formulation of targeted management strategies.

The optimization process necessitates reinforced internal governance structures with clearly defined departmental responsibilities and collaborative mechanisms. Establishing cross-functional risk management teams can effectively dismantle organizational silos and promote information sharing. Close coordination between risk management and business departments ensures alignment between risk control measures and strategic objectives. Furthermore, implementing performance-based incentive mechanisms that incorporate risk management metrics into employee evaluations helps cultivate organizational risk awareness and active participation. Such governance enhancements significantly improve the efficiency and execution of risk management protocols.

Commercial banks should also expand their repertoire of risk management instruments. With financial market development, derivative products like interest rate swaps and credit default swaps provide effective tools for hedging market and credit risks. Strategic partnerships with specialized risk management institutions can further augment banks'

risk mitigation capabilities.

Preliminary results demonstrate marked improvements in risk identification and management following technological adoption and governance optimization. Enhanced market risk prediction enables proactive asset allocation adjustments to minimize losses, while refined credit evaluation models and strengthened post-loan monitoring have effectively reduced non-performing loan ratios. Judicious application of risk management tools has collectively contributed to better controlled overall risk exposure.

4 Conclusion

The optimization of commercial banks' risk management mechanisms constitutes a critical imperative within financial system reform. Through systematic analysis of current conditions, candid identification of challenges, and proactive strategy development, significant progress has been achieved in risk identification, assessment and response capabilities. Looking ahead, continuous evolution of fintech and market dynamics will require further reforms - including technological innovation, governance refinement, and cross-sectoral risk response enhancement - to ensure adaptability in complex financial environments and ultimately support sustainable financial system stability and high-quality economic development.

About the Author

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