

The Impact of Ownership Concentration, Internal Risk Governance, Capital Regulation Pressure and Income Diversification on Performance and Stability of City Commercial Banks

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Abstract. City Commercial Banks (CCBs) are vital players in China's financial system, but they face persistent challenges, including declining profitability, rising credit risk, and fragile governance structures. Ownership concentration plays a dual role in shaping bank performance and stability, offering both enhanced control and heightened risks such as expropriation of minority shareholders and governance inefficiencies. This study investigates the impact of ownership concentration, internal risk governance, capital regulation pressure, and income diversification on the performance of CCBs, using panel data from 35 CCBs between 2011 and 2022. Results reveal that concentrated ownership often correlates with excessive risk-taking, negatively affecting performance, whereas robust governance mechanisms and income diversification enhance stability. These findings provide actionable insights for policymakers and bank executives aiming to enhance the resilience and efficiency of CCBs in a complex regulatory and market environment.

Keywords: city commercial banks, ownership concentration, governance, risk-taking behavior, capital regulation, income diversification, bank performance, financial stability

1. Introduction

City Commercial Banks (CCBs) are essential players in China's financial landscape, contributing to regional economic growth, financial stability, and employment creation. However, compared to their larger counterparts, such as state-owned and joint-stock banks, CCBs exhibit weaker performance metrics and higher vulnerability to financial and operational risks. This weakness stems from several factors, including limited capitalization, reliance on traditional interest-based income, and inefficient governance structures. Historically, most CCBs evolved from local credit unions and remain subject to government influence, which often leads to conflicts of interest and a lack of operational independence. These issues have been further exacerbated by the macroeconomic slowdown and increasing regulatory scrutiny in recent years, prompting an urgent need for reform and strategic innovation to enhance their performance and stability.

The financial performance of CCBs has shown a persistent decline over the past decade. Between 2011 and 2022, the average return on assets (ROA) for CCBs fell by 0.807%, significantly more than the declines experienced by large state-owned and joint-stock banks over the same period. Similarly, their return on equity (ROE) decreased by 12.9%, reflecting diminishing profitability and capital efficiency. Concurrently, the non-performing loan (NPL) ratio in CCBs rose sharply from 0.9% to 2.7%, highlighting increased exposure to credit risk. These challenges have led to several high-profile crises, including the bankruptcy and restructuring of Baoshang Bank in 2019 and significant losses reported by Bank of Jinzhou. Such developments underscore the fragile stability of CCBs and their disproportionate vulnerability to economic and financial shocks. Addressing these vulnerabilities is critical not only for the sustainability of CCBs but also for the broader stability of China's financial system.

A key driver of the challenges faced by CCBs lies in their ownership structures. Unlike larger banks with diversified shareholding bases, many CCBs exhibit concentrated ownership, often dominated by a few large shareholders or local governments. While ownership concentration can enhance control and accountability, it also introduces significant risks, such as potential expropriation of minority shareholders, related-party transactions, and inadequate checks on managerial decisions. This duality underscores the complex relationship between ownership concentration and bank stability, necessitating a deeper

exploration of how different ownership configurations influence performance and risk. Moreover, as regulatory frameworks tighten, CCBs face additional pressures to maintain sufficient capital adequacy and improve governance, further complicating their operational landscape.

In addition to ownership structures, diversification and risk management are emerging as critical determinants of CCB performance. With shrinking margins in traditional lending businesses, many CCBs have turned to income diversification as a strategy to sustain profitability. While diversification into non-interest income sources, such as fee-based and investment banking services, offers potential benefits, it also introduces new complexities and risks. Simultaneously, internal risk governance plays a vital role in mitigating excessive risk-taking behaviors, which are often driven by agency conflicts and competitive pressures. These interconnected dynamics highlight the importance of a holistic approach to understanding and addressing the performance challenges faced by CCBs, with a particular emphasis on the mediating role of risk-taking behavior.

This study seeks to provide a comprehensive analysis of the factors influencing CCB performance and stability, with a focus on ownership concentration, internal risk governance, capital regulation pressure, and income diversification. By employing panel data from 35 CCBs over the period 2011–2022, the research aims to elucidate the mechanisms through which these factors interact and affect risk-taking behavior and performance outcomes. Ultimately, the findings aim to contribute to the ongoing discourse on CCB reform, offering practical recommendations to enhance their resilience, efficiency, and contribution to the real economy.

2. Literature Review

City Commercial Banks (CCBs) operate within a complex financial and regulatory ecosystem influenced by both theoretical constructs and empirical realities. To understand the interplay of ownership concentration, internal risk governance, capital regulation pressure, and income diversification on bank performance, this chapter integrates insights from two dimensions. First, it explores the theoretical underpinnings, particularly the principal-agent theory, which sheds light on the inherent conflicts and alignments between stakeholders in a bank's governance structure. Second, the chapter reviews global empirical studies that provide a broader context to evaluate how the theoretical principles manifest in practical banking scenarios worldwide. Together, these perspectives create a foundation for analyzing the nuanced factors that impact CCB performance and risk behavior.

2.1. Principal-Agent Theory

The principal-agent theory serves as a cornerstone in understanding governance dynamics in financial institutions. It addresses the inherent conflicts arising when the interests of the principal (shareholders) diverge from those of the agent (managers or executives). In banks with concentrated ownership, major shareholders wield significant control, enabling them to influence managerial decisions directly [30]. However, this control can also lead to agency conflicts, as dominant shareholders might prioritize their personal gains over the long-term stability and performance of the bank. This issue is particularly pronounced in CCBs, where local governments or a few large shareholders dominate the ownership structure, often leading to inefficient allocation of resources and high-risk behavior [11].

One of the critical implications of principal-agent theory in banking lies in the role of internal risk governance. From an internal risk governance perspective, when owners and operators pursue different goals, operators may prioritize their own interests over maximizing the company's overall interests [3]. Without a well-designed mechanism to mitigate these conflicts, the interests of all the company's owners may ultimately be compromised. For instance, by establishing an internal risk management system, shareholders can monitor and require managers to focus on profit maximization while preventing high-risk investments, which can positively impact bank performance [12]. Therefore, a robust internal risk management mechanism can effectively oversee agents to maximize shareholder benefits, avoid high-risk decisions, and improve bank performance [1].

Principal-agent theory also highlights the importance of incentive alignment through governance mechanisms. Effective internal risk governance frameworks, such as the presence of a Chief Risk Officer (CRO) and robust supervisory boards, can mitigate agency conflicts by creating checks and balances on managerial decisions [2]. Empirical studies show that banks with well-defined risk governance structures tend to exhibit lower risk-taking behavior and higher performance [29]. These mechanisms are especially vital in CCBs, where governance deficiencies often manifest as excessive risk-taking and weak financial performance.

Another facet of the principal-agent theory relevant to CCBs is the impact of capital regulation. Regulatory frameworks, such as Basel III, impose capital adequacy requirements to reduce the moral hazard problem by aligning the interests of shareholders and depositors. However, tighter capital regulations can also create unintended consequences, such as incentivizing banks to engage in off-balance-sheet activities or high-yield, high-risk investments to maintain profitability under constrained capital buffers [9]. These dynamics illustrate the dual-edged nature of regulatory interventions within the principal-agent framework.

Finally, the theory sheds light on the role of income diversification in addressing agency conflicts. Diversification strategies, such as expanding into non-interest income businesses, can reduce reliance on traditional lending activities, thereby enhancing stability [23]. However, diversification can also increase information opacity, making it harder for principals to monitor agents effectively [16]. This trade-off is particularly relevant in CCBs, where limited resources and expertise often lead to suboptimal diversification outcomes, exacerbating risk and performance challenges.

2.2. Empirical Evidence from Global Studies

Empirical research on the impact of ownership concentration on bank performance reveals a mixed picture. In developed economies, where regulatory frameworks are well-established, studies suggest that concentrated ownership can enhance performance by improving accountability and reducing agency costs [17]. However, in developing economies, including China, concentrated ownership often leads to governance failures, as dominant shareholders prioritize their interests at the expense of minority shareholders and creditors [10]. For instance, research on Indian banks found that high ownership concentration correlates with increased risk-taking, primarily due to weak regulatory enforcement and opaque governance practices [24].

Empirical research on the impact of ownership concentration on bank performance reveals a complex picture. In developed economies with well-established regulatory frameworks, studies suggest that concentrated ownership can enhance performance by improving accountability and reducing agency costs [17]. However, in developing economies, including China, concentrated ownership often leads to governance failures, as dominant shareholders prioritize their own interests at the expense of minority shareholders and creditors [10]. For instance, research on Indian banks found that high ownership concentration is associated with increased risk-taking, primarily due to weak regulatory enforcement and opaque governance practices [24].

Global studies also provide valuable insights into the role of internal risk governance. Aljughaiman and Salama [2], in their analysis of 65 banks across the Middle East, demonstrated that a strong risk governance framework significantly reduces risk-taking behavior, particularly in Islamic banks. Similarly, a study on European banks by Rodrigues et al. [18] highlighted that board size, risk committee structures, and the presence of a CRO are critical determinants of bank stability. These findings underscore the importance of strengthening internal governance mechanisms, especially in CCBs, where governance deficiencies are a major contributor to performance challenges.

The influence of capital regulation pressure on bank behavior has been widely studied in various contexts. In the European Union, Gropp et al. [19] found that banks facing higher capital requirements tend to reduce lending activities, particularly to high-risk borrowers, as a means to improve their capital adequacy ratios. However, this often comes at the cost of reduced profitability and credit availability for small and medium-sized enterprises (SMEs). In contrast, studies on Chinese banks suggest that while capital regulation pressure initially increases risk-taking behavior, it eventually stabilizes performance by compelling banks to adopt more prudent asset management practices [29].

Income diversification has emerged as a critical area of research in recent years. Studies on U.S. and European banks show that diversification into non-interest income sources, such as trading and investment services, can enhance profitability and reduce risk during periods of economic stability [23]. However, the benefits of diversification are less pronounced in developing countries, where banks often lack the expertise and infrastructure needed to manage complex, non-traditional businesses effectively [4]. This disparity highlights the need for tailored diversification strategies in CCBs, which face unique resource and market constraints.

3. Research Design

This chapter outlines the research methodology used to investigate the impact of ownership concentration, internal risk governance, capital regulation pressure, and income diversification on the performance and stability of City Commercial Banks (CCBs) in China. By focusing on panel data from 35 CCBs between 2011 and 2022, this study employs a quantitative approach to analyze the relationships among these variables. Key components of this chapter include the data collection process, construction of variables, and regression analysis techniques, all of which aim to address the research questions posed earlier.

3.1. Variable Selection

Ownership concentration data for CCBs was collected from multiple sources, including the Wind database, annual reports of banks, and public disclosures. Ownership concentration is measured as the proportion of shares held by the largest shareholder and the combined shares of the top three shareholders (Zhou et al., 2019). This measure captures both the dominance of a single shareholder and the potential balance among key stakeholders. The data collection process was guided by previous studies that highlight the significance of ownership concentration in influencing bank performance and risk-taking behavior [10].

The global principal component analysis method is used to form internal risk governance (IRG) indicators. Referring to Aljughaiman and Salama [2], Dupire and Slagmulder [7], and Zhang et al. [29], a total of 11 factors are selected to constitute the IRG.

Building on the work of Guo [8] and Zhang et al., this study posits that capital regulatory pressure is more accurately reflected by the difference between a bank's capital adequacy ratio and the required regulatory capital adequacy ratio. A higher value of this indicator suggests less regulatory pressure faced by the bank. This is because a higher capital adequacy ratio translates to lower capital regulation pressure. Conversely, the further a bank's capital adequacy ratio falls below the regulatory requirements, the greater the regulatory pressure it experiences. On the other hand, an excess of capital beyond regulatory requirements indicates that the bank faces less pressure from capital supervision.

The income sources of commercial banks can be categorized into interest income and non-interest income. Several studies, such as those by Nguyen [16] and Velasco [20], using the Herfindahl Index (HHI) measure the level of income diversification. The HHI is calculated using the following formula:

$$HHI = 1 - PNII^2 + PNET^2$$

Where HHI represents the degree of income diversification, PNII is the percentage of interest-based income relative to total income, and PNET is the percentage of non-interest-based income relative to total income. Non-interest income comprises fees and commissions, investment income, other business income, changes in fair value, and exchange gains and losses.

The HHI is selected to measure the degree of income diversification, with the index ranging from 0 to 1. Higher values of HHI indicate a greater level of income diversification within the bank.

This study, following the research of Huq, and Nguyen [16], employs the Z-score as a measure of bank risk-taking behavior. The Z-score is widely recognized for its ability to reflect the risk of bankruptcy. The Z-score represents the inverse probability of bank bankruptcy: a higher Z-score indicates a lower probability of bankruptcy.

The Z-score can be measured as below:

$$Zscore_{i,t} = (ROA_{i,t} + E/A) / (SDROA_{i,t})$$

Where $ROA_{i,t}$ measures the return on asset of i-bank in the t-year

Where E/A measures the ratio of equity to assets.

Where $SDROA_{i,t}$ means the standard deviation of Return on Asset in i-bank in t,t-1,t-2 year, represents the three-year rolling standard deviation, which measures the volatility of revenue. Considering that the z value distribution is biased, the natural logarithm of the z value LnZ is used to represent the Z value.

Return on Average Assets (ROAA) is a profitability metric that improves upon the traditional Return on Assets (ROA) by incorporating the average of the assets at the beginning and end of the annual period. This adjustment accounts for the changes in a commercial bank's assets throughout the year, as well as any autonomous adjustments, thereby reducing potential errors in measurement. A higher ROAA value indicates stronger profitability characteristics of the bank. The formula for calculating ROAA is as follows:

$$ROAA = (\text{Net net profit}) / (\text{Total average assets}) * 100\%$$

Where total average assets are referred as below:

$$\text{Total average assets} = (TAB + TAE) / 2$$

Here:

TAB represents the total assets at the beginning of the year.

TAE represents the total assets at the end of the year.

A total of 35 CCBs were selected for the study, ensuring geographical and operational diversity. These banks represent a mix of state-owned and non-state-owned institutions, providing a comprehensive dataset for analyzing the impact. The sample covers the period from 2011 to 2022, a decade characterized by significant economic reforms and regulatory changes in China's banking sector. By including both listed and unlisted CCBs, the dataset addresses limitations in prior research that often focused exclusively on listed banks [27].

3.2. The Development on Ownership Concentration in CCBs (2011–2022)

Table 3.1 below provides a summary of the ownership concentration data for the selected CCBs during the study period. The data reveal notable trends, such as the increasing dominance of state-owned shareholders in some banks and the emergence of private strategic investors in others. These variations highlight the need to analyze the impact of ownership concentration within the broader context of governance and market dynamics.

The data in Table 3.1 provides a detailed view of the ownership concentration in City Commercial Banks (CCBs) from 2011 to 2022, highlighting several significant patterns. In 2011, the largest shareholder ratio averaged 18.58%, with a maximum value of 63.84% and a minimum value of 4.32%. This indicates that while some banks had highly concentrated ownership, others were more diversified. By 2012, the average slightly decreased to 18.18%, while the maximum and minimum remained relatively stable at 63.99% and 4.32%, respectively, suggesting no significant shifts in ownership distribution. In 2013, the average declined further to 17.53%, accompanied by an unchanged maximum of 63.99% and a minimum of 4.32%, indicating that concentrated ownership remained prevalent in some banks while others maintained diverse structures.

In 2014, the average ratio reduced marginally to 17.30%, with the maximum still at 63.99% and the minimum at 4.32%, reflecting sustained ownership patterns. By 2015, the average dropped to 16.97%, while the maximum fell significantly to 50.98%, signaling the potential emergence of regulatory or market-driven diversification trends. The minimum value remained at 4.32%, showing stability among the least concentrated banks. In 2016, the average declined further to 16.06%, with a maximum of 50.98% and a lower minimum of 3.25%, reflecting greater heterogeneity among ownership structures. Ownership concentration began to rise slightly in 2017, with the average increasing to 17.92%, while the maximum held steady at 50.98% and the minimum increased to 4.68%, suggesting a slight shift toward more balanced ownership across CCBs. In 2018, the average remained stable at 17.83%, with a slightly lower maximum of 50.29% and the same minimum of 4.68%, indicating continued stability in the ownership structure. By 2019, the average increased to 18.89%, the maximum remained at 50.29%, and the minimum rose to 6.94%, reflecting a gradual reduction in extreme diversification.

The trend toward concentration continued in 2020, with the average rising to 19.98%, while the maximum and minimum remained unchanged at 50.29% and 6.94%, respectively. In 2021, the average fell slightly to 19.51%, while the maximum stayed at 50.29%, and the minimum increased to 8.17%, indicating greater convergence in ownership concentration. Finally, in 2022, the average declined further to 18.93%, with the maximum stable at 50.29% and the minimum unchanged at 8.17%, reflecting ongoing adjustments toward moderate ownership concentration across CCBs.

Table 1. Ownership Concentrations of 35 City Commercial Banks (2011–2022)

Year	The Largest Shareholder Ratio		
Mean	Maximum value	Minimum value	
2011	18.58%	63.84%	4.32%
2012	18.18%	63.99%	4.32%
2013	17.53%	63.99%	4.32%
2014	17.30%	63.99%	4.32%
2015	16.97%	50.98%	4.32%
2016	16.06%	50.98%	3.25%
2017	17.92%	50.98%	4.68%
2018	17.83%	50.29%	4.68%
2019	18.89%	50.29%	6.94%
2020	19.98%	50.29%	6.94%
2021	19.51%	50.29%	8.17%
2022	18.93%	50.29%	8.17%

The ownership structure of CCBs has evolved significantly over the years. For instance, banks such as the Bank of Beijing maintain a relatively diversified ownership structure with no single controlling shareholder, while others, such as the Bank of Tianjin, are heavily influenced by state-owned enterprises. The balance of ownership concentration plays a critical role in shaping governance outcomes and, by extension, bank performance [17]. Additionally, the data reveal that private shareholders often dominate smaller CCBs, introducing unique governance challenges compared to their state-owned counterparts.

The quality and consistency of data collection were ensured through rigorous cross-verification across multiple sources. However, limitations in data availability for certain banks, particularly unlisted ones, posed challenges. These gaps were addressed by incorporating manually collected data from financial reports and public disclosures, ensuring a comprehensive dataset for the analysis. The heterogeneity of ownership concentration across the sample provides a strong foundation for exploring its dual impact on performance and risk-taking behavior.

3.3. Regression Analysis of Risk and Performance

To analyze the impact of ownership concentration, internal risk governance, capital regulation pressure and income diversification on risk-taking behavior and bank performance, this study employs a two-way fixed effects regression model. This model captures both cross-sectional variations across banks and temporal changes over the study period [29]. The control variables, such as bank size, asset quality, and market conditions, are included to account for external factors influencing performance.

Table 2 below summarizes the regression results for the baseline model. The findings indicate that ownership concentration negatively impacts performance, while internal risk governance, capital regulation pressure and income diversification improves bank performance. Besides, ownership concentration correlates with increased risk-taking behavior, capital regulatory pressure decrease bank risk-taking behaviors.

The regression results presented in Table 2 provide insights into the relationship between key independent variables and bank performance (BP), measured by return on average assets (ROAA). Ownership concentration (OC), demonstrates a negative and highly significant coefficient of -0.008 ($p < 0.01$), highlighting that increased concentration is associated with lower performance, likely due to excessive risk-taking or governance inefficiencies. Internal risk governance (IRG) exhibits a positive and statistically significant coefficient of 0.301 ($p < 0.05$), indicating that stronger governance mechanisms enhance performance. Capital regulation pressure (CRP) also shows a positive and significant effect, with a coefficient of 0.032 ($p < 0.05$), suggesting that regulatory requirements, while constraining in the short term, contribute to better long-term performance by promoting prudence. Income diversification (ID) positively affects performance with a coefficient of 0.005 ($p < 0.05$), indicating that diversified revenue streams support stability and profitability.

As for the relationship between key independent variables and bank risk-taking behavior (RTB), measured by z-score. The results in Table 2 show that the regression coefficients of ownership concentration (OC) and capital regulation pressure (CRP) on

bank risk-taking behavior are significantly correlated with bank risk-taking behavior (RTB), with a coefficient of -0.015 ($p < 0.05$) and a coefficient of 0.066 ($p < 0.05$) separately. The regression coefficient of ownership concentration (OC) is negative and the regression coefficient of capital regulation pressure (CRP) on risk-taking behavior (RTB) is positive. This shows that the increase in ownership concentration (OC) reduces bank stability, which means it increases bank risk-taking behavior. The increase in capital buffers, that is, a reduction in capital regulation pressure (CRP) will have a positive impact on bank stability.

Table 2. Fixed Effects Panel Estimation Results

Model Variable	(1) Two-way fixed effect BP	(2) Two-way fixed effect RTB
OC	-0.008*** -0.002	-0.015** 0.006
IRG	0.301** -0.13	0.08 0.25
CRP	0.032** -0.014	0.066** 0.031
ID	0.005** -0.002	0.002 0.006
BA	0.404* -0.232	1.006*** 0.332
LDR	-0.01** -0.005	-0.002 0.007
GDP	-0.011 -0.015	0.04 0.027
MI	-1.111* -0.634	1.746 1.77
CPI		
_Cons	1.528* (-0.835)	-0.067 (2.063)
Control individual effects	YES	YES
Control time effects	YES	YES
Observations	420	420
R-squared	0.565	0.292

*** $p < .01$, ** $p < .05$, * $p < .1$

The regression results underscore the critical correlation between dependent variables and independent variables. For example, banks with concentrated ownership are more likely to engage in high-risk investments, leading to lower ROAA. In contrast, banks with robust internal risk governance and diversified income streams exhibit better stability and performance [2]. Besides, the increase in capital regulation pressure will cause city commercial banks to increase their risk appetite in order to make profits, such as conducting non-standard debt business through business innovation and other methods. This increases bank risks and is not conducive to stable operations [5]. These findings align with global studies that highlight the trade-offs in governance and operational strategies [29].

To further validate the results, robustness checks were performed using alternative specifications, such as random effects models and lagged variables. These checks confirmed the stability of the findings.

Overall, the regression analysis provides critical insights into the impact of ownership concentration, internal risk governance, capital regulation pressure and income diversification on risk-taking behavior and bank performance. These findings contribute to a deeper understanding of the governance-performance nexus in China's banking sector, offering valuable implications for policymakers and bank executives.

4. Results

This study incorporates ownership concentration, internal risk governance, external regulatory pressure, and diversification into its framework, systematically examining the interactions and interdependencies between these variables. The results highlight the

negative effects of capital regulation pressure on bank stability, illustrating the trade-offs between control and risk. In addition, this study also emphasizes the detriment of ownership concentration.

4.1. Impact of Concentrated Ownership on CCBs

Ownership concentration significantly influences the risk profiles of City Commercial Banks (CCBs). Banks with concentrated ownership tend to exhibit stronger control by dominant shareholders, who can directly influence managerial decisions. While this centralized control can streamline decision-making and enhance accountability, it often comes at the cost of minority shareholder rights and governance balance [30]. The study finds that concentrated ownership correlates with higher levels of risk-taking behavior, as dominant shareholders may pursue aggressive investment strategies to maximize short-term returns, often disregarding long-term stability.

A critical issue identified in the analysis is the prevalence of related-party transactions in banks with concentrated ownership. Major shareholders often exploit their control to direct loans and investments to affiliated entities, increasing the risk of non-performing loans and undermining the bank's financial health [10]. This phenomenon is particularly pronounced in smaller CCBs, where external regulatory oversight is limited, and internal governance structures are underdeveloped.

Despite these challenges, concentrated ownership can also have positive effects under certain conditions. In banks with robust regulatory oversight and transparent governance frameworks, dominant shareholders can play an active role in enhancing accountability and driving strategic initiatives [24]. For instance, the presence of strategic investors with long-term interests has been shown to improve operational efficiency and align managerial decisions with shareholder goals.

Overall, the dual impact of concentrated ownership underscores the importance of striking a balance between control and governance. While concentrated ownership can enhance accountability, it also increases the risk of governance failures, particularly in environments with weak regulatory and institutional frameworks.

4.2. Impact of Capital regulation pressure on CCBs

The reduction of capital regulatory pressure positively affects bank performance of CCBs. Based on Yao [26], in terms of capital replenishment, the Financial Stability Board, the People's Bank of China, the China Banking and Insurance Regulatory Commission and other departments issued relevant policies in 2018. The policy expresses support for the issuance of innovative capital supplement bonds by financial institutions, including but not limited to unfixed-term capital bonds and secondary capital bonds with write-down or equity conversion clauses.

However, since city commercial banks have the characteristics of small scale, insufficient capital, weak risk resistance, and more reliance on the development of the local economy for profitability, financing channels are limited Lee et al. Compared with joint-stock banks and the five major state-owned banks, city commercial banks still face difficulties in replenishing capital. Therefore, there is still great pressure on the capital side.

Secondly, it may be because other regulatory policies indirectly increase bank capital consumption. For example, regulatory policies in 2017 continued to release a number of regulatory policies including new regulations on capital management and new financial management regulations. These regulations force banks to urgently return off-balance sheet businesses to their balance sheets. These actions require banks to consume more capital, thus increasing the need for capital replenishment by commercial banks. When city commercial banks face the dual dilemma of strict regulatory pressure and difficulty in capital replenishment, in order to avoid regulatory costs caused by violations of capital regulatory regulations, banks may reduce the book value of risk-weighted assets by underestimating non-performing loans. In this way, banks can have more surplus to replenish capital, while also reducing the regulatory and operational pressure caused by insufficient capital [27].

5. Conclusion

The negative impact of ownership concentration, the important role of capital regulation pressure forms the core of this analysis. Additionally, the findings emphasize the need for tailored approaches to address the unique challenges faced by CCBs in a rapidly changing regulatory and market environment. This chapter also provides actionable recommendations for policymakers and bank executives to enhance performance and stability in this critical segment of China's financial system.

5.1. Balancing Ownership for Better Performance

The study underscores the critical importance of ownership structures in shaping bank performance and stability. Concentrated ownership presents both opportunities and challenges. On the one hand, dominant shareholders can enhance accountability and streamline decision-making, particularly in environments with strong regulatory frameworks. On the other hand, high ownership concentration often leads to governance inefficiencies, such as related-party transactions and inadequate risk controls, which increase the likelihood of instability and poor financial outcomes [30].

Achieving a balance in ownership structures is essential for improving bank performance. Diversified ownership can mitigate the risks associated with concentrated control, fostering better governance and reducing conflicts of interest. However, this approach requires robust regulatory oversight to prevent free-riding behavior among shareholders and ensure effective monitoring of management [24]. For CCBs, particularly those with historically high levels of state ownership, introducing strategic private investors can serve as a viable strategy to enhance governance and operational efficiency while maintaining stability.

Tailored governance reforms are also necessary to address the specific challenges posed by ownership concentration in CCBs. For instance, banks with a history of government-dominated ownership should focus on reducing political interference and fostering greater independence in decision-making processes. Similarly, private banks with concentrated ownership structures must prioritize transparency and accountability to ensure equitable treatment of minority shareholders and other stakeholders.

Overall, the findings highlight that ownership structures must be carefully managed to strike a balance between control and performance. Policymakers and bank executives should adopt a holistic approach that considers the unique characteristics of each bank and leverages governance reforms to align ownership dynamics with long-term performance objectives.

5.2. Promote the Optimization of Capital Structure and Ease the Pressure of Capital Supervision

For city commercial banks, the following methods can be used to promote the optimization of capital structure and improve their capital adequacy ratio. From the perspective of internal financing, 1) City commercial banks should set an appropriate capital growth rate for their scale expansion and try to ensure that internal financing can meet the capital expansion requirements of city commercial banks. 2) Making adequate provisions. In accordance with the new accounting standards and the requirements of regulatory authorities, city commercial banks should make various provisions to achieve capital replenishment while improving risk resistance. 3) Reasonably determine the dividend ratio. On the premise of ensuring the growth of net profit, the cash dividend ratio and profit retention amount shall be reasonably determined in accordance with the profit distribution policy determined by the Articles of Association and the general meeting of shareholders, this can effectively increase the accumulation of endogenous capital.

From the perspective of external financing, city commercial banks can choose: 1) actively introduce strategic investors. This will be discussed in detail later. 2) Choose an opportunity to issue long-term corporate bonds when interest rates are low. 3) Inter-industry mergers and acquisitions. Implementing reorganization and transformation, capital increase and share expansion, and asset replacement under the leadership of the government, or joint mergers and acquisitions by various banks in accordance with market rules and voluntary principles, and cross-regional operations can achieve complementary advantages and resource integration. 4) Seek listing financing. At present, city commercial banks are gradually going public. Although listing is not the purpose, it can indeed solve the problem of capital replenishment. Therefore, listing financing can be regarded as an important task.

From the perspective of assets and liabilities, city commercial banks can speed up capital investment and construction within their own capabilities. Such as increasing the construction of outlets, expanding the scale of outlets and updating outlet facilities. Improve the bank's own value and service efficiency, thereby reducing the bank's own financing difficulty and attracting more investors. Secondly, appropriately adjust loan scale and strictly control loan quality. The pressure of capital supervision will reduce the scale of loans. Under a certain loan scale, it is more important to control the quality of loans and give limited funds to safer customer groups to ensure bank stability and benefit the bank's long-term benefits.

5.3. Policy Implications and Future Directions

The findings of this study have significant implications for policymakers and bank executives aiming to enhance the performance and stability of CCBs. First, regulatory frameworks must be adapted to address the dual impact of ownership concentration by promoting diversified ownership structures and enforcing stringent governance standards. Second, regulatory authorities should use technologies such as big data and artificial intelligence to build reasonable and effective risk supervision and early warning mechanisms, pay close attention to the risk preferences of banks with insufficient capital and subject to high penalties, in order to prevent them from "taking risks" after being punished. Therefore, avoid them causing more serious consequences risk events.

Future research should explore additional factors influencing CCB performance, such as the impact of technological advancements and macroeconomic conditions. Longitudinal studies that incorporate data from a broader range of banks and geographic regions can also provide deeper insights into the dynamics of governance and performance. Finally, as the banking sector continues to evolve, ongoing dialogue and collaboration among stakeholders will be essential for addressing emerging challenges and fostering innovation in governance and risk management.

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