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Theoretical Analysis of Bank Performance: A Multi-Theoretical Perspective

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Abstract. This paper conducts a theoretical analysis of bank performance through the lens of three key theoretical perspectives: Principal-Agent Theory, Resource Dependence Theory, and Financial Innovation Theory. By examining their individual contributions and the conflicts or synergies among them, the study develops an integrative framework to evaluate and enhance the performance of urban commercial banks (CCBs). The Principal-Agent Theory emphasizes the governance and incentive alignment challenges specific to financial institutions, while the Resource Dependence Theory highlights the strategic management of external resources critical for bank success. Additionally, Financial Innovation Theory underscores the importance of adapting to and leveraging innovations in the financial sector. The synthesis of these theories offers a holistic understanding of bank performance, proposing actionable strategies for governance, resource optimization, and innovation adoption. This work provides both theoretical and practical implications for policymakers, researchers, and banking practitioners aiming to improve the competitive positioning and efficiency of urban commercial banks.

Keywords: bank performance, principal-agent theory, resource dependence theory, financial innovation theory, Urban Commercial Banks (CCBs), governance, financial strategy, theoretical integration

1. Introduction

City Commercial Banks (CCBs) are critical players in China's banking and financial sectors, uniquely positioned to address the financial needs of urban economies. Originating from rural credit cooperatives, they were reorganized during China's economic reforms to support local economies, providing tailored financial services to small and medium-sized enterprises (SMEs) and urban residents. Unlike large state-owned commercial banks, CCBs are typically smaller in scale and have a more localized focus. Their unique positioning allows them to act as financial intermediaries that align closely with local economic development priorities, supporting entrepreneurship, infrastructure development, and employment. However, this same focus exposes them to localized economic risks and governance challenges [25, 27].

Despite their importance, CCBs face significant challenges, including weak governance structures, high ownership concentration, and limited access to capital markets. Many CCBs rely heavily on retained earnings for growth and lack the financial flexibility of larger banks. Furthermore, governance issues, such as interference from major shareholders or local governments, exacerbate these challenges. For example, the collapse of Baoshang Bank highlighted the consequences of poor governance, with its largest shareholder, Tomorrow Group, illegally occupying funds, leading to severe credit risks [28]. This situation underscores the critical need for governance reforms and enhanced risk management to ensure stability and performance in the sector.

Understanding the performance of CCBs requires a multi-theoretical perspective. Principal-Agent Theory sheds light on governance and incentive misalignments, highlighting the need for mechanisms to reduce information asymmetry and agency problems [15]. Resource Dependence Theory explains how CCBs strategically manage their external dependencies, particularly in regions where local government policies influence lending priorities. Additionally, Financial Innovation Theory emphasizes the transformative role of technology and financial product innovation in improving efficiency and competitiveness. Together, these frameworks provide a comprehensive lens to analyze the internal and external factors affecting CCB performance.

Given their local focus, CCBs play a vital role in ensuring financial inclusion and regional economic stability. However, recent trends, such as declining net interest margins and rising non-performing loans, have raised concerns about their long-term viability. From 2011 to 2022, the return on assets (ROA) of CCBs decreased significantly compared to large state-owned and joint-stock banks, reflecting their struggles in adapting to changing financial conditions [6]. To address these issues, this study examines

strategies to enhance governance, optimize resource allocation, and foster innovation. Policymakers and banking practitioners can leverage these findings to design targeted interventions for sustaining the competitiveness of CCBs.

This study contributes to the growing body of literature on CCBs by integrating multiple theoretical perspectives to analyze their performance. It provides an empirical basis for understanding how factors such as internal risk governance, ownership concentration, and income diversification influence their operational efficiency. By focusing on CCBs, which have historically received less attention than larger banks, this research aims to fill a critical gap in the literature. The findings offer practical recommendations for enhancing the stability and performance of CCBs, ultimately supporting their role as vital engines of regional economic development [5, 13].

2. Theoretical Framework

Understanding the performance of City Commercial Banks (CCBs) requires the integration of multiple theoretical perspectives to capture the complex interplay of governance structures, external dependencies, and innovation-driven dynamics. While each theory—Principal-Agent Theory, Resource Dependence Theory, and Financial Innovation Theory—offers distinct insights, their combined application provides a more nuanced understanding of the factors influencing bank performance. This section discusses each perspective in detail, providing the foundation for an integrative framework.

2.1. Principal-Agent Theory and Its Application in Banking

The principal-agent conflict arises from the divergence of interests between the principal (owners or shareholders) and the agent (managers), especially in the context of financial institutions. Ideally, agents are expected to act in the best interests of their principals by maximizing profitability. However, driven by personal incentives, they may prioritize decisions that do not align with shareholder objectives, leading to inefficiencies and risks [7]. In the banking sector, this dynamic is further complicated by asymmetric information, where agents hold more specific knowledge about daily operations than the principals. Principal-Agent Theory emphasizes the need for well-designed governance mechanisms and incentive structures to mitigate these misalignments. For example, effective contracts that incorporate both participation constraints and incentive compatibility requirements are vital to ensuring optimal agent behavior under uncertain and conflicting conditions [21].

In scenarios where information is symmetric, principals can directly monitor agent behavior, applying reward and punishment mechanisms to optimize outcomes. However, under asymmetric information, principals must rely on incentive mechanisms tied to observable outcomes influenced by agent actions and external factors. This creates significant challenges in designing contracts that maximize utility for both parties [10]. The application of Principal-Agent Theory in banking becomes crucial, as it helps establish frameworks to address moral hazard and adverse selection—two critical issues that can compromise the stability and performance of banks.

Principal-Agent Theory provides actionable insights into improving corporate governance and reducing risk in banking. For example, moral hazard arises post-contract when agents may act with reduced effort or take undue risks, exploiting informational advantages. Conversely, adverse selection occurs pre-contract, where principals might fail to select the best-suited agents due to incomplete or asymmetric information. Both scenarios undermine organizational efficiency and risk asset security [10, 11]. To address these challenges, modern banking governance incorporates mechanisms like internal risk governance frameworks and monitoring systems, aligning the utility functions of shareholders and managers.

Moreover, the concept of "risk transfer" is critical in Principal-Agent Theory. Shareholders in banks may prefer high-risk projects, as they stand to benefit disproportionately from successful outcomes, whereas creditors bear most of the downside risks. This phenomenon, known as "asset substitution," exemplifies the conflict between shareholders and creditors. Effective governance mechanisms, such as enhanced risk management systems and stricter capital adequacy regulations, can curb such risky behaviors, ensuring that investment activities prioritize long-term bank stability over short-term gains [3, 21.

The practical implications of Principal-Agent Theory are evident in the governance frameworks adopted by city commercial banks (CCBs). For example, the appointment of a Chief Risk Officer (CRO) to oversee risk management and directly report to the board of directors represents a structural application of agency theory. The CRO's role in ensuring transparent communication between stakeholders enhances accountability and minimizes agency costs [3]. Similarly, the establishment of risk committees and board-level oversight mechanisms allows banks to set clear risk preferences, effectively communicate these to management, and ensure compliance with strategic objectives [12]. These governance structures collectively reduce adverse selection and moral hazard, improving overall bank performance.

Furthermore, evidence suggests that larger board sizes with diversified expertise contribute to greater transparency and decision-making efficiency in banks. Such boards effectively balance risk appetite with business strategy, promoting sustainable growth and stakeholder confidence. By integrating Principal-Agent Theory into their operational frameworks, banks can achieve better alignment between managerial actions and shareholder interests, thereby fostering long-term competitiveness and resilience [21].

2.2. Resource Dependence Theory in the Context of Financial Institutions

Resource Dependence Theory (RDT) emphasizes the importance of managing an organization's dependency on external environmental resources for survival. The theory rests on four core assumptions: organizations prioritize survival, require resources they cannot generate internally, depend on interactions with external entities to secure those resources, and must manage these relationships strategically [9, 5]. For city commercial banks (CCBs), maintaining external relationships enables access to critical services such as knowledge and skills, facilitates the development of valuable networks, and enhances their credibility within their environment [21].

Organizational decision-making within this framework reflects economic rationality while grappling with limitations like cognitive biases, incomplete information, and uncertainty [25]. These constraints make effective resource identification crucial, with organizations striving to secure assets that are scarce, irreplaceable, and difficult to replicate. For CCBs, the strategic management of these resources allows them to navigate competition and external risks, ensuring operational stability and differentiation in the banking sector [14]. The governance structure of banks, particularly their boards of directors, plays a critical role in this process by attracting high-quality external resources and providing oversight to address environmental uncertainties [4].

In practice, the integration of independent directors or supervisory figures from diverse industries into governance frameworks enables CCBs to acquire high-quality resources and reduce external shocks [21]. Additionally, the establishment of risk committees, boards of directors, and chief risk officers provides valuable insights and oversight, helping banks optimize their resource acquisition strategies and reduce uncertainties in volatile environments [1, 19]. These mechanisms have been shown to enhance the overall stability of financial institutions.

Furthermore, the effective alignment of resource dependence strategies with internal governance processes contributes to the resilience of banks, enabling them to mitigate adverse effects stemming from external shocks. By leveraging resources such as expertise and professional networks, banks can sustain growth while minimizing risks [19]. The deployment of advanced risk governance systems not only ensures compliance with regulatory standards but also optimizes internal operations to meet external challenges effectively.

2.3. Financial Innovation Theory and Its Relevance to Bank Performance

Financial Innovation Theory builds on Schumpeter's concept of innovation as the recombination of production factors, adapting it to the financial sector. This framework underscores the transformative role of innovation in redefining business practices, enhancing efficiency, and fostering profitability [17]. In the banking context, financial innovation is particularly impactful, as it enables banks to integrate limited resources, develop diverse profit models, and adapt to dynamic market conditions [8].

For example, intermediary businesses such as consulting and agency services have become critical areas for financial innovation. These activities typically require less capital investment while offering high profitability, enabling banks to diversify revenue streams and reduce reliance on traditional interest-based income. As banks innovate financial products and services, they expand their market scope and achieve economies of scale, lowering costs and improving performance.

The practical applications of financial innovation are evident in its impact on the competitive landscape of CCBs. Innovations in financial technology have allowed banks to reconfigure their business models, offering diversified services that enhance customer experience and operational efficiency. However, the drive for innovation is often motivated by the need to navigate regulatory constraints, creating a dynamic interplay of regulation and innovation cycles [20].

Through financial innovation, banks are better positioned to manage risks and allocate resources effectively. For example, e-finance solutions have enabled real-time market information access, reducing dependency on traditional banking intermediaries while promoting financial inclusion [17]. As regulatory environments evolve, banks that resist innovation risk losing their competitive edge, underscoring the importance of continuous adaptation to changing financial landscapes.

3. Synthesis of Theoretical Perspectives

Integrating multiple theories to analyze bank performance requires careful consideration of their individual contributions and inherent contradictions. While each theory provides unique value in understanding specific aspects of banking operations, their combined application allows for a more holistic analysis of the internal and external dynamics that influence performance. The following sections explore the potential conflicts and synergies among these perspectives, demonstrating how they can be synthesized into a cohesive framework.

3.1. Conflict and Synergy Among Theories

The Principal-Agent Theory, Resource Dependence Theory, and Financial Innovation Theory each offer unique insights into bank performance but also generate inherent conceptual conflicts when applied simultaneously. Principal-Agent Theory emphasizes governance and the mitigation of agency costs through incentive alignment mechanisms, prioritizing internal control structures

[5]. In contrast, Resource Dependence Theory highlights the necessity of external resource integration and the interdependence between banks and their operational environments [9, 12]. This external focus often contradicts the insular, self-contained governance priorities of Principal-Agent Theory, leading to tensions between fostering external collaborations and maintaining stringent internal controls. Furthermore, Financial Innovation Theory introduces a disruptive element, advocating for the constant adaptation and transformation of traditional banking practices to embrace technology and new financial products [17]. This emphasis on innovation may conflict with the risk-averse governance mechanisms prescribed by Principal-Agent Theory, creating a delicate balance between promoting innovation and managing risk.

These theoretical conflicts are particularly evident in the banking sector, where decision-makers must simultaneously prioritize risk governance, resource optimization, and innovation. For example, fostering innovation through financial technology can enhance operational efficiency but may increase informational asymmetry, exacerbating agency problems. Similarly, external resource dependencies, such as partnerships with fintech companies, can introduce additional governance challenges that complicate risk management efforts [14]. Thus, while these theories collectively enrich the analytical framework for understanding bank performance, their inherent contradictions require integrative strategies to mitigate conflicts.

Despite their conflicts, these theories also offer significant complementarities when applied together. Principal-Agent Theory's focus on governance aligns well with Resource Dependence Theory's emphasis on strategic resource acquisition, as both frameworks recognize the importance of structured oversight to optimize resource utilization and mitigate risks. For instance, well-governed banks are more effective in managing external dependencies, leveraging their internal controls to negotiate favorable terms and reduce resource volatility [1, 19]. Financial Innovation Theory further complements these frameworks by providing tools and methodologies for enhancing operational efficiency and expanding market reach, offering practical solutions to the resource constraints identified by Resource Dependence Theory.

The synergy among these theories becomes particularly evident in the context of digital transformation. By integrating governance principles with innovative financial technologies, banks can enhance transparency, reduce information asymmetry, and optimize resource allocation. For example, digital platforms enable real-time monitoring and reporting, improving governance while simultaneously fostering innovation and collaboration with external stakeholders [17, 21]. Thus, these theories, when applied synergistically, offer a comprehensive framework for addressing the multifaceted challenges of bank performance.

3.2. Integrative Framework for Bank Performance

An integrative framework for bank performance draws upon the core principles of Principal-Agent Theory, Resource Dependence Theory, and Financial Innovation Theory to address the diverse challenges faced by modern banks. This framework begins with the governance structures proposed by Principal-Agent Theory, emphasizing the alignment of incentives between shareholders and management to reduce agency costs [10, 21]. Simultaneously, it incorporates the resource management strategies of Resource Dependence Theory, which focus on the strategic acquisition and utilization of external resources to enhance operational resilience and competitiveness [5]. These foundational elements are complemented by the innovative practices advocated by Financial Innovation Theory, which encourage the adoption of new technologies and financial products to drive growth and efficiency [17].

By integrating these perspectives, the framework provides a holistic approach to bank performance that balances internal governance, external resource management, and technological innovation. For example, implementing robust internal control systems can enhance risk governance while enabling banks to explore innovative financial solutions, such as blockchain technology and digital payment platforms. This multidimensional approach not only improves operational efficiency but also ensures sustainable growth in an increasingly competitive and dynamic financial environment.

The practical application of this integrative framework requires a structured approach that aligns theoretical principles with real-world banking operations. For instance, banks can establish governance mechanisms that prioritize transparency and accountability while fostering collaborative partnerships with external stakeholders, such as fintech companies and regulatory agencies. Additionally, the adoption of advanced data analytics tools can enhance decision-making processes, enabling banks to identify and mitigate risks, optimize resource allocation, and explore new market opportunities.

Moreover, the framework emphasizes the importance of aligning innovation with regulatory compliance. By leveraging the insights from Financial Innovation Theory, banks can develop scalable solutions that not only meet regulatory requirements but also drive long-term profitability. For example, the integration of artificial intelligence in fraud detection systems can improve governance while enhancing customer trust and operational efficiency [17]. Ultimately, this integrative framework serves as a roadmap for banks to navigate the complexities of modern financial ecosystems, offering a balanced and comprehensive approach to performance optimization.

3.3. Comparative Analysis of Theory Applications

The application of these theories varies significantly across regions and types of financial institutions, reflecting differences in regulatory environments, market dynamics, and organizational structures. For instance, banks in developed economies often prioritize Financial Innovation Theory due to their advanced technological infrastructure and competitive market conditions, while those in developing economies may focus more on Resource Dependence Theory to secure critical external resources [14].

Similarly, small and medium-sized banks, such as city commercial banks (CCBs), tend to emphasize governance mechanisms outlined by Principal-Agent Theory to address challenges related to ownership concentration and limited capital access [1].

These variations highlight the need for tailored strategies that align theoretical principles with the specific contexts of different banking institutions. For example, while large multinational banks may benefit from global resource networks and advanced technologies, CCBs must navigate localized economic conditions and regulatory constraints, requiring a more focused application of governance and resource management principles.

Comparative analyses reveal that banks adopting a balanced approach to these theories tend to perform better than those relying on a single perspective. For instance, institutions that integrate innovation with robust governance structures often achieve higher operational efficiency and customer satisfaction, as evidenced by the successful adoption of digital banking platforms in several Asian markets [16, 17]. Conversely, banks that neglect governance or fail to adapt to technological changes face significant performance risks, including operational inefficiencies and reputational damage [27].

These findings underscore the importance of a comprehensive and adaptable framework that leverages the strengths of each theory while addressing their limitations. By comparing the applications of these theories across different contexts, this study provides valuable insights into the strategies that banks can adopt to enhance their performance and resilience in a rapidly evolving financial landscape.

4. Implications for Bank Performance

The practical application of theoretical insights is critical to improving the operational efficiency, stability, and competitiveness of City Commercial Banks (CCBs). By addressing challenges related to governance, resource allocation, and innovation, banks can enhance their performance and resilience in an evolving financial landscape. The following sections delve into specific implications for governance, resource optimization, and financial innovation, providing actionable strategies for improvement.

4.1. Governance and Incentive Design

Governance and incentive structures play a pivotal role in maintaining the stability and efficiency of financial institutions. In the context of city commercial banks (CCBs), effective governance mechanisms are critical to addressing the inherent conflicts of interest highlighted by Principal-Agent Theory. Proper governance frameworks ensure the alignment of objectives between shareholders and management, thereby reducing agency costs and enhancing performance [10, 21]. Central to this is the implementation of oversight mechanisms, such as risk committees, independent directors, and robust reporting systems, which help monitor managerial behavior and decision-making. These mechanisms are especially crucial in CCBs, which are more susceptible to external shocks due to their relatively smaller scale and concentrated ownership structures.

One notable challenge in governance is addressing the moral hazard and adverse selection risks associated with management decisions. For example, managers may prioritize short-term gains over long-term stability, leading to riskier investment behaviors. Governance structures that include performance-based incentives, regular audits, and clear accountability frameworks help mitigate these risks. By fostering a culture of transparency and accountability, these measures enhance trust among stakeholders and improve operational efficiency [21, 28].

Incentive structures are a cornerstone of effective governance in banks. They serve to align the interests of shareholders, management, and other stakeholders. Performance-based compensation, such as bonuses tied to long-term profitability metrics, is one example of how incentives can be structured to promote sustainable growth. However, such systems must be carefully designed to avoid encouraging excessive risk-taking. For instance, while high-risk projects may yield short-term profits, they can jeopardize the bank's long-term stability and reputation [7, 11].

In the case of CCBs, the introduction of equity-based incentives, such as stock options for senior management, has shown promise in aligning managerial interests with shareholder goals. These incentives encourage managers to adopt a long-term perspective, focusing on sustainable growth rather than immediate financial gains. Additionally, the incorporation of non-monetary incentives, such as professional development opportunities and public recognition, can further enhance motivation and performance. When combined with rigorous oversight and transparent reporting, these incentive structures contribute to a governance framework that promotes stability, innovation, and competitiveness in the banking sector.

4.2. Resource Optimization Strategies

Resource optimization is fundamental to the operational success of banks, particularly for CCBs operating in competitive and resource-constrained environments. Drawing on Resource Dependence Theory, banks must strategically manage their relationships with external entities to secure the resources necessary for their operations and growth. For CCBs, this includes accessing capital, acquiring skilled personnel, and leveraging technological advancements to improve efficiency and service delivery [4].

Effective resource allocation strategies involve prioritizing investments in areas that yield the highest returns. For instance, diversifying income sources through the development of non-interest-based revenue streams, such as consulting and advisory

services, can reduce dependence on traditional interest-based income and mitigate risks associated with market fluctuations. Moreover, strategic partnerships with fintech companies and other financial institutions can provide CCBs with access to advanced technologies and innovative financial products, further enhancing their resource base and competitive positioning.

The optimization of resources must be balanced with effective risk management to ensure sustainable growth. This includes adopting advanced risk assessment tools to evaluate potential investments and allocate resources efficiently. For example, data analytics and artificial intelligence can be used to analyze market trends, assess credit risks, and identify opportunities for growth. By leveraging these technologies, CCBs can make informed decisions that optimize their resource utilization while minimizing exposure to risks [1, 14].

Furthermore, resource optimization strategies must align with the broader strategic objectives of the bank. This involves ensuring that investments in technology, personnel, and infrastructure contribute to the long-term goals of operational efficiency, customer satisfaction, and market expansion. For CCBs, this means adopting a holistic approach that integrates financial performance with social and environmental considerations, thereby enhancing their overall impact and sustainability [12].

4.3. Leveraging Financial Innovation

Financial innovation is a key driver of growth and competitiveness in the banking sector. According to Financial Innovation Theory, the adoption of new technologies and financial products can transform traditional banking operations, enhancing efficiency and customer experience. For CCBs, innovations such as digital payment systems, blockchain technology, and artificial intelligence offer opportunities to streamline operations, reduce costs, and expand their market reach [17, 20].

However, the adoption of financial innovations must be carefully managed to address regulatory and operational challenges. For example, while digital banking platforms can improve accessibility and convenience, they also introduce new risks, such as cybersecurity threats and data privacy concerns. To mitigate these risks, CCBs must invest in robust cybersecurity measures and comply with regulatory standards, ensuring that their innovations are both effective and secure.

The successful implementation of financial innovation requires a strategic approach that integrates technology with the bank's overall objectives. For CCBs, this involves identifying areas where innovation can have the greatest impact, such as customer service, risk management, and product development. For instance, the use of artificial intelligence in fraud detection systems can enhance security while improving operational efficiency. Similarly, the development of customized financial products, such as tailored loans for small and medium-sized enterprises (SMEs), can help CCBs meet the specific needs of their customers and differentiate themselves in the market.

Additionally, collaboration with fintech companies and other technology providers can accelerate the adoption of financial innovations, providing CCBs with access to advanced tools and expertise. By leveraging these partnerships, CCBs can enhance their capabilities, improve their competitive positioning, and drive long-term growth. Ultimately, the integration of financial innovation into the strategic framework of CCBs is essential for ensuring their relevance and success in an increasingly dynamic financial landscape [17].

5. Conclusion

This study provides a comprehensive analysis of the factors influencing the performance of city commercial banks (CCBs) through an integrative framework based on Principal-Agent Theory, Resource Dependence Theory, and Financial Innovation Theory. The findings highlight the critical role of governance, resource optimization, and innovation in enhancing bank performance. Specifically, effective internal governance mechanisms, such as performance-based incentives and transparent reporting systems, were shown to mitigate agency problems and reduce risk-taking behaviors, ultimately fostering long-term stability. The study also underscores the importance of strategic resource acquisition and management, as proposed by Resource Dependence Theory, emphasizing the need for external collaborations and partnerships to strengthen operational resilience. Furthermore, Financial Innovation Theory highlights how technological advancements, such as digital banking platforms and AI-driven risk management tools, can drive efficiency, improve customer experiences, and ensure competitiveness in a rapidly evolving financial landscape.

Despite these insights, the study reveals inherent conflicts among the theoretical perspectives. For instance, the risk-averse principles of governance structures may sometimes hinder the disruptive innovations advocated by Financial Innovation Theory, necessitating a balanced approach to align these dynamics effectively. The practical implications of this research are significant, offering actionable strategies for policymakers, regulators, and banking practitioners to enhance the governance, resource management, and innovation capacities of CCBs. Future research should explore the mediating and moderating factors influencing these relationships, particularly in varying economic and regulatory environments. By addressing these gaps, the findings can further inform the development of tailored frameworks to support the sustainable growth and stability of city commercial banks in diverse contexts.

References

[1] Aljughaiman, A. A., & Salama, A. (2019). Do banks effectively manage their risks? The role of risk governance in the MENA region. *Journal of Accounting and Public Policy, 38*(5), 106680. https://doi.org/10.1016/j.jaccpubpol.2019.106680

[2] Alparslan, A. (2020). *Being and existence and Sandra and Heidegger: A comparative ontology*. İstanbul: İbn Haldun Üniversitesi Yayınları.

[3] Alkhazalia, A., et al. (2021). Internal risks and bank performance. *Accounting Review, 7*(2021), 1819–1824.

[4] Aslam, M., & Haron, R. (2020). Resource acquisition strategies in the banking sector. *Journal of Banking Research, 12*(3), 134–156.

[5] Chen, W., Xiong, Q., & Lee, M. (2021). Research on the equity structure characteristics and optimization mechanism of city commercial banks in China. *Financial Supervision Research*, (4), 59–79.

[6] Elekdag, S., Malik, S., & Mitra, S. (2020). Breaking the bank? A probabilistic assessment of euro area bank profitability. *Journal of Banking and Finance, 120*, 1–17.

[7] Guan, Y., & Lee, S. (2018). Capital constraints, heterogeneity and banks business performance-based on the perspective of financial crisis. *East China Economic Management, 32*(4), 96-102.

[8] Hu, D., Qin, H., & Jiang, W. (2019). Ownership structure and credit risk taking of commercial banks correlation research. *Regional Finance Research*, (07), 21-28.

[9] Hunjra, A. I., Hanif, M., Mehmood, R., & Nguyen, L. V. (2020). Diversification, corporate governance, regulation and bank risk-taking. *Journal of Financial Reporting and Accounting, 19*(1), 92–108. https://doi.org/10.1108/jfra-03-2020-0071

[10] Jiang, H., Huang, M., & Barth, J. R. (2018). On foreign shareholdings and agency costs: new evidence from China. *Emerging Markets Finance and Trade, 54*(12), 2815-2833.

[11] Kakar, S. K., Ali, J., Bilal, M., Tahira, Y., Tahir, M., Bahadar, N., Bukhari, H., Ullah, S., & Aziz, T. (2021). Corporate governance, risk management, and bank performance: Does type of ownership matter? *Journal of Financial Risk Management, 10*(03), 342–366. https://doi.org/10.4236/jfrm.2021.103020

[12] Lee, B. W., & Geng, S. (2020). Measurement, statistics and decision-making of commercial banks' maturity mismatch risk. *36*(11), 125-129.

[13] Liang, X. (2022). Research on the impact of capital regulation on bank credit in China. *Journal of Regional Financial Research, 602*, 85–92.

[14] Luu, H. N., Nguyen, L. Q. T., Vu, Q. H., & Tuan, L. Q. (2019). Income diversification and financial performance of commercial banks in Vietnam: Do experience and ownership structure matter? *Review of Behavioral Finance, 12*(3), 185-199.

[15] Nguyen, Q. K. (2020). Ownership structure and bank risk-taking in ASEAN countries: A quantile regression approach. *Cogent Economics and Finance, 8*(1), 1–20. https://doi.org/10.1080/23322039.2020.1809789

[16] Phan, T. T. H., Pham, A. H. T., Hoang Anh Le, & Thai, B. N. L. (2023). The impact of non-interest income on the performance of commercial banks in the ASEAN region. *Journal of Risk and Financial Management, 16*(18). https://doi.org/10.3390/jrfm16010018

[17] Shen, H., & Dong, F. (2021). Research on the relationship between top management team characteristics and bank performance-based on the mediating role of bank innovation. *Science Technology and Industry, 21*(8), 1-9.

[18] Shen, C., Zhao, S., & Li, Y. (2020). Interest rate liberalization, non-interest income and bank net interest margin-discussing the differentiated impact paths of non-interest income by category. *Statistical Research, 37*, 68-81.

[19] Shi, S. (2022). Ownership structure, abnormal shareholder behavior and risk-taking behavior of small and medium-sized banks - an empirical study based on 70 city commercial banks in my country from 2015 to 2019. *Financial Theory and Practice, 514*(5), 1-9.

[20] Velasco, P. (2021). Is bank diversification a linking channel between regulatory capital and bank value? *The British Accounting Review, 54*(4), 1–24. https://doi.org/10.1016/j.bar.2021.101070

[21] Wang, J., Lai, N., & Zhang, L. (2021). Research on the impact of internal control quality on the profitability of commercial banks—based on empirical evidence of listed commercial banks. *Regional Finance Research, 592*(11), 11-17.

[22] Zhang, L. (2019). Ownership structure, credit structure and commercial bank performance. *Journal of Chengdu Administration Institute, (2)*, 54-60.

[23] Zhang, M., & Shen, W. (2024). The impact of private capital shareholding on the operating performance of city commercial banks. *Financial Vision, 89-92*. doi: 10.19995/j.cnki.CN101617/F7.2024.03.089

[24] Zhang, X., & Jiang, H. (2022). Test on the coordination effect of capital and liquidity constraints from the perspective of bank risk-taking. *Finance Forum, 19-31*.

[25] Zhang, Y., Zhou, Y., & Liu, Z. (2019). Research on the relationship between ownership concentration and operating performance of rural banks. *Journal of Yunnan University of Finance and Economics, 35*(12), 84-93.

[26] Zhang, Z., & Fan, X. (2019). Analysis of the differences and causes of intermediary business between state-owned banks and non-state-controlled banks - based on the analysis of 12 listed banks. *Finance, Taxation and Finance, 12*(4), 1-4.

[27] Zhou, F., Fu, Y., & An, Y. (2019). Impacts of ownership balance and nonexecutive directors on bank performance and risk-taking: Evidence from city commercial banks in China. *Global Economic Review, 48*(1), 1–24. https://doi.org/10.1080/1226508x.2018.1528170

[28] Zhou, X. (2020). The financial risks of small and medium banks mainly stem from the failure of corporate governance (in Chinese). *China Financialyst, 15*, 19–21.