

# A STUDY ON THE FACTORS AFFECTING THE PROFITABILITY OF RURAL COMMERCIAL BANKS

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Abstract: Rural commercial banks have gradually gained a foothold in the financial market. However, they still face challenges such as insufficient financial risk management capabilities, limited capital replenishment channels, difficulty in meeting technological innovation demands, reliance on a relatively simplistic profit model, and the lingering effects of rapid asset expansion. Therefore, in order to overcome current developmental hurdles and sustain long-term growth, it is crucial for commercial banks to study their profitability and influencing factors. This research is pivotal for enhancing competitiveness within the banking industry and ensuring sustainable development. Therefore, this paper proposes the following questions: (1) to explore the impact of internal operations on the profitability of rural commercial banks; (2) to explore the impact of employee situation on the profitability of rural commercial banks and (3) to explore the impact of innovation capability on the profitability of rural commercial banks.

This study targets employees of Wuxi Commercial Bank. Out of 200 profitability questionnaires distributed, 185 valid questionnaires were collected. Therefore, the response rate is 92.5%. The analysis conducted using SPSS software revealed the following results: (1) the significant positive impact of internal operations on the profitability of rural commercial banks; (2) the significant positive impact of employee situation on the profitability of rural commercial banks and (3) the significant positive impact of innovation capability on the profitability of rural commercial banks. Therefore, a proper understanding of these factors, especially optimizing internal operations, improving employee conditions, and fostering innovation capability, not only enhances the profitability of banks but also helps them maintain sustained competitive advantage and achieve long-term growth.

Keywords: Internal operations, Employee Situation, Innovation Capability, Profitability

# Introduction

In recent years, the development of commercial banks has been a key focus for the government and financial professionals. Enhancing the overall strength of the banking industry has



become an urgent priority. Despite significant improvements in aspects like capital scale, China's banking sector still faces numerous challenges. Commercial banks encounter significant constraints in financial policies, business types, and other areas, leading to immense competitive pressures and a challenging environment for survival and growth (Zhou & Zhang, 2015).

With the advent of the era of financial disintermediation, the trend towards interest rate liberalization is intensifying. Commercial banks no longer solely rely on traditional interest rate spread business models, thereby weakening the traditional financial dominance held by China's banking sector. Financial disintermediation has had a profound impact on customers and businesses, resulting in significant shifts in deposit habits (Ni, 2022). Consequently, traditional deposit businesses are under immense developmental pressure, and the competitive landscape among banks has become exceptionally severe.

Commercial banks are integral components of the banking system, and with the deepening urbanization in China, rural commercial banks have also achieved certain accomplishments. They play an increasingly crucial role in regional economic and social development (Chen, 2021). Despite the substantial gap in scale compared to larger commercial banks like the Industrial and Commercial Bank of China, rural commercial banks fulfill important roles in meeting the financing needs of regional economic development.

When assessing a bank's overall strength, profitability is a critical indicator. Profitability reflects the current profit levels of the bank as well as the sustainability and growth potential of its future earnings (Xie et al., 2020). A certain level of profitability is fundamental to a bank's existence. The stronger the profitability, the higher the bank's earnings. Higher sustainability of future earnings enhances the bank's ability to withstand risks. Moreover, greater growth potential of future earnings indicates greater development prospects for the bank. These factors are crucial for the survival, development, and maturity of banks (Lou, 2022).

In terms of profitability, rural commercial banks face notable challenges compared to more mature joint-stock commercial banks in China. For instance, rural commercial banks generally have smaller asset sizes, and their profitability models are more reliant on regional economic policies. Therefore, a thorough investigation into the factors influencing the profitability of rural commercial banks is essential.

#### **Research Objectives**

- (1) To explore the impact of internal operations on the profitability of rural commercial banks.
- (2) To explore the impact of employee situation on the profitability of rural commercial banks.
- (3) To explore the impact of innovation capability on the profitability of rural commercial banks.



#### Literature Review

Economies of Scale Theory

American economist Marshall first expounded the economies of scale theory, suggesting that large-scale enterprises benefit more from technological and managerial advantages, which can lead to higher profits (Chen, 2021). However, he also argued against unlimited expansion of company size, as it could result in monopolies and reduce market competition. Subsequently, researchers like Robinson and Chamberlain further enriched the economies of scale theory by introducing concepts of monopolistic competition.

There should be certain standards limiting the asset size of banks, as exceeding these standards can decrease their profitability. As financial institutions that largely rely on asset size for profit generation, banks can increase profitability by expanding their branch networks to scale assets, thus reducing marginal costs and increasing marginal returns (Bucevska & Misheva, 2017). However, excessive expansion can lead to uneven managerial levels within banks, affecting profitability due to management chaos. Presently, major commercial banks have optimized their scale through expansion, but blind expansion could limit further profitability improvements (Xie et al., 2020). Yet, for rural commercial banks experiencing rapid growth phases, moderate measures to increase asset size can strengthen profitability. Each bank should choose an appropriate operational scale based on its business development, focusing on internal optimization and expanding intermediary business income to enhance profitability.

For rural commercial banks, the theoretical content of economies of scale theory holds significant relevance, given their late development start in China, often formed through mergers of rural or urban credit cooperatives, resulting in relatively smaller asset sizes. As outlined above, a bank's profitability model hinges on its own assets, making economies of scale theory highly relevant and essential for commercial banks.

**Profitability** 

Profitability is an important indicator for assessing the operational status and development prospects of enterprises. It refers to the capability of enterprises to continuously generate profits by mobilizing and utilizing internal and external resources as drivers of their operations. This process involves integrating distinctive products and services in accordance with customer demands and market needs, thereby maximizing enterprise efficiency and profitability through strategic marketing approaches (Liu & Jiang, 2020).

The sources of profitability for banks stem from the daily operations, hence any factors influencing operations directly impact a bank's profitability (Gaur & Mohapatra, 2020). For large commercial banks, there was a negative relationship between asset size and profitability, whereas for small commercial banks, the opposite was observed (Li & Li, 2022). To enhance the profitability of



banks, optimizing the product structure is crucial. Banks need to continuously develop and research financial products that meet market demands, and formulate comprehensive product development strategies (Fu, 2020). By thoroughly understanding the preferences and needs of target customers, and meticulously designing scientifically sound product solutions, banks can establish a leading position in competitive markets.

The employee situation plays a crucial role in the operation of rural commercial banks. The bank's operations rely heavily on its employees, including their quantity and capability, which directly impacts the profitability of the bank. The executives of the bank determine its strategic direction and planning, and their competence and boldness significantly influence the bank's prospects (Lao, 2022). The stronger the marketing capability and the better the service provided, the higher the profits generated by the corresponding products. In the current customer-centric marketing context, emphasis on post-marketing service assurance is essential. Effective post-service assurance helps banks retain customers, who are fundamentally the source of profits. Therefore, by altering the bank's staffing situation, the profitability of the commercial bank can be enhanced to a certain extent (Kundid & Pavić, 2021).

Innovation capability is the fundamental driving force for an enterprise to continuously surpass itself and advance towards the future. Continuous technological innovation inevitably leads the market, thereby also guiding future profit growth for the enterprise. In an era where the pace of innovation in products, technologies, and knowledge is accelerating, customer demands are also changing rapidly (Zhang, 2022). Therefore, continuous progress and breakthroughs in product innovation, technological reform, and cost improvement are the sources for enterprises to adapt to market changes, maintain profitability levels, and enhance profitability capabilities. Improving service innovation capability can directly increase a company's market share and revenue, enhance customer experience, and establish a strong brand image in the market. Through service innovation, companies can also reduce service costs and enhance operational efficiency. Furthermore, introducing cutting-edge technologies improves product quality, lowers production costs, and opens up new market opportunities through technological innovation capabilities.

# Methodology

This study targets employees of Wuxi Commercial Bank and aims to explore various factors affecting the bank's profitability. A detailed questionnaire was designed to collect employees' views and opinions on these factors. The questionnaire covers three main dimensions: internal operations, employee conditions, and innovation. Employee feedback will provide deep insights into the actual impact of these factors.

The questionnaire design adopts the format of the Likert five-point scale. Each question offers

five options, ranging from "strongly disagree" to "strongly agree," corresponding to scores from 1 to 5. The questionnaires have all undergone reliability and validity testing, ensuring the credibility of the subsequent analysis.

The data collected from the questionnaire survey will be processed using SPSS software. First, descriptive statistical analysis will be conducted to summarize the basic characteristics of the participants. Next, correlation analysis will be performed to explore the relationships between the various factors. Finally, regression analysis will be used to further determine the specific impact of each factor on the bank's profitability.

#### Results

As showed by Table 1, it is evident that female employees constitute the majority, accounting for 62.2% of participants. The age structure is predominantly under 40 years old, indicating that the bank's workforce is generally young, energetic, and has strong potential for development. Regarding work experience, the majority of employees have between 3 years or less and 3-10 years of experience, totaling 80% of participants, demonstrating significant practical experience. In terms of job level, regular employees make up the vast majority, with managerial staff accounting for a relatively small proportion.

Table 1: Descriptive Analysis

Items	Category	Number of People	Percentage (%)	
Gender	Male	70	37.8	
	Female	115	62.2	
Age	Under 30 years old	56	30.3	
	30-40 years old	68	36.8	
	40-50 years old	35	19.0	
	Over 50 years old	26	13.9	
Years of work	Under 3 years	79	42.7	
experience	3-10 years old	69	37.3	
	Over 20 years	37	20.0	
Job level	Regular employee	153	82.7	
	Executive	32	17.3	

Table 2: Correlation Analysis Results Between Internal Operations and Profitability

Dimensions	Asset size	Financial product structure	Profitability
Asset size	1		
Financial product structure	.614**	1	
Profitability	.704**	.711**	1

Table 2 results indicate a correlation coefficient of 0.704\*\* between asset size and profitability, and 0.711\*\* between financial product structure and profitability. Therefore, there is a

significant positive correlation between asset size, financial product structure, and profitability, indicating a strong positive relationship between internal operations and profitability.

Table 3: Regression Analysis Results between Internal Operations and Profitability

		Standardized pefficient	Standardized coefficient	t	p	$\mathbb{R}^2$	Adjusting R <sup>2</sup>	F
	В	Standard Error	Beta					
(Constant)	.641	.047	-	5.322	.000	.514	.539	212.921
Internal operations	.722	.064	.791	11.715	.000			

According to Table 3, internal operations significantly influence profitability (standardized coefficient B=0.791, p<0.05). The model explains a variance of  $R^2=0.514$ , indicating that the internal operations variable has strong predictive power for explaining profitability. Additionally, the constant term is 0.641, with a t-value of 5.322 and a p-value less than 0.05, indicating that the constant term is also significant in the model.

Table 4: Correlation Analysis Results between Employee Situation and Profitability

Dimension	Ordinary employee	Executive team	Marketing capability	Profitability
Ordinary employee	1			
Executive team	.822**	1		
Marketing capability	.784**	.773**	1	
Profitability	.791**	.724**	.774**	1

Table 4 results indicate a correlation coefficient of 0.791\*\* between ordinary employee and profitability, 0.724\*\* between executive team and profitability and 0.774\*\* between marketing capability and profitability. Therefore, there is a significant positive correlation between ordinary employee, executive team, marketing capability and profitability, indicating a strong positive relationship between employee situation and profitability.

 Table 5: Regression Analysis Results between Employee Situation and Profitability

	Non-Standardized		Standardized	t	p	$\mathbb{R}^2$	Adjusting	F
	C	oefficient	coefficient				$\mathbb{R}^2$	
	В	Standard Error	Beta					
(Constant)	.701	.114	-	5.637	.000	.529	.513	172.437
Employee situation	.673	.079	.684	13.887	.000			

According to Table 5, employee situation significantly influence profitability (standardized coefficient B = 0.684, p < 0.05). The model explains a variance of  $R^2 = 0.529$ , indicating that the employee situation variable has strong predictive power for explaining profitability. Additionally, the constant term is 0.673, with a t-value of 5.637 and a p-value less than 0.05, indicating that the

constant term is also significant in the model.

Table 6: Correlation Analysis Results between Innovation Capability and Profitability

Dimension	Service innovation	Technological	Profitability
	capabilities	ınnovatıon	
Service innovation capabilities	1		
Technological innovation	.642**	1	
Profitability	.736**	.774**	1

Table 6 results indicate a correlation coefficient of 0.736\*\* between service innovation capabilities and profitability, and 0.774\*\* between technological innovation and profitability. Therefore, there is a significant positive correlation between service innovation capabilities, technological innovation and profitability, indicating a strong positive relationship between innovation capability and profitability.

Table 7: Regression Analysis Results between Innovation Capability and Profitability

	Non-Standardized		Standardized	t	p	$\mathbb{R}^2$	Adjusting	F
	(	Coefficient	coefficient				$\mathbb{R}^2$	
	В	Standard Error	Beta					
(Constant)	.670	.128	-	5.213	.000	.581	.564	221.512
Innovation capability	.711	.087	.674	12.551	.000			

According to Table 7, innovation capabilities significantly influence profitability (standardized coefficient B=0.674, p<0.05). The model explains a variance of  $R^2=0.581$ , indicating that the innovation capabilities variable has strong predictive power for explaining profitability. Additionally, the constant term is 0.711, with a t-value of 5.213and a p-value less than 0.05, indicating that the constant term is also significant in the model.

# **Discussion**

This study examines the factors influencing the profitability of Wuxi Rural Commercial Bank. Therefore, the findings of this research may have some limitations when applied to other contexts. Although previous studies suggest that internal operations, employee conditions, and innovation capability influence the profitability of commercial banks, the results may not fully capture all the factors affecting profitability.

To enhance the robustness and accuracy of future research, it is recommended to increase the sample size by including multiple banks. Additionally, incorporating various factors can provide a more comprehensive understanding of the determinants of commercial bank profitability. By doing so, subsequent studies can offer more generalized and accurate insights into the factors affecting the

profitability of rural commercial banks.

### **Conclusions**

The significant positive impact of internal operations on the profitability of rural commercial banks. The correlation and regression analysis indicates that the internal operations of rural commercial banks, particularly the optimization of asset size and financial product structure, have a significant positive impact on enhancing the banks' profitability. Within a rural commercial bank, the core competitive edge of its intermediary operations lies primarily in its capability to innovate financial products. Whether in international or domestic markets, relying solely on traditional interest income from loans is insufficient to attract strong customer interest and tends to yield lower income levels. Real-world evidence suggests that high levels of intermediary income are often achieved through the successful promotion of diversified and innovative financial products, which serve as crucial tools for increasing revenue.

The significant positive impact of employee situation on the profitability of rural commercial banks. Correlation analysis and regression results indicate that the employee situation significantly enhances the profitability of rural commercial banks. Firstly, the capabilities of ordinary employees directly impact the smoothness of daily bank operations and the quality of customer service. Highly skilled employees can provide more efficient and professional services, thereby increasing customer satisfaction and loyalty, which in turn stimulates business growth and profitability. Secondly, the competence and decision-making of the executive team directly influence the bank's strategic planning and development direction. A proficient executive team can formulate effective business strategies, optimize resource allocation, enhance operational efficiency, and thereby drive profitability growth. Moreover, precise market positioning and innovative marketing strategies enable banks to attract more customers and business opportunities, expand market share, increase revenue streams, and consequently elevate overall profitability. Therefore, effectively managing and enhancing the overall capabilities of employees, including the professional skills of ordinary staff, leadership capabilities of the executive team, and market insights of the marketing team, are crucial for rural commercial banks to sustainably enhance profitability and achieve stable development.

The significant positive impact of innovation capability on the profitability of rural commercial banks. Correlation analysis and regression results indicate that the innovation capabilities of rural commercial banks, particularly service innovation capabilities and technological innovation capabilities, have a significant positive impact on enhancing the banks' profitability. Firstly, improving service innovation capabilities can significantly enhance customer experience. For instance, launching convenient mobile banking services and intelligent customer consultation systems can greatly improve customer satisfaction and increase their dependence on bank services. Secondly,



technological innovation capabilities are crucial for banks to enhance their competitiveness and achieve long-term development. By introducing and applying advanced financial technologies, such as big data analytics, blockchain technology, and artificial intelligence, banks can optimize business processes, improve operational efficiency, and reduce operational costs, thereby enhancing profitability. Specifically, big data analytics can help banks more accurately control risks and assess customer credit, increasing the security and recovery rate of loans. Blockchain technology can improve transaction transparency and security while reducing transaction costs. Artificial intelligence can automate the processing of large amounts of data, improving the speed and accuracy of services.

By enhancing service innovation capabilities and technological innovation capabilities, rural commercial banks can significantly boost their market competitiveness and profitability, thereby achieving sustainable development and stable growth. Dual innovation in services and technology not only brings direct economic benefits to banks but also establishes a positive brand image, attracting more customer resources and market opportunities, ultimately achieving a comprehensive enhancement of the banks' overall competitiveness and profitability.

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