THE IMPACT MODEL OF INTEREST RATE LIBERALIZATION REFORM ON THE PROFITABILITY OF STATE-OWNED COMMERCIAL BANKS: A CASE STUDY OF BANK C OF CHINA

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This paper explores the definition and development of interest rate marketization in China and its impact on the profitability of state-owned commercial banks. The reform, characterized by the People's Bank of China's gradual easing of interest rate controls and expansion of the benchmark interest rate's floating range, enhanced financial market flexibility and efficiency but challenged traditional banking profit models based on interest margins.

Through qualitative case studies and thematic analysis of the Bank C (China), the study finds that Bank C effectively mitigated these challenges by optimizing asset-liability management, adjusting asset and liability structures, and employing proactive risk management. These measures improved its investment returns and profitability. Additionally, Bank C’s adoption of countercyclical strategies and advancements in digital transformation and process automation helped sustain its profit model.

The research concludes that Bank C's strategic adjustments enhanced its profitability and competitive edge, offering insights for other banks in similar market conditions and aiding predictions of financial market trends.

Keywords: interest rate liberalization; state-owned commercial banks; profitability; Bank C

Introduction

This article is dedicated to an in-depth analysis of how interest rate adjustments in the financial sector reflect subtle changes in macroeconomic policies and reveal the complex motivations behind the behavior of market participants. With qualitative research methods, we carefully examined the launch of China's inter-bank lending market in 1996, the removal of the deposit interest rate ceiling in 2015, and the comprehensive reform of the loan market interest rate quotation mechanism in 2019.

This historical review aims to describe the development process of interest rate liberalization in China and its widespread impact. Through a comprehensive explanation of
the policy reforms and economic environment during this period, it aims to delve into the response strategies of commercial banks facing interest rate liberalization under China's special economic environment and its impact on the reshaping of the banking industry's competitive structure and operating strategies.

On this basis, this article selects the Bank C of China as the object of analysis to further explore its strategic adjustments and innovation activities in the interest rate marketization environment.

The focus is on how Bank C can reconfigure its credit structure, strengthen risk control mechanisms, expand support for small, medium, and large enterprises and personal loans, and develop new financial products and services to cope with the volatility of market interest rates and the diversification of customer needs. To effectively withstand the challenges of changing financial technology, improve service efficiency and quality.

By analyzing the operational efficiency and competitiveness of Bank C, we explore its role and impact in the interest rate marketization process and evaluate how the bank leverages its inherent advantages to meet the challenges of market-oriented reform.

This paper aims to provide insights into the adaptation and transformation of China's banking industry in the interest rate marketization reform and provide strategic suggestions on improving the competitiveness of state-owned commercial banks, aiming to contribute theoretical and practical perspectives to the continued optimization and development of China's banking industry.

**Objectives**

This article aims to explore how the interest rate marketization reform reshapes the profit model and economic ecology of China's state-owned commercial banks. With the continuous advancement of interest rate marketization reform, the external environment and internal operating mechanisms faced by state-owned commercial banks have undergone fundamental changes.

Through a case analysis of the Bank C (China), this article aims to comprehensively reveal the impact of interest rate marketization reform on the profitability of state-owned commercial banks, especially the comprehensive effect on the bank's net interest margin, income structure, and operating risks.

At the same time, it analyzes how reforms can stimulate banking business innovation, management optimization, and business philosophy renewal, thereby providing new perspectives and strategic suggestions for banks' strategic transformation and expanding theoretical research horizons.

This article adopts a qualitative research framework, combined with thematic analysis and in-depth interview methods, to conduct a detailed analysis of Bank C's business strategy, organizational structure, management system, and business processes.

Through in-depth interviews with bank insiders, we aim to capture the multi-dimensional internal perceptions and descriptions of the impact of the reform, thereby providing a comprehensive framework for a deeper understanding of the impact of the interest rate marketization reform from an internal perspective.

The goal is to excavate and identify key themes and patterns in the reform process through extensive collection and in-depth analysis of secondary data, combined with bank insiders' direct experience.
Combining multi-dimensional and multi-level analysis, it aims to deepen the understanding and explanation of the impact of interest rate liberalization reform on the profitability of state-owned commercial banks and propose precise and comprehensive analytical conclusions with empirical support.

It not only provides profound insights into the adaptation and transformation of state-owned commercial banks in the face of macroeconomic policy adjustments but also provides valuable strategic reference for the banking industry and policymakers by revealing the deep-seated economic and social significance of the reform. It also contributes to the healthy development and innovation of China’s financial market.

**Literature review**

*Current status of foreign research*

After analyzing more than 20 countries that are in the process of interest rate liberalization or have already achieved interest rate liberalization, Sarge (1997) found that 15 of them showed an upward trend in interest rates.

We selected eighteen of these countries for in-depth analysis of real interest rates, and the results revealed a growth trend in the real interest rates of seventeen of them. These findings suggest that the trend of interest rate liberalization will lead to an increase in market interest rates.

When analyzing the situation after Malaysia implemented interest rate liberalization, Mckibbin (2017) studied the positive correlation between financial deepening reforms, the growth of financial institutions, and national economic growth and verified the mutually reinforcing relationship between the three.

Research results show that interest rate liberalization has significantly improved the efficiency of market resource allocation, thereby contributing to the sustained and healthy growth of the economy.

Guillen et al. (2014) observed a decline in net interest income during the implementation of interest rate liberalization reforms in the United States in the 1980s.

This change, in turn, limited the growth of loan lines, which led to an increase in the proportion of non-interest income, ultimately promoting an increase in U.S. commercial banks' profit margins at the time.

Berger & Turk-Ariss (2015) believe that although interest rate controls may have a positive impact on the financial market's stability, the implementation of interest rate liberalization measures will change the way banks operate their businesses, thereby posing potential challenges to the financial market's stability.

Cubillas & Gonzales (2016) established a model by analyzing more than 4,000 banks from 80 countries and found that financial liberalization will increase banks' operating risks to a certain extent, whether in developing or developed countries.

However, the specific shape of risk manifestations varies: in developing countries, banks primarily face risks due to increased speculation, while in developed countries; increased industry competition has a greater impact.

*Research on factors affecting the profitability of commercial banks*

At the micro level, Claudiu Tiberiu (2015) explores the detailed status within banks from a macro perspective. This study selected representative banks from six emerging
countries in South and Central America as the analysis object, used monthly data as research samples, and empirically analyzed the impact of commercial banks' internal factors on profitability. The empirical results indicate a negative relationship between a bank's profitability and its non-performing loan ratio and non-interest income proportion.

A higher non-performing loan ratio indicates that bank assets are more vulnerable to damage, thereby negatively affecting profits; at the same time, an increase in the proportion of non-interest income usually means a decrease in interest income.

This may be because these countries are promoting interest rate liberalization, resulting in interest rate spreads, downsizing, and reduced interest income. Since the profits from non-interest income are usually lower than the traditional profits obtained from deposit and loan interest rate differentials, this explains the existence of a negative correlation between the two.

From a macro perspective, De Haan & Poghosyan (2014) conducted an in-depth analysis of how a bank's asset size and business concentration affect its rate of return. The study selected all commercial banks, joint stock banks, and other types of banks in the United States from the fourth quarter of 2004 to the fourth quarter of 2009 as samples.

The research results show that the impact of market concentration on bank returns is not significant. Banks with higher market concentration ratios have a less negative impact on returns due to their size. Especially during financial crises, larger banks can demonstrate more stable profitability than smaller banks.

In published research, Hsieh (2018) also supported this conclusion's reference value and compared the profitability levels of banks in different countries from the perspective of the global banking industry and used commercial banks in 61 countries as research samples.

We used a dynamic panel data model for analysis, covering the period from 2002 to 2016. The study found that there is a negative correlation between the profitability of commercial banks and the degree of market competition, but this negative correlation is not very obvious.

Therefore, when a bank's market competitiveness declines, its profitability does not increase significantly. In addition, effective external supervision helps banks maintain the stability of their market influence, thereby preventing the decline in bank stability and the increase in external risks caused by too high or too low market influence.

The increase in bank asset size and capital adequacy ratio has also enhanced its market influence, making it easier for banks to raise funds and use the funds raised to carry out asset business, thereby increasing revenue and profits.

**The current status of research in China**

In 1998, China increased the upper limit of loan interest rates for small and medium-sized enterprises by 20%, as well as raising the upper limit of loan interest rates for rural credit cooperatives to 50%. This shows that my country has taken a pioneering step in implementing the progressive reform of lending before deposits. In 2004, the upper limit of the floating interest rate of rural credit cooperatives was adjusted to 2.3 times, and the upper limit of the loan interest rates of other financial institutions was cancelled. Since then, discussions around interest rate liberalization have continued, generating a large amount of related research.

Li (2014) pointed out that the existence of a dual-track interest rate system is inevitable. He also believed that the core goal of interest rate market reform should be to find...
a benchmark interest rate determined by the money market, and the People's Bank of China will use various policy tools to adjust this interest rate.

Jiang & Liu (2015) hold the view that only on the premise of establishing a relatively complete fair competition system can developing countries promote the maximum interests of buyers and sellers in the market by canceling interest rate controls, promoting interest rate marketization, and ensuring that resources are allocated appropriately.

In his discussion, Guo (2017) emphasized the importance of Shibor as the benchmark interest rate and put forward pragmatic suggestions on the development trend of my country's interest rate marketization. He suggested adjusting the target interest rate through the use of open market operations, the statutory reserve ratio, and other monetary policy means to ensure that it fluctuates within the established range to achieve the desired effect.

In his article, Yi (2019) reviewed the development process and progress of interest rate liberalization. The article mentioned that Shibor or other market benchmark interest rates are crucial conditions for China to deepen the process of interest rate marketization.

Ji et al. (2016) analyzed the characteristics of the dual-track system in China's financial system and emphasized that in order to promote interest rate marketization, it is necessary to overcome the shortcomings of the dual-track system, which include reducing price deviations and transforming quantity control strategies.

Zhuang (2017) used principal component analysis to evaluate the depth of interest rate marketization in China at different points in time and based this on the development level of my country's financial liberalization.

Tao & Mingyu (2014) proposed that multiple factors should be considered when evaluating the degree of interest rate marketization, including the fluctuation range of interest rates, pricing models, and the level of interest rates, and that the level of China's interest rate marketization should be determined by using the average calculation method.

Based on previous research, Zhang & Xue (2017) used the Euler number index method to measure the volatility of interest rates, combined with the degree of freedom index determined by interest rates and the level index of actual interest rates, to conduct empirical analysis on China's interest rate marketization.

In his paper, Yi (2021) emphasized that my country has established a relatively complete interest rate marketization framework and developed a relatively mature yield curve, which provides an important basis for market pricing. He also pointed out that in order to further promote the market-oriented reform of interest rates, it is necessary to increase supervision, optimize the business environment, mitigate systemic risks, and strengthen the role of the yield curve.

Research on the impact of interest rate liberalization on the profitability of China’s listed commercial banks

Zhou (2016) drew on the practice of interest rate liberalization in Hong Kong and proposed a series of issues to my country's commercial banks, such as intensified interest rate fluctuations, deepening competition between banks, narrowing deposit and loan spreads, increased interest rate risk exposure, and survival challenges faced by small and medium-sized banks. Some constructive development suggestions were made.

Qian (2011) clearly pointed out that the impact of interest rate liberalization on the profitability of Chinese commercial banks is mainly reflected in several aspects: first, the decline in loan interest rates leads to a decrease in asset returns; second, the increase in
deposit interest rates, thereby increasing the cost of funds; this These two factors work together to narrow deposit and loan interest rate spreads.

**Methodology**

This article adopts a case study method to explore how the interest rate marketization reform fundamentally affects the profitability of state-owned commercial banks. Combining the analysis of financial data, a review of strategic planning, and insights provided by employees' perspectives, it strives to comprehensively demonstrate the complex impact of interest rate liberalization reform on bank profitability.

The reason for selecting Bank C as a case is its leading position in the state-owned commercial banking system, as well as its strategic adjustments and management innovations in response to market-oriented reforms. By gathering a wide range of public information, including annual reports, quarterly reports, press releases, and academic papers, we aim to systematically analyze the relationship between interest rate liberalization reform and bank profitability.

For a variety of reasons, this article does not use a single theoretical framework for analysis.

First of all, the impact of interest rate marketization reform on bank profitability is a multi-dimensional and complex issue, covering macroeconomic conditions, market competition situations, internal management strategies, etc., and it is difficult to fully cover it through a single theoretical framework.

Secondly, the focus of this article's research is to deeply explore the specific impact of interest rate liberalization reform on Bank C's profitability and the mechanisms behind it, rather than to verify a specific theoretical hypothesis. Furthermore, the qualitative nature of the research reveals the deep meaning and internal connections of the phenomenon through case and thematic analysis.

In summary, this article combines the case study method, in-depth interview method, and thematic analysis method to explore the impact of interest rate marketization reform on the profitability of state-owned commercial banks, aiming to provide theoretical and practical guidance for the adaptive reform of the banking industry.

Although this article does not adopt a single theoretical framework, through multi-dimensional and in-depth analysis, it provides a new perspective for understanding the adaptability and transformation of state-owned commercial banks when facing macroeconomic policy adjustments and also provides information for the banking industry and policymakers.

This article follows these key steps:

- **Data collection.** Use diversified data collection methods, covering financial data, policy documents, news reports, etc. released by Bank C, to ensure that the analysis is based on comprehensive and authoritative data sources.

- **Elementary coding.** Following an initial review of the collected data, we generated primary coding for each potential theme or pattern as a fundamental tool for tracking and identifying themes.

- **Explore themes.** To accurately identify themes, you may need to repeat the process of categorizing and summarizing primary coding to find core themes in the data.
**Topic check.** Compare and verify whether the identified themes are consistent with the data content. This step may require integrating, splitting, or discarding the themes.

**Topic definition and naming.** To ensure a clear presentation of the finalized topic in the research report, it must be clearly defined and named.

**Writing reports.** A detailed statement of the various topics and their connections to each other, as well as their relevance to the research topic, Particular attention will be paid to the challenges and opportunities that Bank C faces during the interest rate liberalization reform and how these factors affect its profitability.

We provide a comprehensive interpretation of the impact of interest rate marketization reform on Bank C's profitability based on the above steps, providing insights into how banks can adapt to and respond to the challenges of marketization reform.

**Results**

This article explores and analyzes the impact on the profitability of China's state-owned commercial banks, taking the Bank C of China as the core case, and reveals the important role of interest rate marketization reform in improving the competitiveness of the banking industry and enhancing the effectiveness of financial markets.

Methods such as literature review, theoretical framework construction, and case studies are comprehensively applied to systematically demonstrate the profound impact of reform on the operating model and profit structure of state-owned commercial banks.

With the help of diversified methods such as literature reviews, the construction of theoretical frameworks, and case studies, this paper describes how this reform fundamentally affects the operating model and profit structure of state-owned commercial banks.

Specifically, we employed qualitative research techniques like in-depth interviews and thematic analysis, along with the personal experiences of bank insiders and multi-angle analysis, to identify and analyze the key themes and patterns in the reform process, thereby deepening our understanding and impact of the interest rate marketization reform.

**Interpretation**

The research results show that Bank C adapts to the complexity and multidimensionality of transformation when facing macroeconomic policy adjustments, reveals the economic and social significance of the reform, and provides strategic reference significance for the banking industry and policymakers.

This reform has clarified the following core issues and corresponding solution strategies in response to the challenges it presents:

**Response to spread compression**

The compression of spreads caused by interest rate liberalization has a direct impact on banks' profitability.

Bank C needs to optimize asset and liability management strategies, improve asset allocation and liability structure, and use efficient risk management tools and technologies to increase return on investment and profitability.
Management of procyclical risks
The impact of macroeconomic cyclical fluctuations on bank financial performance has become more significant in the context of marketization. Banks should adopt countercyclical strategies, including optimizing capital adequacy management and using macroprudential policy tools, such as countercyclical capital buffers, to enhance their ability to withstand economic fluctuations.

Optimization of internal management and cost control
In a rapidly changing market environment, accelerating digital transformation and realizing process automation, data analysis, and cloud computing are the keys to improving internal management efficiency and cost control.

Growth of non-interest income
To address the decline in interest income, banks should actively develop new financial products and services, particularly wealth management and electronic banking services, to achieve diversification and sustainable profit model development. Based on the above analysis, this article concludes that, in the face of the challenges of interest rate marketization reform, Bank C has effectively responded to market changes and improved profitability through strategic adjustments and innovative practices.

These strategies not only provide Bank C with a reference for responding to market-oriented reforms but also provide theoretical and practical perspectives for understanding the impact of financial market reforms on the banking industry. As market-oriented reforms further deepen, banks need to continue to pay attention to changes in the macroeconomic and market environment and flexibly adjust strategies to ensure sustained development and stable profitability in the fiercely competitive market.

Conclusion

Based on the conclusions of this article, the following strategic suggestions are put forward for the strategic adjustment of Bank C and other state-owned commercial banks in the new era of interest rate liberalization:

First, in order to improve financial stability and profitability, banks should refine their asset and liability management strategies.

Secondly, banks need to accelerate their digital transformation process and improve service efficiency and customer satisfaction through technological innovation, thereby opening up new growth opportunities.

In addition, in order to respond to the challenges of market-oriented reforms and enhance competitiveness, banks should focus on developing and promoting innovative financial products and services to cater to the needs of the market and customers.

Finally, strengthening internal management and risk control mechanisms is crucial to ensuring the long-term and stable development of banks.

As far as financial regulatory agencies are concerned, the conclusions and strategic suggestions provided in this article can, to a certain extent, not only provide theoretical and practical reference for the banking industry to adapt to market-oriented reforms, but also provide inspiration for policy formulation and guidance of the market-oriented reform process.
In short, the in-depth implementation of these strategies will have a profound impact on promoting the sustainable development of China's banking industry and the healthy growth and innovation of the financial market.

**Strategic adjustments for spread compression**
Interest rate liberalization's compression of interest spreads directly threatens bank profits, prompting banks to reevaluate their asset and liability management strategies. Bank C should optimize asset allocation and adjust its liability structure to improve asset quality and seek investment opportunities with higher returns.

At the same time, introducing efficient risk management tools and technologies to accurately control loan and investment risks is a key step to improving the overall return on investment and profitability. Through this series of measures, banks can move forward steadily in an interest rate liberalization environment and seek new growth drivers.

**Countercyclical measures to deal with procyclical risks**
The impact of macroeconomic fluctuations on banks is increasingly obvious, especially in the context of interest rate liberalization. In order to enhance its resilience during economic downturns, Bank C needs to adopt countercyclical strategies, such as optimizing capital adequacy ratio management, improving liquidity coverage ratios, and effectively using macro-prudential policy tools, such as countercyclical capital buffers.

These measures help buffer the impact of economic cycle fluctuations on banks’ financial stability and provide a solid foundation for banks’ sound operations.

**Digital transformation accelerates internal management and cost control**
In order to improve internal management efficiency and optimize cost control, Bank C urgently needs to accelerate its digital transformation. By implementing a comprehensive digital strategy, such as process automation, in-depth data analysis, and the application of cloud computing technology, banks can significantly improve operational efficiency and reduce operating costs.

Further optimizing business processes and strengthening employee skills training will enable banks to maintain their leading position in the highly competitive market while improving work efficiency and service quality.

**Diversification strategies to grow non-interest income**
Faced with continued pressure on interest income, Bank C should actively explore and develop new financial products and services, especially focusing on wealth management, electronic banking services, and investment banking. Innovative and diversified financial products and services, such as customized wealth management solutions and online financial services, can not only attract more customers but also bring significant non-interest income to banks, helping to achieve a diversified and long-term profit model.

To sum up, through the implementation of the above strategies, Bank C can not only effectively respond to challenges in the new era of interest rate liberalization but also find new growth and profit opportunities. The conclusions and suggestions in this article serve as strategic references for Bank C and other state-owned commercial banks.

At the same time, it also provides certain guidance for financial regulatory agencies in formulating relevant policies and responding to market-oriented reforms.
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In-depth discussion and implementation of these strategies will contribute to the banking industry's sustainable development.

**Recommendation**

This article conducts a detailed analysis around the core issue of how to adjust strategies to maintain and enhance profitability in the context of interest rate liberalization. Although this article has achieved certain results in revealing the impact of interest rate liberalization on the operating model and profit structure of state-owned Bank C, there are still some shortcomings, and it also looks forward to future research directions.

**Research limitations**

This article has limitations in the interview survey and data collection and cannot cover all stages of interest rate marketization reform. We anticipate conducting more comprehensive and in-depth research in the future as data continues to improve and the number of listed commercial banks rises.

**Future research directions**

Faced with the challenges brought by the interest rate liberalization reform, Bank C has effectively responded to market changes and maintained profitability through strategies such as optimizing internal management, strengthening risk control, improving cost efficiency, and innovating profit models. Implementing these strategies provides Bank C and other state-owned commercial banks with valuable experience and references. However, as market-oriented reforms continue to deepen, the challenges and opportunities facing the banking industry will become more diverse.

Future research can be deepened in the following aspects:

1) Expansion of data and methods: We can better understand the impact of interest rate liberalization reform on commercial banks by using more diversified data sources and research methods.

2) Cross-national comparative research: compare the experiences of interest rate marketization reforms in different countries and explore an interest rate marketization path suitable for Chinese characteristics.

3) Long-term impact analysis: Focus on the impact of interest rate liberalization reform on banks' long-term profitability and risk management, as well as its role in macroeconomic stability.

4) Deepening of strategies and policy recommendations: Based on in-depth analysis, provide the banking industry and regulatory agencies with more targeted and practical value strategies and policy recommendations.

In summary, the above-mentioned shortcomings and prospects not only provide insights into identifying the challenges and opportunities currently faced by the banking industry to a certain extent but also indicate a path for future research and practice with a view to the continued development of China's banking industry.
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