

A STUDY OF THE PERFORMANCE OF PUBLIC AND PRIVATE SECTOR BANKS IN INDIA

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ABSTRACT

The banking industry plays a vital role in fostering balanced regional growth by ensuring the availability of financial resources and banking infrastructure across different parts of the country, including economically underdeveloped regions. It supports the primary sector by extending timely credit to farmers and improves the quality of life by providing finance for housing, consumer durables, and other personal needs. Since the banking sector significantly influences the nation's economic progress, evaluating its financial performance is essential. This study examines the financial performance of selected public and private sector banks operating in India over a five-year period from 2015–16 to 2019–20, comparing performance using six key financial indicators. The findings suggest that the financial performance of the selected public and private sector banks differed significantly across five of the six indicators examined. The only exception was the Return on Assets ratio, where both groups demonstrated similar performance.

Keywords: *Non-Interest Income to Total Fund Ratio; Quick Ratio; Return on Assets; Return on Net Worth; Total Assets Turnover Ratio; Total Debts to Owners' Fund.*

1. Introduction

The banking sector is one of the fundamental pillars of India's economic system and plays a significant role in promoting national development. It serves as an essential financial intermediary, providing timely credit and other banking services to individuals, businesses, industries, and the agricultural sector. Adequate capital formation is indispensable for sustainable economic growth, and banks facilitate this by encouraging savings and channeling funds into productive investments. Through credit creation, banks stimulate production, generate employment, and contribute substantially to economic progress.

In addition to supporting economic activities, the banking industry promotes balanced regional development by extending financial infrastructure and services to less-developed and rural areas. It strengthens the agricultural sector by providing timely institutional credit to farmers, thereby enhancing productivity and rural development, and it improves the standard of living through housing, vehicle, education, and consumer finance.

Considering the strategic importance of the banking sector, assessing its financial performance becomes essential, because the efficiency and stability of banks directly influence the health of the economy. Over the past few decades, the Indian banking industry has been significantly transformed, with private sector banks emerging as strong competitors alongside public sector banks. Against this background, the present study evaluates and compares the financial performance of selected public and private sector banks in India over the five-year period from 2015–16 to 2019–20, seeking useful insights into their comparative efficiency and financial position.

2. Review of Literature

A review of previous research indicates that many scholars have examined banking-sector performance from different perspectives using a variety of financial and operational indicators. Prabhakar and Lakshmi Prabha (2012) reported that banking-sector performance exhibited considerable consistency and recommended efficient portfolio management to minimize investment risk. Spathis and Doumpos (2002) classified banks according to profitability and operational efficiency, highlighting differences between small and large institutions. Kaur (2012) observed that public sector banks outperformed private sector banks on several measures, whereas Balasubramanin (2007) emphasized the increasing contribution of private sector banks to India's economic development. Pathak (2003) suggested that deposits, profitability, return on assets, and productivity are reliable measures for assessing banks' financial performance.

Goel and Bajpai (2013) evaluated the impact of the global financial recession using liquidity, capital adequacy, and profitability ratios, finding that Indian banks were not significantly affected during 2006–2009; Yadav (2014) reported that foreign banks performed better than other groups before the recession. Singla (2008) found stable profitability during the study period, with a higher interest coverage ratio and a debt–equity ratio exceeding 1:1 reflecting strong solvency, and reported inverse relationships among return on net worth, the debt–equity ratio, and the interest coverage ratio. Chien and Danw (2004) argued that operational efficiency does not necessarily translate into greater organizational effectiveness, while Chaudhary and Sharma (2011) recommended strengthening management information systems and staff training in loan documentation, security management, and credit appraisal to reduce non-performing assets.

Kumar and Malhotra (2013) evaluated Indian public sector banks using composite ranking, identifying Bank of Baroda as the top performer for liquidity and asset quality and United Bank of India as the lowest. Mohanraj and Gomathi (2013) concluded that the global financial crisis created profitability pressures from higher funding costs, mark-to-market requirements, and declining asset quality, though Indian banks were relatively insulated by limited international exposure and prudent regulation. Mistry and Savani (2015) found that operational efficiency, asset management, and bank size significantly influence the financial performance of private sector banks, and Mistry (2011, 2012, 2014) reported significant positive relationships between bank size, return on assets, and corporate social disclosures. Chavda et al. (2022) compared selected public and private sector banks and observed significant differences across several indicators, including the Capital Adequacy Ratio, Credit–Deposit Ratio, Current Ratio, Interest Income to Total Fund Ratio, Loans Turnover Ratio, and Net Profit Margin Ratio.

Overall, the literature demonstrates that researchers have assessed banking performance using different methodologies, ratios, and analytical approaches, with findings often differing because of variations in sample, period, and technique. Limited attention has been given to comparing public and private sector banks during the pre-COVID-19 period; this research seeks to bridge that gap for the period 2015–16 to 2019–20.

3. Research Methodology

Research objective. The primary objective is to evaluate and compare the financial performance of selected public and private sector banks operating in India, and to identify whether significant differences exist between the two categories based on selected indicators.

Study period and data. The study covers five financial years from 2015–16 to 2019–20 (the pre-COVID-19 period) and is entirely based on secondary data collected from the published annual reports of the selected banks.

Variables. Six financial variables were selected: (1) Non-Interest Income to Total Fund Ratio, (2) Quick Ratio, (3) Return on Assets (ROA), (4) Return on Net Worth (RONW), (5) Total Assets Turnover Ratio, and (6) Total Debts to Owners' Fund Ratio. These collectively represent the liquidity, profitability, efficiency, and financial stability of the selected banks.

Sample design. A non-probability convenience sampling technique was adopted, covering eight public sector and eight private sector banks that constitute a substantial portion of the Indian banking industry.

Research Hypotheses

H0: There is no significant difference in the financial performance of the selected public sector and private sector banks.

H1: There is a significant difference in the financial performance of the selected public sector and private sector banks.

Statistical techniques. The data were analyzed using descriptive statistics (mean values of the selected ratios) and inferential statistics. One-Way Analysis of Variance (ANOVA: Single Factor) was used to determine whether statistically significant differences existed between the financial performance of the two groups, at the 5% level of significance.

Limitations. The accuracy of the findings depends on the reliability of the secondary data; the analysis is confined to a five-year period and to the Indian banking industry, and it includes only eight public and eight private sector banks compared across six financial variables.

4. Results and Discussion

4.1 Non-Interest Income to Total Fund Ratio

Table 1. ANOVA — Non-Interest Income / Total Fund Ratio (Summary)

Group	Count	Sum	Average	Variance
Private sector banks (avg. of 8)	5	9.346	1.869	0.023
Public sector banks (avg. of 8)	5	5.141	1.028	0.015

Table 2. ANOVA — Non-Interest Income / Total Fund Ratio (Single Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.768	1	1.768	91.996	1.16E-05	5.318
Within Groups	0.154	8	0.019			
Total	1.922	9				

Note: At the 5% level of significance.

The calculated F-value (91.996) is substantially greater than the critical F-value (5.318), and the p-value (1.16E-05) is below 0.05. The null hypothesis is therefore rejected, confirming a statistically significant difference in the Non-Interest Income to Total Fund Ratio between the selected public and private sector banks. Private banks generated a higher average ratio (1.869 vs. 1.028), indicating greater income from non-interest sources.

4.2 Quick Ratio

Table 3. ANOVA — Quick Ratio (Summary)

Group	Count	Sum	Average	Variance
Private sector banks (avg. of 8)	5	94.571	18.914	7.930
Public sector banks (avg. of 8)	5	132.219	26.444	1.581

Table 4. ANOVA — Quick Ratio (Single Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	141.733	1	141.733	29.803	0.000602	5.318
Within Groups	38.045	8	4.756			
Total	179.779	9				

Note: At the 5% level of significance.

The calculated F-statistic (29.803) exceeds the critical F-value (5.318), and the p-value (0.000602) is below 0.05. The null hypothesis is rejected: the selected banks differ significantly in their Quick Ratio, with public banks recording a higher average (26.444 vs. 18.914), reflecting stronger short-term liquidity.

4.3 Return on Assets (ROA)

Table 5. ANOVA — Return on Assets (Summary)

Group	Count	Sum	Average	Variance
Private sector banks (avg. of 8)	5	1072.886	214.577	309.127
Public sector banks (avg. of 8)	5	1068.533	213.707	1536.125

Table 6. ANOVA — Return on Assets (Single Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.896	1	1.896	0.002	0.964958	5.318
Within Groups	7381.010	8	922.626			
Total	7382.905	9				

Note: At the 5% level of significance.

The calculated F-value (0.002) is much lower than the critical F-value (5.318), and the p-value (0.964958) is far above 0.05. The null hypothesis cannot be rejected: no statistically significant difference exists in the Return on Assets of the selected public and private sector banks, indicating comparable efficiency in using total assets.

4.4 Return on Net Worth (RONW)

Table 7. ANOVA — Return on Net Worth (Summary)

Group	Count	Sum	Average	Variance
Private sector banks (avg. of 8)	5	18.015	3.603	41.670
Public sector banks (avg. of 8)	5	-26.041	-5.208	28.476

Table 8. ANOVA — Return on Net Worth (Single Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	194.095	1	194.095	5.534	0.046503	5.318
Within Groups	280.584	8	35.073			

Source of Variation	SS	df	MS	F	P-value	F crit
Total	474.680	9				

Note: At the 5% level of significance.

The calculated F-value (5.534) is marginally higher than the critical F-value (5.318), and the p-value (0.046503) is below 0.05. The null hypothesis is rejected: Return on Net Worth differs significantly between the two groups, with private banks earning a positive average return (3.603) against a negative average (−5.208) for public banks over the period.

4.5 Total Assets Turnover Ratio

Table 9. ANOVA — Total Assets Turnover Ratio (Summary)

Group	Count	Sum	Average	Variance
Private sector banks (avg. of 8)	5	0.448	0.090	0.000
Public sector banks (avg. of 8)	5	0.354	0.071	0.000

Table 10. ANOVA — Total Assets Turnover Ratio (Single Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.001	1	0.001	38.007	0.00027	5.318
Within Groups	0.000	8	0.000			
Total	0.001	9				

Note: At the 5% level of significance.

The calculated F-value (38.007) is greater than the critical F-value (5.318), and the p-value (0.00027) is below 0.05. The null hypothesis is rejected, confirming a significant difference in the Total Assets Turnover Ratio, with private banks showing marginally higher asset-utilisation efficiency (0.090 vs. 0.071).

4.6 Total Debts to Owners' Fund Ratio

Table 11. ANOVA — Total Debts to Owners' Fund Ratio (Summary)

Group	Count	Sum	Average	Variance
Private sector banks (avg. of 8)	5	42.441	8.488	0.218
Public sector banks (avg. of 8)	5	87.006	17.401	1.738

Table 12. ANOVA — Total Debts to Owners' Fund Ratio (Single Factor)

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	198.604	1	198.604	203.079	5.73E-07	5.318
Within Groups	7.824	8	0.978			
Total	206.428	9				

Note: At the 5% level of significance.

The calculated F-value (203.079) is substantially higher than the critical F-value (5.318), and the p-value (5.73E-07) is far below 0.05. The null hypothesis is rejected: a significant difference exists in the Total Debts to Owners' Fund Ratio, with public banks far more leveraged (17.401 vs. 8.488), indicating a different capital structure.

5. Findings and Conclusion

The analysis demonstrates that the selected public and private sector banks exhibit significant differences across most of the financial indicators considered. A statistically significant variation was observed in the Non-Interest Income to Total Fund Ratio, indicating differences in the ability to generate income from non-interest sources, and in the Quick Ratio, reflecting variations in liquidity management. In contrast, the analysis of Return on Assets revealed no statistically significant difference, suggesting that both groups utilised their total assets with comparable efficiency.

Significant differences were identified in Return on Net Worth (implying variations in shareholders' returns and profitability), in the Total Assets Turnover Ratio (highlighting differences in asset-utilisation efficiency), and in the Total Debts to Owners' Fund Ratio (indicating variations in financial leverage and capital structure). Overall, the financial performance of the selected public and private sector banks was significantly different across five of the six indicators examined, the only exception being Return on Assets, where both groups performed similarly. Although differences existed in liquidity, profitability, efficiency, and leverage measures, the overall financial performance of the two groups remained broadly comparable throughout the study period.

References

- Balasubramanin, S. K. (2007). Financial performance of private sector banks in India — An evaluation. *SSRN*. <http://ssrn.com>
- Chaudhary, K., & Sharma, M. (2011). Performance of Indian public sector banks and private sector banks: A comparative study. *International Journal of Innovation, Management and Technology*, 2(3), 249–256.
- Chavda, D., Mistry, D. S., & Deshpande, S. (2022). Analysis of performance of public and private sector banks in India. *Vidya — A Journal of Gujarat University*, 1(1), 38–43.
- Chien, T., & Danw, S. (2004). Performance measurement of Taiwan commercial banks. *International Journal of Productivity and Performance Management*, 53(5), 425–434.
- Goel, S., & Bajpai, A. (2013). An impact analysis of global recession on the Indian banking sector. *International Journal of Engineering and Management Sciences*, 4(1), 55–60.
- Kaur, R. (2012). Performance evaluation of Indian banking system: A comparative study of public sector and private sector banks. *South Asian Journal of Marketing and Management Research*, 2(1), 12–30.
- Kumar, P. A., & Malhotra, N. (2013). Performance appraisal of Indian public sector banks. *World Journal of Social Sciences*, 3(3), 71–88.
- Mistry, D. S. (2011). Determinants of profitability of Indian commercial banks. *RVIM Journal of Management Research*, 3(1), 18–31.
- Mistry, D. S. (2012). A comparative study on the profitability performance in the banking sector: Evidence from Indian public sector banks. *Finance India*, 26(2), 531–544.
- Mistry, D. S. (2014). An empirical analysis of the relationship between characteristics and corporate social disclosures in the Indian banking sector. *JIM QUEST — Journal of Management and Technology*, 10(2), 1–5.
- Mistry, D. S., & Savani, V. (2015). A comparative study of the profitability performance in the banking sector: Evidence from Indian private sector banks. In *XVI Annual Conference Proceedings* (pp. 346–360). Delhi School of Professional Studies and Research.
- Mohanraj, V., & Gomathi, S. (2013). Impact of global financial crisis on the financial performance of selected public sector banks in India. *International Journal of Research in Computer Application & Management*, 3(11), 57–61.



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- Pathak, B. (2003). A comparison of the financial performance of private sector banks. *Finance India*, 18(4), 1345–1356.
- Prabhakar, V., & Lakshmi Prabha, D. (2012). Performance of share price of Indian public sector banks and private sector banks — Comparative study. *Indian Journal of Applied Research*, 1(5), 157–158.
- Singla, H. K. (2008). Financial performance of banks in India. *Journal of Bank Management*, 7, 50–62.
- Spathis, K., & Doumpos, M. (2002). Assessing profitability factors in the Greek banking system: A multi-criteria methodology. *International Transactions in Operational Research*, 9(1), 517–524.
- Yadav, A. S. (2014). Banking sector in post-recession era: A study of comparative performance of different bank groups in India. *The International Journal of Business & Management*, 2(7), 165–171.