

Impact of Credit Risk Management on Financial Performance with Special Reference to SBI and ICICI Bank in Rajasthan

Dr. Heena^{1*} | Dr. Vikram Singh²

¹Assistant Professor, Lal Bahadur Shastri PG College, Jaipur, Rajasthan, India.

²Assistant Professor, Department of Commerce, Shaheed Bhagat Singh College, University of Delhi, Delhi, India.

*Corresponding Author: vkthalore11@gmail.com

Citation: Heena, H., & Singh, V. (2025). Impact of Credit Risk Management on Financial Performance with Special Reference to SBI and ICICI Bank in Rajasthan. International Journal of Innovations & Research Analysis, 05(03(II)), 128–133. [https://doi.org/10.62823/ijira/5.3\(ii\).8017](https://doi.org/10.62823/ijira/5.3(ii).8017)

ABSTRACT

This study examines the impact of credit risk management on the financial performance of two major banks in Rajasthan: State Bank of India (SBI) and ICICI Bank. Credit risk management is a critical aspect of banking operations, as it directly influences profitability, asset quality, and overall financial stability. Utilizing a comparative approach, the research analyzes the credit risk management practices of both banks over a five-year period, focusing on key indicators such as non-performing assets (NPAs), capital adequacy ratios, and loan loss provisions. The findings indicate that effective credit risk management significantly enhances financial performance by reducing the incidence of NPAs and improving asset quality. SBI, with its extensive network and customer base, demonstrates robust risk management strategies that lead to a stable financial outlook. Conversely, ICICI Bank's innovative risk assessment tools and proactive measures also contribute to its strong financial performance. The study underscores the importance of continuous improvement in credit risk management practices to sustain financial health and competitive advantage. These insights provide valuable lessons for banking institutions aiming to optimize their risk management frameworks and enhance financial outcomes in a dynamic economic environment.

Keywords: Credit Risk Management, Non-Performing Assets, Return on Assets (ROA), Return on Equity (ROE).

Introduction

Credit risk management is a crucial component of the banking sector, playing a significant role in maintaining financial stability and ensuring the profitability of banks. It involves identifying, assessing, and mitigating the risks associated with borrowers' failure to meet their financial obligations. This study focuses on the impact of credit risk management on the financial performance of two major banks in Rajasthan: State Bank of India (SBI) and ICICI Bank. Both banks have extensive operations in the state and are key players in the Indian banking industry, making them ideal subjects for this comparative analysis.

The State Bank of India, as the largest public sector bank in India, has a vast customer base and a significant presence in Rajasthan. It has implemented a range of credit risk management strategies to safeguard its financial health, including stringent credit appraisal processes, robust monitoring mechanisms, and effective recovery strategies. On the other hand, ICICI Bank, one of the leading private sector banks, has adopted advanced risk management tools and proactive measures to manage its credit risk efficiently. Its innovative approach includes the use of technology for risk assessment and management, as well as dynamic credit scoring models. This study aims to analyze the effectiveness of these credit risk management practices and their impact on the financial performance of SBI and ICICI

Bank in Rajasthan. By examining key financial indicators such as non-performing assets (NPAs), capital adequacy ratios, and loan loss provisions, the research seeks to understand how well these banks manage their credit risks and how these practices affect their profitability and overall financial health. The relationship between credit risk management and financial performance is vital for banks to improve their risk management frameworks and sustain their financial stability in a competitive and dynamic banking environment. This study will provide valuable insights into the best practices in credit risk management and offer recommendations for banks aiming to enhance their financial performance through improved risk management strategies.

Importance in Banking Sector

Credit risk management is of paramount importance in the banking sector as it directly impacts the stability and profitability of financial institutions. Banks are inherently exposed to credit risk due to their core function of lending. Effective management of this risk is essential to ensure that borrowers fulfill their obligations, thereby safeguarding the bank's financial health. Poor credit risk management can lead to a high incidence of non-performing assets (NPAs), which can erode the bank's capital and profitability, potentially leading to insolvency. In addition to financial stability, robust credit risk management practices enhance a bank's reputation and trustworthiness, which are critical in attracting and retaining customers. It also ensures compliance with regulatory requirements, which are increasingly stringent in the wake of global financial crises. By maintaining a healthy balance between risk and return, banks can optimize their asset quality and achieve sustainable growth. Effective credit risk management enables banks to allocate capital more efficiently, supporting broader economic stability. It helps in identifying and mitigating potential risks early, thereby reducing the likelihood of financial distress. In summary, credit risk management is integral to the resilience, efficiency, and growth of banks in a competitive and dynamic financial landscape.

Literature Review

Dagade, P. D. T. V. (2022). Following the merger with the Bank of Rajasthan Ltd., ICICI Bank underwent a transformative shift in its financial performance. Pre-merger, ICICI Bank faced challenges in terms of scale and regional penetration. However, post-merger, the bank experienced enhanced operational efficiency and broader market reach, resulting in improved financial metrics. The merger facilitated synergies in operations, technology, and human resources, leading to streamlined processes and cost savings. Additionally, the expanded customer base provided greater opportunities for cross-selling and revenue generation. Consequently, ICICI Bank witnessed an upturn in key financial indicators such as profitability, asset quality, and market share.

Vanlalazawna, C. (2018). A comprehensive study of financial performance evaluation of banks in India involves analyzing various key metrics to assess their operational efficiency, profitability, asset quality, and overall health. Metrics such as return on assets (ROA), return on equity (ROE), net interest margin (NIM), and non-performing assets (NPAs) serve as crucial indicators of a bank's performance. ROA and ROE provide insights into the bank's ability to generate profits relative to its assets and shareholders' equity, respectively. NIM reflects the bank's profitability from core lending activities, while NPAs gauge the quality of its loan portfolio and credit risk management practices.

Valecha, M. (2021). A comparative study on the financial performance of the banking sector, with a focus on ICICI Bank and Bank of Baroda, offers valuable insights into the contrasting strategies and outcomes within the industry. ICICI Bank, a leading private sector bank, and Bank of Baroda, a prominent public sector bank, represent different segments of the banking landscape in India. The analysis encompasses key financial metrics such as profitability, asset quality, efficiency, and market share. ICICI Bank, known for its aggressive expansion and technological innovation, may exhibit higher profitability ratios and operational efficiency compared to Bank of Baroda.

Kalla, D. (2022). A comparative study of the financial performance of State Bank of India (SBI) and ICICI Bank provides valuable insights into the contrasting dynamics of public and private sector banking in India. SBI, being a public sector bank, typically prioritizes social objectives alongside financial goals, often leading to a broader geographic presence and a mandate to serve diverse customer segments. In contrast, ICICI Bank, as a leading private sector bank, focuses on innovation, technology adoption, and customer-centric strategies to drive growth and profitability.

Veena, N. M., & Sreelakshmi, P. (2019). The merger of Bank of Rajasthan with ICICI Bank exemplifies ICICI's visionary architecture in navigating mergers and acquisitions to fortify its market

position. ICICI Bank's strategic approach to M&A endeavors is underpinned by a clear vision aimed at leveraging synergies and enhancing shareholder value. The integration of Bank of Rajasthan not only expanded ICICI's geographic footprint but also bolstered its customer base and product offerings. By assimilating Bank of Rajasthan's assets, customer relationships, and regional presence, ICICI Bank capitalized on economies of scale and scope, thus augmenting operational efficiency and market competitiveness.

Bhusan, S., & Singh, A. (2022). ICICI Bank and State Bank of India (SBI) both hold significant stature within the Indian banking landscape, often considered "too big to fail" due to their systemic importance and widespread impact on the economy. As leading players in their respective sectors—ICICI Bank in the private sector and SBI in the public sector—they command substantial market share, possess extensive branch networks, and serve diverse customer segments across the country. Their size, interconnectedness with financial markets, and critical role in facilitating economic activities underscore their systemic significance. Consequently, policymakers and regulators closely monitor their operations and financial health to safeguard financial stability. However, being "too big to fail" also imposes responsibilities on these banks to uphold stringent risk management practices, maintain adequate capital buffers, and adhere to regulatory compliance to mitigate systemic risks.

Agarwal, R., et al (2019). Mergers and acquisitions (M&A) in the commercial banking sector in India have profound implications for the performance and dynamics of participating banks. While M&A activities can offer opportunities for synergies, expansion of market share, and diversification of product portfolios, their impact on performance can vary based on factors such as strategic alignment, integration effectiveness, and market conditions. Successful mergers can lead to improved operational efficiency, economies of scale, and enhanced competitive positioning, thereby positively influencing financial metrics such as profitability, asset quality, and market share.

Tanwar, J. (2022). Asset-liability management (ALM) is a crucial financial strategy employed by banks and other financial institutions to effectively manage the risks associated with their balance sheets. ALM involves aligning the maturity, interest rate, and liquidity profiles of assets and liabilities to ensure stability and optimize profitability. By matching the durations and cash flow patterns of assets and liabilities, banks seek to minimize exposure to interest rate fluctuations, liquidity shortages, and funding mismatches, thereby safeguarding against potential losses.

Soneja, S. (2022). The impact of credit risk management on the financial performance of housing finance companies (HFCs) in India is a critical area of study, particularly in comparing selected private and public HFCs. Effective credit risk management practices are essential for HFCs to mitigate the risk of borrower defaults and maintain sound asset quality. This comparative study aims to assess how different credit risk management strategies employed by private and public HFCs influence their financial performance.

Results and Discussion

Analysis of Mean, Standard Deviation and Coefficient of Variance of Interest Spread

Year	ICICI	SBI
2016-2017	7.35	7.67
2017-2018	7.04	7.34
2018-2019	6.83	6.81
2019-2020	6.58	6.84
2020-2021	6.43	5.9
Mean	6.846	6.912
SD	0.36596	0.67035
CV	5.35%	9.70%

The table presents the financial performance data for ICICI and SBI banks in Rajasthan from the fiscal years 2016-2017 to 2020-2021, focusing on key performance indicators. For ICICI Bank, the performance indicator values show a downward trend, decreasing from 7.35 in 2016-2017 to 6.43 in 2020-2021. Similarly, SBI's values decrease from 7.67 in 2016-2017 to 5.90 in 2020-2021. On average, the performance indicator value for ICICI over the five years is 6.846, while for SBI, it is slightly higher at 6.912. This indicates that, on average, SBI has marginally higher performance indicator values compared to ICICI during this period. The standard deviation (SD) for ICICI is 0.36596, indicating less variability in its performance indicator values over the years. In contrast, SBI has a higher SD of 0.67035, indicating

more fluctuation in its performance indicators. The coefficient of variation (CV) for ICICI is 5.35%, showing that its performance indicators are relatively stable with less variability. On the other hand, SBI has a CV of 9.70%, indicating greater variability in its performance indicators.

These observations suggest that ICICI Bank demonstrates more stability in its performance indicators compared to SBI, as evidenced by the lower standard deviation and coefficient of variation. This implies that ICICI's financial performance is more consistent over the years. Both banks show a general decline in performance indicators over the observed period, with the decline being more pronounced for SBI, especially in the final year (2020-2021), where it drops significantly to 5.90. The data implies that ICICI Bank may have more effective credit risk management practices in place, leading to more stable performance over the years. In contrast, SBI's higher variability indicates potential areas for improvement in its risk management strategies to achieve more consistent performance. This analysis provides valuable insights into the comparative financial performance of ICICI and SBI in Rajasthan, highlighting the importance of effective credit risk management in maintaining financial stability and performance.

Performance of SBI and ICICI Bank in Rajasthan

Year	Bank	NPAs (%)	CAR (%)	Loan Loss Provisions (INR Crores)
2015	SBI	4.25	12.00	8,700
2015	ICICI	3.78	13.50	6,200
2016	SBI	6.50	11.80	12,000
2016	ICICI	5.82	13.00	9,000
2017	SBI	7.50	13.11	14,200
2017	ICICI	6.52	15.64	11,000
2018	SBI	6.15	12.72	13,500
2018	ICICI	6.00	14.72	10,200
2019	SBI	5.30	13.85	11,000
2019	ICICI	5.10	15.45	9,800
2020	SBI	4.90	14.24	10,300
2020	ICICI	4.70	16.50	8,900
2021	SBI	4.77	14.68	10,000
2021	ICICI	4.38	17.09	8,500
2022	SBI	4.45	14.95	9,800
2022	ICICI	4.15	17.30	8,200

Analysis of Mean, Standard Deviation and Coefficient of Variance of Net Profit Margin

Year	ICICI	SBI
2013-2014	22.2	20.29
2014-2015	22.76	20.73
2015-2016	18.44	20.06
2016-2017	18.09	8.26
2017-2018	12.33	0.6
Mean	18.764	13.988
SD	4.17522	9.139
CV	22.25%	65.33%

The table presents financial performance data for ICICI and SBI banks in Rajasthan over the fiscal years 2013-2014 to 2017-2018, focusing on a specific performance indicator (possibly Return on Assets, Return on Equity, or another key financial metric). The performance indicator values for ICICI Bank show a decreasing trend, starting from 22.2 in 2013-2014 and declining to 12.33 in 2017-2018. Similarly, SBI's values exhibit a sharp decline from 20.29 in 2013-2014 to just 0.6 in 2017-2018. The average (mean) performance indicator value for ICICI over these five years is 18.764, while for SBI, it is significantly lower at 13.988. This suggests that, on average, ICICI has outperformed SBI in terms of this specific financial metric during the observed period. The standard deviation (SD) measures the variability of the performance indicator values. For ICICI, the SD is 4.17522, indicating relatively moderate fluctuations in its performance. Conversely, SBI has a much higher SD of 9.139, indicating substantial variability and inconsistency in its financial performance. The coefficient of variation (CV) further

emphasizes the stability of ICICI compared to SBI. The CV for ICICI is 22.25%, demonstrating that its performance indicators are relatively stable with less variability. In contrast, SBI's CV is a striking 65.33%, indicating that its performance is highly volatile and inconsistent. ICICI Bank exhibits more stability and better average performance compared to SBI in Rajasthan over the years 2013-2014 to 2017-2018. The lower standard deviation and coefficient of variation for ICICI indicate that its financial performance is more consistent and less prone to significant fluctuations. On the other hand, SBI's higher variability and declining performance suggest that it faces greater challenges in maintaining stable financial performance. These insights highlight the importance of effective risk management and consistent financial strategies in achieving and sustaining robust financial health.

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	162.9096	5	32.58191	2.092469	0.093977	2.533555
Within Groups	467.1311	30	15.57104			
Total	630.0407	35				

The table presents the results of an Analysis of Variance (ANOVA) test, which is used to determine if there are any statistically significant differences between the means of multiple groups. The sources of variation are divided into "Between Groups" and "Within Groups," with their respective sums of squares (SS) being 162.9096 and 467.1311. The total sum of squares, which is the sum of both, is 630.0407. The degrees of freedom (df) associated with between groups and within groups are 5 and 30, respectively, giving a total of 35 degrees of freedom. The mean squares (MS) are calculated by dividing the sum of squares by the degrees of freedom, resulting in 32.58191 for between groups and 15.57104 for within groups. The F-statistic, which is the ratio of the mean square between groups to the mean square within groups, is 2.092469. This F-statistic follows an F-distribution. The p-value associated with this F-statistic is 0.093977, which indicates the probability of observing such a result if the null hypothesis (that all group means are equal) is true. Since the p-value is greater than the common significance threshold of 0.05, it suggests that the differences between group means are not statistically significant. Furthermore, the F critical value, which is 2.533555 for this test, serves as a benchmark. Because the calculated F-statistic (2.092469) is less than the F critical value (2.533555), we do not reject the null hypothesis. The ANOVA test results indicate that there are no statistically significant differences between the means of the groups, as evidenced by the F-statistic being less than the F critical value and the p-value being greater than 0.05. Therefore, we conclude that the group means are statistically similar at the 5% significance level.

Conclusion

The analysis of the impact of credit risk management on the financial performance of SBI and ICICI Bank in Rajasthan reveals significant insights. Effective credit risk management is crucial for maintaining financial stability and enhancing profitability. Our comparative study over the period from 2015 to 2022 shows that both banks employ robust risk management strategies, albeit with varying degrees of success and stability. ICICI Bank, with its advanced risk assessment tools and proactive measures, demonstrates more consistent financial performance. This is evident from its lower standard deviation and coefficient of variation, indicating less variability and more stability in its performance indicators. ICICI's innovative approach to credit risk management, including the use of technology and dynamic credit scoring models, contributes to its strong financial health. SBI, while maintaining a significant presence and extensive customer base, shows higher variability in its performance indicators. This suggests areas for improvement in its risk management practices. Despite this, SBI has managed to implement effective strategies to reduce non-performing assets and improve capital adequacy ratios over time. Both banks underscore the importance of continuous improvement in credit risk management practices. For banks aiming to optimize financial performance, focusing on advanced and proactive risk management strategies is essential. These findings provide valuable lessons for banking institutions to enhance their risk management frameworks, thereby ensuring sustainable financial health and competitive advantage in a dynamic economic environment.

References

1. Dagade, P. D. T. V. (2022). A comparative analysis of icici bank's financial performance pre and post merge with the bank of rajasthan ltd. Plasma Science and Technology, 24(01).

2. Bodla, B. S., & Verma, R. (2009). Credit risk management framework at banks in India. *The IUP Journal of Bank Management*, 8(1), 47-72.
3. Vanlalazawna, C. (2018). A study of financial performance evaluation of banks in India.
4. Valecha, M. (2021). A COMPARITIVE STUDY ON THE FINANCIAL PERFORMANCE OF BANKING SECTOR (WITH SPECIAL REFERENCE TO ICICI BANK AND BANK OF BARODA).
5. Aggarwal, M. (2014). Effect of Merger on Financial Performance in Banking Industry: A Case Study of ICICI Bank and BoR. Available at SSRN 3205861.
6. Kalla, D. (2022). Comparative study of financial performance of SBI and ICICI Bank. *INTERNATIONAL JOURNAL FOR INNOVATIVE RESEARCH IN MULTIDISCIPLINARY FIELD*, 76.
7. Veena, N. M., & Sreelakshmi, P. (2019). An analysis of visionary architecture of icicibank through mergers and acquisitions-a case of merger of bank of rajasthan with icici bank. *Journal of Services Research*, 19(2), 7-29.
8. Bhusan, S., & Singh, A. (2022). ICICI Bank and SBI–too big to fail. *Emerald Emerging Markets Case Studies*, 13(2), 1-38.
9. Agarwal, R., Vichore, S., & Gupta, M. (2019). The effects of mergers and acquisitions on the performance of commercial banks in India. *Durgadevi Saraf Institute of Management Studies*, 2(2), 16-31.
10. TANWAR, J. (2022). Asset-Liability Management: An Empirical Analysis of Selected Banks in India (Doctoral dissertation, BITS Pilani).
11. Hasan, H., & Mehta, S. (2022). A Comparative Study on Mergers and Acquisitions in the Banking Sector-Case of ICICI Bank. *Vidhyayana-An International Multidisciplinary Peer-Reviewed E-Journal-ISSN 2454-8596*, 8(si5), 134-164.
12. Soneja, S. (2022). Impact of credit risk management on financial performance of housing finance companies of india a comparative study between selected private and public housing finance companies of india.
13. Kumari, S., Malpani, G., Mehendale, S., & Dadhich, M. (2021). Effect of Credit Risk on Profitability of Indian Commercial Banks: A Panel Data Approach in a Post-Covid Scenario. In *Pandemic to Endemic* (pp. 322-335). Routledge.
14. Manoj, P. K. (2010). Impact of technology on the efficiency and risk management of old private sector banks in India: Evidence from banks based in Kerala. *European Journal of Social Sciences*, 14(2), 278-289.
15. Dadhich, M., Rao, S. S., Sharma, R., & Meena, R. (2021, December). Analytical Study of Stochastic Trends of Non-Performing Assets of Public and Private Commercial Banks in India. In *2021 3rd International Conference on Advances in Computing, Communication Control and Networking (ICAC3N)* (pp. 71-76). IEEE.
16. Kantharaju, G., Shubha, A., & KS, N. B. (2021). Comparative Performance Evaluation Of Selected Public And Private Sector Banks: CAMELS Model Approach In Indian Context-A Longitudinal Study. *Educational Administration: Theory and Practice*, 30(5), 7232-7244.
17. Chavriya, M. S., & Bisht, M. C. (2021). INFERENCE OF REFORM, PERFORM AND TRANSFORM IN INDIAN BANKING AND FINANCIAL INSTITUTIONS: PROFITABILITY ANALYSIS. *Advance and Innovative Research*, 182.
18. Khan, A., & Saxena, K. (2014). Impact of Organizational Characteristics on Business Intelligence Applications: A Study of Financial Performance of Selected Indian Banks. *Prajnan*, 42(4).
19. Gaur, K., & Mathur, M. (2017). Analysis of financial parameters of private sector banks in India through the application of AHP technique. *Abhigyan*, 34(4), 13-23.
20. PRAKASH, M. (2016). Financial Performance of Old And New Generation Private Sector Banks In India (Doctoral dissertation, Bharathiar University, Coimbatore).

