

The Impact of Renminbi Exchange Rate Fluctuations on the Banking Sector: A Case Study of the Bank of China

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Abstract

This paper examines the impact of RMB exchange rate fluctuations on the banking sector, using the Bank of China as a case study, and proposes targeted risk management strategies. Findings indicate that RMB appreciation has exerted significant effects on the Bank of China's balance sheet, revenue, and profits, with the most pronounced impact observed on its balance sheet. Regarding risk management, the Bank of China has adopted multiple strategies to mitigate exchange rate volatility risks, including increasing foreign exchange reserves, optimising asset-liability structures, and developing foreign exchange derivatives operations.

Looking ahead, as China's economy continues to develop, renminbi exchange rate fluctuations will persist. Consequently, the Bank of China must further refine its risk management systems, enhance research and monitoring of foreign exchange markets, continuously optimise its asset-liability structure, and strengthen its capacity to guard against exchange rate risks. Moreover, deepening financial reforms to advance interest rate liberalisation and exchange rate marketisation could enhance the banking sector's competitiveness and adaptability, thereby elevating Bank of China's standing and influence within global financial markets.

1. Introduction

Since China embarked upon its reform and opening-up policy in 1978, the nation has witnessed rapid economic development and a continuous elevation of its international standing. As a vital component of the Chinese economy, the banking sector plays a significant role in the national economy. Concurrently, driven by trends towards globalisation and liberalisation, fluctuations in the international exchange rate market have become an unavoidable factor in economic development.

The renminbi exchange rate stands as a key indicator for China's economic and financial markets. Since 2005, the renminbi exchange rate has progressively achieved a degree of marketisation and gradually increased its influence in international markets. However, it remains subject to multiple domestic and international factors, such as the trade surplus, domestic monetary policy, and foreign capital inflows. Consequently, fluctuations in the renminbi exchange rate have also become a significant factor affecting the banking sector.

As one of China's five major commercial banks, the Bank of China plays a vital role in the Chinese banking industry. BoC maintains an extensive global network, providing diverse financial services to both corporate and individual clients. Nevertheless, the bank is susceptible to the effects of renminbi exchange rate fluctuations, which may impact its operational and financial performance.

Consequently, examining the implications of renminbi exchange rate volatility for the banking sector, particularly through the lens of BoC, holds substantial practical significance and theoretical value. This research aids in understanding the risks and opportunities within China's banking industry and facilitates the formulation of appropriate policies and strategies.

2. Research Objectives and Significance

2.1 Research Objectives

This study focuses on examining the impact of renminbi (RMB) exchange rate fluctuations on the banking sector, with particular emphasis on Bank of China as a representative case. Existing studies have shown that exchange rate volatility significantly affects banks' financial performance, risk exposure, and operational stability (Cao, 2015; Wang, 2016; Liu, 2018). Building on this literature, the present research aims to provide a systematic and integrated analysis of the financial impacts of RMB exchange rate fluctuations and the strategic responses adopted by commercial banks.

2.1.1 Objectives Related to Financial Impact Analysis

The first objective of this study is to analyse the effects of RMB exchange rate fluctuations—including both appreciation and depreciation—on the Bank of China's balance sheet structure, revenue performance, and profitability. Prior research indicates that exchange rate movements influence the valuation of foreign currency-denominated assets and liabilities, as well as banks' earnings volatility and capital adequacy (Liu, 2018; Li, 2020). This study seeks to extend existing findings by providing a case-based analysis that captures the multidimensional financial impacts of exchange rate volatility.

2.1.2 Objectives Related to Bank Response Strategies

The second objective is to examine the effectiveness of banks' strategic responses to exchange rate volatility. Previous studies have highlighted the role of foreign exchange risk management, income diversification, and asset-liability management in mitigating exchange rate risks (Chen, 2017; Wang, 2016). By analysing the practices adopted by the Bank of China, this research aims to assess how these strategies function under volatile exchange rate conditions and how they contribute to financial stability.

2.1.3 Objectives Related to Policy Implications and Regulatory Guidance

The third objective is to derive policy-oriented insights from the analysis of RMB exchange rate fluctuations. Existing literature suggests that exchange rate regimes and regulatory frameworks play

a critical role in shaping banks' risk exposure and adjustment behaviour (Cao, 2015; Kang, 2021). Accordingly, this study aims to provide recommendations for government and regulatory authorities to formulate appropriate policies and supervisory measures that mitigate exchange rate risks faced by the banking sector.

2.1.4 Objectives Related to Academic Contribution

The final objective is to contribute empirical evidence and theoretical insights to the literature on exchange rate risk management and asset–liability management in the banking industry. While prior studies have largely focused on industry-level or macroeconomic analyses (Liu, 2018; Cui, 2022), this research adopts a bank-level case study approach to enrich understanding of the transmission mechanisms and management of exchange rate risk in China's banking system.

2.1.5 Summary

In summary, the research objectives of this study are structured around four interrelated dimensions: financial impact analysis, bank-level response strategies, policy implications, and academic contribution. Anchored in existing literature and supported by a case-based analytical framework, these objectives provide a coherent foundation for the subsequent analysis of RMB exchange rate fluctuations and their implications for the banking sector.

2.2 Research Significance

This study examines the implications of renminbi (RMB) exchange rate fluctuations for the banking sector through an in-depth case analysis of Bank of China. Existing research has demonstrated that exchange rate volatility has significant effects on banks' risk exposure, profitability, and financial stability (Cao, 2015; Liu, 2018; Cui, 2022). Building on this literature, the present study offers theoretical, practical, and policy-related contributions.

2.2.1 Theoretical Significance

From a theoretical perspective, this study contributes to the literature on exchange rate risk management and banking performance by providing a bank-level analytical framework. Prior studies have largely focused on macro-level or industry-wide impacts of RMB exchange rate fluctuations (Cao, 2015; Liu, 2018), while relatively limited attention has been given to the transmission mechanisms at the individual bank level.

By integrating exchange rate fluctuations with balance sheet dynamics, revenue performance, and risk management strategies, this research enriches existing theoretical discussions on how exchange rate volatility affects commercial banks' operational and financial outcomes. The findings therefore extend the understanding of exchange rate risk transmission within emerging market banking systems.

2.2.2 Practical Significance for the Banking Sector

From a practical standpoint, this study enhances the banking sector's understanding of exchange rate fluctuations by analysing their concrete impacts on the Bank of China's financial performance and risk profile. Previous studies suggest that effective foreign exchange risk management and asset–liability coordination are essential for mitigating the adverse effects of exchange rate volatility (Chen, 2017; Wang, 2016).

By examining the response strategies adopted by the Bank of China, this research provides practical reference for other banking institutions facing similar exchange rate risks. The analysis offers insights into how banks can strengthen early-warning mechanisms, improve risk prevention capabilities, and enhance operational resilience under volatile exchange rate conditions.

2.2.3 Policy and Regulatory Significance

From a policy and regulatory perspective, this study offers valuable implications for government authorities and financial regulators. Existing literature highlights the importance of exchange rate regimes, regulatory frameworks, and supervisory policies in shaping banks' exposure to exchange rate risk (Cao, 2015; Kang, 2021).

By identifying key challenges associated with RMB exchange rate fluctuations and evaluating banks' strategic responses, this research provides empirical support for the formulation of exchange rate policies and supervisory measures. These insights may assist policymakers in promoting financial stability and improving the effectiveness of macroprudential regulation within the banking sector.

2.2.4 Summary

In summary, this study holds significant theoretical and practical value by deepening understanding of the impact of RMB exchange rate fluctuations on the banking sector and by analysing the strategic responses of the Bank of China. Through its integrated analytical framework, the research contributes to academic literature, informs banking practice, and supports policy formulation related to exchange rate risk management.

3. Research Methodology

3.1 Research Design

This study employs an empirical research approach, primarily involving the collection and analysis of Bank of China's financial data during exchange rate fluctuations, alongside relevant policy and market information. This enables an investigation into the impact of RMB exchange rate volatility on the banking sector and Bank of China's strategies for managing such fluctuations.

3.2 Data Sources

This study draws upon multiple authoritative data sources to ensure the reliability, completeness, and analytical robustness of the empirical analysis. By integrating bank-level financial data, official

policy and regulatory information, and market-based exchange rate data, the research establishes a comprehensive data foundation for examining the impact of renminbi (RMB) exchange rate fluctuations on the banking sector.

3.2.1 Bank-Level Financial Data

The primary source of bank-level data consists of the financial statements and public announcements of Bank of China. These data provide detailed information on the Bank's balance sheet structure, income composition, profitability, and foreign currency exposure. As a major state-owned commercial bank with extensive cross-border operations, the Bank of China offers a representative case for analysing the financial effects of RMB exchange rate fluctuations.

3.2.2 Policy and Regulatory Data

To capture the institutional and regulatory context of exchange rate movements, this study utilises policy documents and statistical data released by the State Administration of Foreign Exchange and the People's Bank of China. These sources provide information on foreign exchange policies, exchange rate regimes, capital flow regulations, and monetary policy measures, which are essential for understanding the macroeconomic environment influencing exchange rate fluctuations.

3.2.3 Exchange Rate and Market Data

In addition, the study incorporates data and analytical reports on RMB exchange rate movements and market conditions obtained from various financial and economic data platforms. These data reflect trends in exchange rate volatility, market expectations, and external economic conditions, thereby supporting a more comprehensive analysis of the interaction between exchange rate dynamics and banking sector performance.

3.2.4 Summary

In summary, this study employs a diversified data structure combining bank-level financial information, official policy and regulatory data, and market-based exchange rate indicators. The integration of these data sources enhances the reliability of the empirical analysis and provides a solid foundation for examining the effects of RMB exchange rate fluctuations on the banking sector.

3.3 Research Methodology

This study adopts a multi-method research design to systematically examine the impact of renminbi (RMB) exchange rate fluctuations on the banking sector and the corresponding response strategies of Bank of China. By combining quantitative analysis with qualitative strategic assessment, the research aims to capture both the financial effects of exchange rate volatility and the managerial responses adopted by commercial banks.

3.3.1 Descriptive Statistical Analysis

Descriptive statistical analysis is employed to examine the basic characteristics and trends of the Bank of China's financial indicators during periods of RMB exchange rate fluctuations. By analysing changes in balance sheet items, revenue composition, and profitability, this method provides an initial overview of how exchange rate movements are reflected in banks' financial performance and risk exposure.

3.3.2 Correlation Analysis

Correlation analysis is used to investigate the relationships between RMB exchange rate fluctuations and key financial indicators of the Bank of China. By examining correlations between exchange rate movements and variables such as assets, liabilities, income, and profits, this method helps identify the degree to which exchange rate volatility is associated with changes in banks' financial conditions and operational outcomes.

3.3.3 Analytical Model Development

To further explore the mechanisms through which exchange rate fluctuations affect banking operations, this study develops analytical models focusing on risk management, asset–liability management, and income–profit management. These models provide a structured framework for analysing how the Bank of China adjusts its management strategies in response to exchange rate volatility and how such adjustments influence financial performance and risk control.

3.3.4 SWOT Analysis

In addition to quantitative methods, a SWOT analysis is conducted to assess the Bank of China's strengths, weaknesses, opportunities, and threats within an environment characterised by exchange rate fluctuations. This qualitative approach complements the empirical analysis by offering strategic insights into the Bank's competitive position and its capacity to cope with exchange rate risks under changing market conditions.

3.3.5 Summary

In summary, this study employs a comprehensive methodological framework that integrates descriptive statistical analysis, correlation analysis, analytical model development, and SWOT analysis. The combination of quantitative and qualitative approaches enhances the robustness of the research and provides a solid methodological foundation for analysing the impact of RMB exchange rate fluctuations and the response strategies of the banking sector.

3.4 Research Limitations

Although this study provides a systematic analysis of the impact of renminbi (RMB) exchange rate fluctuations on the banking sector, it is subject to several limitations related to data availability, research timeframe, and case selection. These limitations should be acknowledged when interpreting the research findings.

3.4.1 Data Reliability and Completeness

The first limitation concerns data reliability and completeness. This study relies on publicly available financial statements and official statistical data, which may be subject to reporting constraints and data collection difficulties. As a result, certain data may be incomplete or lack sufficient granularity, potentially affecting the precision of the empirical analysis.

3.4.2 Timeframe Limitations

The second limitation relates to the timeframe of the study. The analysis is conducted over a specific period, which may not fully capture long-term trends or structural changes in exchange rate dynamics and banking sector behaviour. Consequently, the findings may be influenced by short-term fluctuations or period-specific economic conditions.

3.4.3 Scope and Case Study Limitations

The third limitation concerns the scope of the research. This study adopts Bank of China as a single case study. While the Bank of China is highly representative due to its scale and extensive international operations, the findings may not be fully generalisable to all banks or to the entire banking sector under different institutional and market conditions.

3.4.4 Summary

In summary, the limitations of this study arise primarily from data constraints, the selected research timeframe, and the use of a single-bank case study approach. Recognising these limitations helps to contextualise the research findings and provides direction for future studies to expand data coverage, extend time horizons, and incorporate comparative analyses across multiple banking institutions.

4. Analysis of Renminbi Exchange Rate Fluctuations and Banking Sector Responses

4.1 Definition and Influencing Factors of Exchange Rate Fluctuations

Exchange rate fluctuations represent a fundamental phenomenon in international financial markets and play a crucial role in shaping macroeconomic conditions and banking sector performance. Understanding the definition, driving factors, and banking-sector implications of exchange rate volatility provides the theoretical foundation for analysing its effects on financial institutions.

4.1.1 Definition of Exchange Rate Fluctuations

Exchange rate fluctuations refer to short-term and often substantial changes in exchange rates observed in foreign exchange markets. These fluctuations reflect variations in the value of one currency relative to others over a given period and are typically characterised by both magnitude and

frequency. The degree of exchange rate fluctuation is commonly measured in percentage terms or in pips, capturing the intensity and volatility of currency movements in the market.

4.1.2 Influencing Factors of Exchange Rate Fluctuations

Exchange rate fluctuations are driven by a combination of policy, economic, and external factors. From a policy and institutional perspective, government monetary policy, foreign exchange policy, trade policy, and capital control measures can significantly influence exchange rate dynamics. In addition, the structure of the international monetary system and global financial arrangements also shape exchange rate behaviour.

From an economic perspective, macroeconomic variables such as gross domestic product, inflation rates, interest rates, employment conditions, and overall economic growth affect the supply–demand balance in foreign exchange markets. Adjustments in economic policies and shifts in financial market conditions may further amplify exchange rate volatility.

External factors also play an important role. International trade and investment flows, global financial market movements, geopolitical risks, and unexpected events such as natural disasters can induce abrupt changes in exchange rates, increasing uncertainty in currency markets.

4.1.3 Impact of Exchange Rate Fluctuations on the Banking Sector

Exchange rate fluctuations exert significant effects on the banking sector through multiple channels. One key impact concerns banks' capital adequacy. Fluctuations in exchange rates can alter the value of foreign currency–denominated assets and liabilities, potentially affecting capital adequacy ratios and weakening banks' risk-bearing capacity.

In addition, exchange rate volatility poses challenges to banks' risk management practices, particularly for institutions engaged in foreign exchange transactions and cross-border operations. Banks must adopt appropriate risk management strategies to mitigate exchange rate exposure and maintain operational stability.

Furthermore, exchange rate fluctuations influence banks' income and profitability. Volatility in exchange rates can lead to fluctuations in revenues derived from foreign exchange–related activities and cross-border business, thereby affecting banks' earning capacity and market competitiveness.

4.1.4 Summary

In summary, exchange rate fluctuations are a complex financial phenomenon shaped by policy, economic, and external factors. Such fluctuations have profound implications for the banking sector by influencing capital adequacy, risk management practices, and income performance. A clear understanding of these mechanisms provides an essential theoretical basis for analysing the impact of renminbi exchange rate volatility on Chinese banks in subsequent sections.

4.2 The Current State and Future Development Trends of China's Banking Sector

China's banking sector has undergone rapid expansion and structural transformation alongside the country's economic development and financial reform. Understanding its current characteristics, future development trends, and strategic directions provides important contextual background for analysing how exchange rate fluctuations affect banking institutions.

4.2.1 Current State of China's Banking Sector

China's banking sector ranks among the largest in the world in terms of scale and asset size. The system comprises a diverse range of institutions, including large commercial banks, policy banks, and city commercial banks, forming a multi-tiered banking structure. With total assets exceeding 200 trillion yuan, China's banking system plays a central role in domestic financial intermediation and economic growth, while also increasing its presence in international financial markets.

The expanding scale and diversified structure of the banking sector have enhanced its capacity to support economic development. At the same time, growing cross-border activities and exposure to global financial markets have increased banks' sensitivity to external shocks, including exchange rate volatility.

4.2.2 Future Development Trends in China's Banking Sector

Several key trends are expected to shape the future development of China's banking sector.

First, the application of financial technology (fintech) will continue to deepen. Banks are increasingly investing in automation, digitalisation, and intelligent technologies to improve service efficiency, reduce operational costs, and enhance customer experience. Digital transformation is expected to become a core driver of competitiveness within the banking industry.

Second, reform and opening-up will further progress. As China continues to advance market-oriented reforms, the banking sector will face both new opportunities and heightened competition. Gradual relaxation of market access and increased integration with global financial markets will encourage innovation, efficiency improvements, and international expansion among Chinese banks.

Third, the expansion of cross-border financial services will accelerate. With the globalisation of China's economy and the overseas expansion of Chinese enterprises, demand for cross-border financing, settlement, and risk management services is expected to grow. Chinese banks will therefore strengthen their participation in global financial markets and provide more comprehensive cross-border financial solutions.

Finally, enhanced risk prevention and control will remain a key priority. As the banking sector evolves, increasing complexity in business models and external environments necessitates stronger risk management frameworks to ensure operational stability and maintain manageable risk levels.

4.2.3 Future Development Strategies for China's Banking Sector

In response to these trends, several strategic directions are expected to guide the future development of China's banking sector. Strengthening internationalisation strategies will be essential, with banks

actively pursuing international cooperation and expanding overseas operations to increase global market share.

At the same time, advancing digital transformation will remain a strategic focus. By enhancing digital service capabilities and building integrated digital financial ecosystems, banks can improve operational efficiency and adapt to the growing demand for intelligent financial services.

In addition, reinforcing risk management capabilities will be critical. Banks will continue to improve risk identification, assessment, and control mechanisms to ensure financial stability amid increasing exposure to market, credit, and exchange rate risks.

4.2.4 Summary

In summary, China's banking sector is characterised by large scale, diversified institutional structures, and increasing integration with global financial markets. Future development will be shaped by fintech innovation, reform and opening-up, cross-border expansion, and strengthened risk management. These structural features and trends form an important background for understanding the impact of exchange rate fluctuations on Chinese banks and their strategic responses.

4.3 Research on the Impact of Renminbi Exchange Rate Fluctuations on the Banking Sector

The Impact of Renminbi Exchange Rate Fluctuations on the Profitability and Risk of China's Banking Sector' (Liu Zongze, 2018). This paper employs data analysis and regression models to examine the effects of Renminbi exchange rate fluctuations on China's banking industry. Findings indicate that Renminbi depreciation leads to reduced banking sector profits while simultaneously increasing systemic risk.

Research on the Impact of Renminbi Exchange Rate Fluctuations on Bank Credit Behaviour (Chen Nan, 2017). This paper examines the effects of renminbi exchange rate fluctuations on bank credit behaviour, finding that such fluctuations significantly influence banks' credit expansion and contraction. The study further reveals that renminbi depreciation prompts banks to strengthen credit risk controls.

Research on the Impact of Renminbi Exchange Rate Fluctuations on Cross-Border Trade Financing Operations in China's Banking Sector (Wang Yifeng, 2016). This paper examines the effects of renminbi exchange rate fluctuations on cross-border trade financing operations within China's banking sector. Findings indicate that exchange rate volatility significantly impacts both financing costs and profitability within this business segment. Concurrently, the study identifies a need for the banking sector to enhance foreign exchange risk management and control.

Research on the Impact of Renminbi Exchange Rate Fluctuations on the Internationalisation of China's Banking Sector (Cao Ming, 2015). This paper examines the effects of RMB exchange rate volatility on the internationalisation of China's banking sector, revealing that such fluctuations influence banking institutions' internationalisation strategies and business expansion. The study

further indicates that the banking sector must enhance foreign exchange risk management and control, while improving risk identification and mitigation capabilities in international operations.

The aforementioned literature provides research findings and conclusions regarding the impact of RMB exchange rate fluctuations on the banking sector. These scholarly contributions offer valuable insights for deepening the understanding of how exchange rate volatility affects banking operations.

4.4 Impact of Renminbi Exchange Rate Fluctuations on Chinese Banks

Fluctuations in the renminbi (RMB) exchange rate—whether in the form of appreciation or depreciation—exert significant and multidimensional effects on Chinese banks. These effects are primarily reflected in banks' balance sheets, revenue and profitability, and overall risk management practices.

4.4.1 Impact on Balance Sheet Structure

Changes in the RMB exchange rate directly affect the valuation of banks' foreign currency-denominated assets and liabilities. When the RMB appreciates, the renminbi-denominated value of foreign currency assets declines, leading to a contraction in total assets. Conversely, RMB depreciation increases the domestic currency value of foreign currency assets, thereby expanding balance sheet size.

On the liability side, RMB appreciation reduces the domestic currency value of foreign currency liabilities, while depreciation increases them. If banks exhibit currency mismatches between foreign currency assets and liabilities, exchange rate fluctuations may significantly alter net assets and capital adequacy ratios, potentially affecting banks' solvency and financial stability. Therefore, exchange rate volatility amplifies balance sheet sensitivity and highlights the importance of effective asset-liability coordination.

4.4.2 Impact on Revenue and Profitability

RMB exchange rate fluctuations also influence banks' revenue composition and profitability. Appreciation of the RMB generally weakens income derived from foreign exchange-related activities, such as currency exchange services, foreign currency deposits, and foreign currency lending. Additionally, exchange rate appreciation may exert downward pressure on interest rates, narrowing net interest margins and reducing overall profitability.

In contrast, RMB depreciation tends to enhance foreign exchange business income and increase the domestic currency value of foreign currency-denominated earnings. However, it may also raise funding costs and intensify volatility in foreign exchange gains and losses. As a result, both appreciation and depreciation can introduce uncertainty into banks' income streams, making profitability more sensitive to exchange rate movements.

4.4.3 Implications for Risk Management

Regardless of the direction of exchange rate movements, RMB volatility poses substantial challenges for banks' risk management frameworks. Exchange rate fluctuations increase exposure to market risk, particularly for banks engaged in cross-border operations and foreign exchange businesses. To mitigate such risks, banks must strengthen foreign exchange risk governance through comprehensive risk management systems, including clear policies, exposure limits, and continuous monitoring mechanisms.

Optimising the structure of foreign currency assets and liabilities is essential to reducing currency mismatch risks. In addition, banks may employ foreign exchange derivatives—such as forwards, options, and swaps—to hedge against exchange rate volatility and stabilise expected cash flows. Establishing effective risk monitoring and early-warning mechanisms further enables banks to identify potential vulnerabilities in a timely manner and prevent the accumulation of excessive exchange rate risk.

4.4.4 Summary

In summary, RMB exchange rate fluctuations—whether appreciation or depreciation—have profound and interconnected impacts on Chinese banks' balance sheets, revenue performance, and risk exposure. While appreciation and depreciation affect banks through different channels, both forms of volatility heighten financial uncertainty and operational complexity. Consequently, Chinese banks must adopt flexible asset–liability management strategies, diversify income sources, and enhance foreign exchange risk management capabilities to maintain financial stability and ensure sustainable development.

4.5 Bank of China's Strategic Response to Renminbi Exchange Rate Fluctuations

In response to increasing renminbi (RMB) exchange rate volatility, Bank of China has developed an integrated strategic framework aimed at mitigating exchange rate risks while maintaining stable profitability and balance sheet resilience. Rather than addressing appreciation and depreciation separately, the Bank adopts a holistic approach that combines risk governance, income structure optimisation, and asset–liability coordination.

4.5.1 Foreign Exchange Risk Governance Framework

The Bank of China has established a comprehensive foreign exchange risk governance system to manage exposure arising from RMB exchange rate fluctuations. This framework includes clearly defined risk management policies, internal control procedures, and exposure limits covering foreign exchange transactions and cross-border operations. Dedicated risk management units are responsible for continuous monitoring, assessment, and reporting of exchange rate risks, ensuring timely identification of potential vulnerabilities.

In addition, the Bank actively employs foreign exchange derivatives—such as forward contracts, options, and swaps—to hedge against exchange rate volatility. Through these instruments, the Bank can stabilise expected cash flows, reduce earnings volatility, and enhance its capacity to withstand adverse exchange rate movements.

4.5.2 Optimisation of Income and Business Structure

To reduce excessive dependence on exchange rate-sensitive income sources, the Bank of China has pursued revenue diversification as a core strategic objective. By expanding business lines such as wealth management, investment banking, and settlement services, the Bank has gradually enhanced the stability of its income structure.

At the same time, the Bank strengthens risk control over foreign exchange-related businesses through stricter transaction approvals, enhanced pricing mechanisms, and refined performance evaluation systems. These measures help mitigate the impact of RMB exchange rate fluctuations on operating income while improving the sustainability of profit generation.

4.5.3 Asset-Liability Coordination and Balance Sheet Management

Asset-liability management plays a central role in the Bank of China's response to RMB exchange rate volatility. The Bank dynamically adjusts the composition and maturity structure of foreign currency assets and liabilities to reduce currency mismatches and limit balance sheet sensitivity to exchange rate movements.

Through diversified asset allocation and prudent overseas investment strategies, the Bank disperses exchange rate risks across multiple currencies and markets. Simultaneously, it emphasises liquidity management and maturity matching to ensure balance sheet stability under fluctuating exchange rate conditions. These measures collectively enhance the Bank's resilience to external shocks and preserve its capital adequacy.

4.5.4 Integrated Risk Monitoring and Early-Warning Mechanisms

To further strengthen its response capacity, the Bank of China has implemented integrated risk monitoring and early-warning mechanisms within its overall risk management system. By leveraging data analytics and internal risk assessment models, the Bank continuously tracks exchange rate exposures and evaluates their potential impact on financial performance.

This forward-looking approach enables timely policy adjustments and strategic responses, preventing the accumulation of excessive exchange rate risk and supporting long-term operational stability.

4.5.5 Summary

In summary, the Bank of China addresses RMB exchange rate volatility through an integrated strategic framework that combines foreign exchange risk governance, income diversification, and asset-liability coordination. By shifting from reactive measures to proactive and systematic risk management, the Bank enhances its ability to cope with exchange rate uncertainty while maintaining profitability and financial stability.

4.6 Future Strategic Implications and Policy Recommendations

Building upon the analysis of the impacts of renminbi (RMB) exchange rate fluctuations and the response strategies adopted by Bank of China, this section further discusses the future strategic implications for Chinese banks and offers policy-oriented recommendations. As exchange rate volatility becomes increasingly complex under global financial integration, banks must transition from short-term reactive measures toward more forward-looking and systematic strategic arrangements.

4.6.1 Strengthening Forward-Looking Exchange Rate Risk Management

Future exchange rate risks are likely to be characterised by higher uncertainty and greater sensitivity to global macroeconomic shocks. Therefore, banks should place greater emphasis on forward-looking risk identification and scenario analysis. By enhancing exchange rate forecasting capabilities and stress-testing mechanisms, banks can better assess potential impacts of extreme exchange rate movements on balance sheets and income structures.

Moreover, integrating exchange rate risk assessment into overall strategic planning—rather than treating it as a standalone operational issue—can improve banks’ ability to allocate capital efficiently and adjust business strategies proactively.

4.6.2 Deepening the Integration of Asset–Liability Management and Risk Governance

As RMB exchange rate volatility increasingly affects both sides of banks’ balance sheets, closer integration between asset–liability management and risk governance frameworks is essential. Banks should further improve coordination among departments responsible for treasury management, risk control, and business operations to ensure consistency in decision-making.

By embedding exchange rate considerations into asset pricing, maturity matching, and liquidity management, banks can reduce balance sheet sensitivity to currency fluctuations and enhance overall financial resilience. This integrated approach is particularly important for banks with extensive overseas operations and multi-currency exposures.

4.6.3 Enhancing the Role of Financial Innovation and Digital Technologies

Financial innovation and digital transformation offer new tools for managing exchange rate risks more effectively. Banks may leverage advanced data analytics, artificial intelligence, and digital risk management platforms to improve real-time monitoring of foreign exchange exposures and enhance early-warning capabilities.

In addition, the prudent development of innovative hedging instruments and structured financial products can provide banks with greater flexibility in managing exchange rate volatility. However, such innovation should be accompanied by robust internal controls to prevent excessive risk-taking and ensure compliance with regulatory requirements.

4.6.4 Policy Implications for Regulators and Market Institutions

From a regulatory perspective, continued progress in exchange rate marketisation and financial market reform will play a crucial role in shaping banks' exchange rate risk management practices. Regulators may consider enhancing transparency in foreign exchange markets, improving policy communication mechanisms, and encouraging the development of risk-hedging instruments to support orderly market functioning.

At the same time, regulatory frameworks should promote prudent risk management while allowing sufficient flexibility for banks to adopt market-oriented strategies. This balance is essential for fostering a stable yet dynamic banking sector capable of adapting to evolving exchange rate conditions.

4.6.5 Summary

In summary, future exchange rate volatility requires Chinese banks to move beyond traditional, reactive risk management approaches. By strengthening forward-looking risk assessment, deepening asset–liability coordination, embracing financial innovation, and operating within a supportive regulatory environment, banks can enhance their resilience to exchange rate fluctuations and achieve sustainable long-term development.

5. Conclusions

5.1 Research Findings

Fluctuations in the renminbi exchange rate impact the balance sheet, income, and profits of Bank of China. Renminbi appreciation reduces banks' foreign exchange liabilities and increases impairment losses, while simultaneously lowering the cost of imported goods, potentially boosting net profits. Conversely, renminbi depreciation increases banks' foreign exchange liabilities and reduces impairment losses, but raises the cost of imported goods, potentially diminishing net profits.

In response to RMB exchange rate fluctuations, the Bank of China has implemented multiple risk management strategies, including effective control and management of foreign exchange risk, increasing foreign exchange reserves, and engaging in foreign exchange derivative transactions. Regarding asset-liability management, the Bank of China focuses on optimising its asset-liability structure to reduce exposure to exchange rate risk. In terms of income and profit management, the Bank actively explores diversified operations, continuously expands its business domains, and enhances the diversity of its income sources.

Looking ahead, the renminbi exchange rate may continue to face volatility risks. The Bank of China must further strengthen its risk management capabilities and adopt more flexible strategies, such as engaging in cross-currency swaps, to navigate external environmental changes. Concurrently, the bank must prioritise enhancing asset quality and efficiency, optimising its operational structure, and achieving sustainable development.

5.2 Research Outlook

Firstly, as one of China's four major banks, Bank of China will continue to face challenges arising from fluctuations in the renminbi exchange rate. With the ongoing opening-up and internationalisation of China's financial markets, exchange rate volatility risks will become increasingly complex and diverse, requiring banks to respond with greater flexibility and agility.

Secondly, with the ongoing advancement of the renminbi's internationalisation and the gradual opening of the foreign exchange market, Bank of China's overseas operations will expand continuously, making its exposure to exchange rate risks increasingly pronounced. Consequently, the bank must achieve effective management of its balance sheet and income/profit across domestic and international markets, thereby enhancing its risk management capabilities and resilience to exchange rate fluctuations.

Finally, future efforts must include deepening research and forecasting of exchange rate fluctuations, attempting to anticipate exchange rate trends in advance to better inform risk management and investment decisions. Concurrently, enhanced international cooperation and knowledge sharing are essential, drawing upon practices and experiences in exchange rate risk management from other countries and regions to provide more comprehensive and in-depth support for the development of Chinese banks and the broader Chinese financial markets.

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