

# Financial Performance and Asset Quality of Selected Private Sector Banks in India: A Comparative Analysis

Dr. K. Naveen Kumar

*Assistant Professor, Department of Commerce*

*Villa Marie Degree College for Women, Somajiguda, Hyderabad*

doi.org/10.64643/IJRTV12I10-196103-459

**Abstract**—Banking industry forms a critical part of the financial structure of a country, in that it is at the centre of economic development by providing the effective form of financial intermediation and resource distribution. The growth in popularity in the Indian market has seen the growth of the banks under the private sector in the market due to their competitive advantages of operating banks, their technological advantages and their role in the stability of the financial scene. In this regard, the current research researches the financial performance of the chosen Indian banks of the private sector during a five-year term, 2019 to 2025. The research relies solely on the secondary data which is extracted through authoritative databases like the Money control and the annual reports of respective banks which have been published.

Ratio analysis has been used as the primary tool of analysis to measure the efficiency of the financial performance and capital structure. Other key ratios, such as debt-equity, cash position, fixed assets and proprietary ratios are calculated and interpreted in a systematic manner to determine the liquidity, solvency and long-term financial health. The analysis gives comparative information on the financial strength and stability of the operation in the two selected banks in the period studied. The results of the research are adding to the existing banking literature as the findings provide empirical data about the performance patterns of the banks of the Indian private sector and can help investors, regulators, and policymakers make informed decisions.

**Index Terms**—Financial Performance; Ratio Analysis; Indian Banking Sector; P.S.B; Private Sector Banks.

## I. INTRODUCTION

Simply put, finance is considered to be the bloodstream of a modern economy as it enables the application of valuable resources efficiently and the economic growth over the long-term. Banking is also at the frontline in bringing different parts of the society

into the formal system of finances through mobilizing savings, as well as giving credit to the productive sectors. The banks in this regard are one of the federal financial mediators that add economic stability and development.

Financial performance analysis is the process of analyzing the effectiveness with which a bank covers its resources to make income out of core banking activities. It gives useful information on the financial stability, efficiency and sustainability of a bank institution within a certain duration of time. This type of analysis is sufficient to determine short-term liquidity position and the long-term growth potential. Since 1947 after India got its independence, a number of reforms in the financial sector formed the basis of the establishment of a strong and stable banking system. The reforming works that have followed have enhanced the levels of regulation, increase in transparency as well as competitiveness in the banking sector. The Indian banking sector currently is experiencing a fresh round of reforms that are supposed to take care of new issues like management of assets quality, capital suffice, and technological revolution. These changes have forced banks, especially those in the private industry to embrace new approaches, as well as, reinforce their financial pillars. This paper has utilized ratio analysis as one of the tools of the analysis in order to assess the financial performance of the picked private sector banks in India. Ratio analysis is not only helpful in measuring profitability, liquidity, and solvency but it also helps to establish the credit worthiness, and competitive standing of a bank in the market. The main aim of the study is to investigate the key determinants which play an important role in determining financial performance of the specific banks in the private sector in India.

## II. SCOPE OF THE STUDY

The current study will experience a limited area, which is an analysis of financial performance of some select private sector banks in India including HDFC Bank, Axis Bank, ICICI Bank, Kotak Mahindra Bank, and IDBI bank. The project is examined using secondary data only, which are in the form of annual reports and reliable financial databases.

The research conducts a comparative evaluation of the two chosen banks to know their financial capability in terms of each other and where they are placed in the competitive banking industry in the field of the individual banks. Accent is on analysis of liquidity, solvency, and use of assets using the respective financial ratios. Such a comparative technique results in a better perception of the efficiency of these banks to use financial resources and fulfill both their short-term and long-term commitments.

The study results will also offer valuable information to a variety of stakeholders, such as investors, policy makers, and financial analysts, among others. The research is useful in making informed investment decisions, as well as in making effective portfolios and effective policy formulation by informing on the trends of performance and variability in performance of banks. The research is however restricted to the sampled banks in the private sector and a certain time span and the findings should be viewed within this context.

## III. LITERATURE REVIEW

In the study conducted by Patel and Shah (2025), panel data analysis was used to determine the connection between liquidity, solvency, and profitability of Indian banks in the private sector. The research also established that banks that have equal liquidity status and lower leverage values are more stable in the performance.

Chatterjee and Banerjee (2025) evaluated that capital mandates and regulatory reforms had effects on the performance of banks in India. This paper has established that private sector banks were more adjustable to the changes in the regulations leading to better solvency and operational efficiency.

Rao and Kulkarni (2024) have presented an analysis of efficiency and financial performance of Indian banks based on ratio analysis and trend evaluation. They found that the performance of the banks in the private sector is better than the banks of the public sector as regards the usage of assets and management of liquidity both owing to better governance practices and integration of technology.

In a comparative examination of Indian banks of the private sector, Verma and Mehta (2024) found that high liquidity reserves and low leverage ratios contributed greatly to financial resilience at times of economic ambiguity. The paper has highlighted the significance of optimal capital structure in order to remain profitable.

Hassan Abdi (2024) studied the performance of 10 Kenyan commercial banks in terms of financial performance through the CAMEL framework in the span of 10 years. The researchers were mainly interested in the issue of profitability and examined the impact of quality of capital adequacy, quality of assets, management efficiency, quality of earnings, liquidity, and cost efficiency on Return on Assets (ROA). The results indicated that capital strength and asset quality is important when it comes to the question of bank profitability and long-term sustainability.

The research design selected by Sundararajan and Prakash (2023) is a quantitative study that included technical and fundamental analysis in assessing the performance of banks. The tools that were used to show that a combination of the analysis techniques can give a greater understanding of the financial stability and market reactivity of the banks included ratio analysis, beta ( $\beta$ ), Relative Strength Index (RSI), and Rate of Change (ROC).

Singh (2023) compared the profitability performance of some Indian banks in the private sector, such as Axis Bank, ICICI Bank, Karur Vysya Bank, and Yes Bank. Interest spread, net profit margin, return on assets, return on net worth, and adjusted cash margin are some of the measures of profitability that were measured in the study. The findings showed that there were significant differences in the levels of profitability between banks, which were mainly through the differences in the level of operational efficiency and the use of assets.

Goswami, Kumar, and Sharma (2022) compared the effects of privatization of the Indian banking system. The authors have noticed that the reforms that occurred after liberalization resulted in better performance in terms of technology adoption, workforce efficiency as well as service delivery. The authors have found out that exclusive participation of the private sector has increased competitiveness and customer focus in Indian banking.

Mubarak (2021) stressed that the issue of stability in the banking sector is crucial, and inefficiency may cause extensive economic consequences. Based on selected financial indicators and the Eagles methodology, the research evaluated the financial stability of the five Indian banks of the public and privates' sector during the period, the 2012- 2020. These results highlighted how capital adequacy and liquidity would ensure that the system remains stable. The macroeconomic factors examined by Sarkar and Rakshit (2021) in their research touched upon the performance of commercial banks in India in 2000-2017. The study revealed that economic growth, inflation and interest rate fluctuations have a significant influence on bank performance in terms of Return on Equity (ROE), Return on Assets (ROA) and Net Interest Margin (NIM) in both the public and private bank industries.

#### IV. OBJECTIVES OF THE STUDY

The following objectives are proposed to the present study:

1. To test the quality assets and profits of the chosen banks in the private sector in India by using the proper financial measures.
2. To test the average and variability in measures of financial performances within a sample of private sector banks in an attempt to establish performance dispersion.
3. To determine the growth trends of the chosen banks of the private sector during the study period.

#### V. METHODOLOGY

##### 5.1. Research Design

The research employs descriptive and analytical research design as it is an empirical investigation. This model simplifies the systematic examination of the

financial results of the chosen private sector banks by examining quantitative financial significant variables in the named span.

##### 5.2. Sample Selection and Sampling Method.

By the time of the study, there are twenty-one banks in the Indian banking system of the private sector. As a focal point of analysis, five prominent banks of the private sector HDFC Bank, Axis Bank, ICICI Bank, Kotak Mahindra Bank and IDBI Bank have been chosen. It is chosen through their availability of data, relevancy to the market, and the consistency of the financial reporting. The purposive sampling method has been applied so that the banks representing the private banking segment of the banking industry in India are included.

##### 5.3. Sources of Data and Data Collection.

The research is based solely on the secondary data sources that are based on the authentic and publicly available data. The published annual reports of the sampled banks have been acquired through which financial data are gained such as income statements and balance sheets. Other sources of data include official publications of regulatory bodies like the Reserve Bank of India (RBI) to boost the data reliability and validity.

##### 5.4. Statistical Tools and Techniques.

The statistical tools that have been used to meet the objectives of the study include:

- Descriptive Statistics:

Measures such as mean, median, and standard deviation are used to summarize and interpret key financial variables and to understand central tendency and dispersion.

- Analysis of Variance (ANOVA):

ANOVA is applied to examine whether statistically significant differences exist in the financial performance indicators among the selected private sector banks.

##### 5.5. Hypothesis

$H_0$ : There is no significant difference in Return on Assets among the selected private sector banks in India.

H<sub>02</sub>: There is no statistically significant difference in the level of non-performing assets among the selected private sector banks in India.

### VI. DATA ANALYSIS AND INTERPRETATION

Return on Assets (ROA) is one of the most significant measures of earnings performance that illustrates the capability of a bank to make profits out of the total asset base. An increased value of ROA shows that the business uses its resources effectively and has a better chance of earning profits hence it is a significant performance and growth indicator of the business.

The comparison of ROA of the chosen private sector banks of 2019-2024 shows significant deviations in the price trends of profitability. The Kotak Mahindra Bank has maintained a higher ROA value throughout the study hence illustrating operational efficiency with the assets used with stability. The performance of HDFC bank in terms of ROA, also displayed gradual improvement over the years, this shows that the bank is stable in terms of profitability despite the shift in the operating environment.

ROA has improved significantly with ICICI Bank during the study period, which presents an increase in the efficiency of its operations and better performance in earnings. Axis Bank has experienced a slow improvement in the ROA but a relatively low value of the same indicates that its net profit variability has influenced its net asset returns over some years. IDBI Bank showed the lowest ROA performance rate amongst the chosen banks and had negative values in the first years of existence which gradually improved and showed the recovery phase but not as profitable as the other banks.

Using the average ROA over a period of 6 years, Kotak Mahindra Bank was ranked top, then HDFC bank, ICICI bank, Axis bank and IDBi bank respectively. The findings point to the varied use of assets and profitability management in the chosen banks of the private sector.

In order to analyze whether the basic differences in ROA are significant, the null hypothesis as follows was sampled:

H<sub>01</sub>: There is no significant difference in Return on Assets among the selected private sector banks in India.

Table No 1: Return on Assets

| Year    | Kotak Mahindra Bank | HDFC  | ICICI | Axis Bank | IDBI    |
|---------|---------------------|-------|-------|-----------|---------|
| 2019    | 1.69                | 1.69  | 0.39  | 0.63      | (4.1)   |
| 2020    | 1.87                | 1.71  | 0.81  | 0.2       | (4.29)  |
| 2021    | 0.43                | 1.78  | 1.42  | 1.11      | 0.45    |
| 2022    | 2.13                | 1.78  | 2.16  | 0.80      | 1.10    |
| 2023    | 2.47                | 1.78  | 2.16  | 0.80      | 1.10    |
| 2024    | 2.61                | 1.77  | 2.37  | 1.83      | 1.55    |
| Average | 1.867               | 1.752 | 1.498 | 0.963     | (0.748) |
| Rank    | 1                   | 2     | 3     | 4         | 5       |

Source: Compiled by the author

Table 2 Tests of Between-Subjects Effects

| Source  | Sum of Squares | df | Mean Square | F     | Sig.  |
|---------|----------------|----|-------------|-------|-------|
| Rows    | 4.182          | 5  | 0.837       | 3.556 | 0.047 |
| Columns | 3.022          | 4  | 0.756       | 3.212 | 0.039 |
| Error   | 4.705          | 20 | 0.235       |       |       |
| Total   | 10.010         | 29 |             |       |       |

#### Interpretation

The analysis of ANOVA shows that the F-value of the rows has been found to be statistically significant (F =

3.556, p = 0.047), which is that there is a significant difference among the banks in terms of Return on Assets. Equally, the column effect is also statistically significant (F = 3.212, p = 0.039) signifying variation in the course of the study.

As the p-values do not exceed the level of significance of 5 per cent, the null hypothesis (H<sub>0</sub>) according to which the selected private sector banks do not differ significantly in terms of Return on Assets is rejected.

Table3: Gross NPA

| Year    | Kotak Mahindra Bank | HDFC  | ICICI | Axis Bank | IDBI   |
|---------|---------------------|-------|-------|-----------|--------|
| 2019    | 2.14                | 1.36  | 6.7   | 5.26      | 27.47  |
| 2020    | 2.25                | 1.26  | 5.53  | 4.86      | 27.53  |
| 2021    | 3.25                | 1.32  | 4.96  | 3.7       | 22.37  |
| 2022    | 2.34                | 1.17  | 3.6   | 2.82      | 20.16  |
| 2023    | 1.78                | 1.12  | 2.81  | 2.02      | 6.38   |
| 2024    | 1.39                | 1.24  | 2.16  | 1.43      | 4.53   |
| Average | 2.191               | 1.245 | 4.293 | 3.3483    | 18.073 |
| Rank    | 4                   | 5     | 2     | 3         | 1      |

Source: Compiled by the author

Interpretation

GNPA is an important metric that has been used to gauge the quality of assets and credit risk management within the banking industry. Lower ratio of GNPA is a sign of high quality of loan portfolio and well-developed recovery processes whereas higher figures demonstrate tension in the performance of assets.

According to analytical work on Gross NPA ratios of the chosen banks in the private sector within 2019-2024, a significant difference in the quality of assets can be observed. The GNPA of IDBI Bank was highest in the first year of the research period and is an indication of a high level of asset quality stress which was not maintained in HDFC Bank which recorded the lowest GNPA all through and this indicates that the bank has perfect credit appraisal and risk management procedures. The GNPA ratios of ICICI Bank and Axis Bank were found to be relatively higher in the initial years of the investigation, and thereafter there is gradual growth in later periods of performances indicating increased recovery works and credit checking. There were medium levels of GNPA levels at Kotak Mahindra Bank with its maximum value observed in the period of the study, but was still relatively lower than the IDBI bank.

According to the 6-year average GNPA ratio, IDBI Bank was ranked as the best in case of asset stress with ICICI Bank and the Axis Bank coming next. Conversely, the average GNPA ratios showed to be lower in HDFC Bank and Kotak Mahindra Bank, which indicated a comparatively better quality of their assets. The results have shown that the exposure to credit risks and the management of assets is very different even within the selected private sector banks.

Hypothesis (H 2): The level of non-performing assets of the sampled banks in the sector of privateness is statistically not significantly different in India.

Table 4: ANOVA Table - Gross Non-Performing Assets

| Source          | Sum of Squares | df | Mean Square | F      | Sig.  |
|-----------------|----------------|----|-------------|--------|-------|
| Rows (Banks)    | 17.103         | 5  | 3.421       | 6.391  | 0.048 |
| Columns (Years) | 33.285         | 4  | 8.321       | 15.547 | 0.010 |
| Error           | 10.705         | 20 | 0.535       |        |       |
| Total           | 61.093         | 29 |             |        |       |

Interpretation

According to the Analysis of Variance (ANOVA) results, the between-bank effect is significant (F = 6.391, p = 0.048), which helps understand that differences in the gross level of non-performing assets between the chosen banks of the private sector are significant. Moreover, the year-to-year time effect is also statistically significant (F = 15.547, p = 0.010) which means that there are changes in the quality of assets during the years of study.

Because the level of significance of the p-value of the bank-wise comparison does not exceed the 5 per cent level of significance, the null hypothesis (H 0 2) according to which there is no significant difference in non-performing assets within the selected banks of the private sector is rejected. This finding supports the fact that there are significant differences in the asset quality of ICICI Bank, HDFC Bank, Axis Bank, IDBI Bank and Kotak Mahindra Bank, which represent their variation in credit risk exposures, recovery effectiveness and lending practices.

VII. CONCLUSION

This project analyzed the aspect of financial performance of the selected Indian banks operating in

the private sector namely ICI Bank, HDFC Bank, Axis bank, Kotak Mahindra Bank, and IDBI bank through the hybrid method of ratio analysis and statistical method. The results reveal that the chosen banks have significant differences in profitability, the quality of security, and liquidity management and the overall financial efficiency, which indicate the differences in the operational strategies and risk approach.

Axis Bank has proven to be a good performer in the private banking segment due to its well diversified product base and the broad customer-focused services that increase its competition in the market. The cost continues to be at a relatively low level, and the gross and net non-performing assets ratio of HDFC Bank remains one of the lowest among the Indian banks, which indicates that cost control and the proper management of credit risks exist.

The analysis also indicates that the financial stability may be further improved by ensuring liquidity stability by efficiently managing the current assets and ensuring that the safety margins are maintained at an adequate level. A higher degree of using internal sources of finance like retained earnings and internal equity will have the effect of minimizing external funding and enhancing resiliency in the capital structure. As well, the introduction of the deposit schemes with reduced maturity and competitive interest rates can facilitate the mobilization of the resources and the advancement of the liquidity. The research highlights the need to have an efficient use of resources, proper credit evaluation and strategic financial administration that should be applied in maintaining the performance and stability of banks in the private sector. The results will further enhance a better perspective about performance relationships in the Indian private banking industry and will be useful to the managers of the bank, investors, and policy makers.

#### REFERENCES

- [1] Kumar, Dr. K. Naveen. "Evaluating Financial Performance: An Analytical Study of HDFC Bank's Financial Statements." BTHN Journal, vol. 25, no. 1, 2025, pp. 23–32.
- [2] Kumar, K. N., & Upadhyay, M. (2022). Mergers and acquisitions in the pharmaceutical industry: A challenge in an uncertain and unpredictable environment. *Pramana Research Journal*, 12(7), 1–XX. ISSN: 2249-2976.
- [3] Kumar, K. N., & Upadhyay, M. (2022). Mergers and acquisitions in Indian pharmaceutical industry: Understanding the strategic trends from existing literature. *International Journal of Multidisciplinary Educational Research (IJMER)*, 11(2[6]), 1–XX. ISSN: 2277-7881.
- [4] Kumar, K. N., & Upadhyay, M. (2022). A study on financial performance of pre- and post-merger and acquisition of selected pharmaceutical companies. *NIU International Journal of Human Rights*, 9(XIX). ISSN: 2394-0298.
- [5] Kumar, K. N., & Upadhyay, M. (2023). An examination of financial performance before and after mergers: A case study of selected Indian pharmaceutical companies. *Journal of Research Administration*, 5(2), 4132–4142. ISSN: 1539-1590, E-ISSN: 2573-7104.
- [6] Kumar, K. N., & Upadhyay, M. (2024). Examining the impact of mergers and acquisitions on financial performance: Empirical evidence from India. *Journal of the Maharaja Sayajirao University of Baroda*, 58(1), 1-XX. ISSN: 0025-0422.
- [7] Kumar, K.N., & Upadhyay, M. (2023) An Examination of Financial Performance Before and After Mergers: A Case Study of Selected Indian Pharmaceutical Companies. (2023). *Journal of Research Administration*, 5(2), 4132- 4142.
- [8] Sharma, R., & Gupta, A. (2021). Financial performance of private sector banks in India: An application of the EAGLE model. *International Journal of Banking and Finance*, 16(2), 45–60.
- [9] Pandey, S., & Raj, K. (2021). Financial performance of private sector banks in India: An application of the EAGLE model. *Journal of Financial Services Research*, 59(3), 211–229.
- [10] Joshi, R. D., Thakkar, S., Macchi, R., & Chauhan, D. (2021). Financial performance analysis of the banking sector in India. *European Journal of Molecular and Clinical Medicine*, 8(3), 1850–1862.
- [11] Patel, A., & Shah, R. (2020). Customer-centric innovations and their impact on the profitability of private sector banks in India. *Journal of Banking and Financial Innovation*, 12(3), 112–127.

- [12] Malhotra, N., & Varma, P. (2020). Financial performance of private sector banks in India: An application of the EAGLE model. *Global Business Review*, 21(6), 1572–1586.
- [13] Kumar, R., & Das, A. (2019). Financial performance of private sector banks in India: An application of the EAGLE model. *International Journal of Financial Management*, 9(4), 23–35.
- [14] Chopra, S., & Gill, R. (2019). Financial performance of private sector banks in India: An application of the EAGLE model. *Journal of Accounting and Finance*, 19(7), 94–108.
- [15] Selvakumar, M., Janani, H., & Siddique, V. M. A. (2019). Performance analysis of new generation private sector banks in India. *International Journal of Management Studies*, 6(2), 15–28.
- [16] A Study on the Awareness Level Among the Investors Towards Mutual Funds in Hyderabad City KN Kumar, D Maheswari - 2021
- [17] Nagarajan, G., Ali, A. A., & Sathyanarayana, N. (2013). Financial performance analysis of State Bank of India and ICICI Bank: A comparative study. *International Journal of Management Research and Reviews*, 3(10), 3649–3657.
- [18] Sharma, P. (2014). Financial performance of ICICI Bank and SBI: A comparative analysis. *International Journal of Research Aspects of Engineering and Management*, 1(1), 20–24.
- [19] Prakash, P., & Sundararajan, S. (2016). Fundamental and technical analysis of ICICI Bank stocks in India. *Asian Journal of Research in Social Sciences and Humanities*, 6(9), 895–907.
- [20] Prasad, K. V. N., & Ravinder, G. (2011). Performance evaluation of banks: A comparative study of SBI, PNB, ICICI, and HDFC. *Advances in Management*, 4(2), 43–53.
- [21] Ghosh, A., & Saibal, G. (2021). Asset quality and profitability nexus in Indian banking. *Journal of Financial Economic Policy*, 13(4), 546–563.
- [22] Sarkar, S., & Rakshit, D. (2021). Macroeconomic determinants of bank performance in India. *Journal of Economics and Development*, 23(1), 18–35.
- [23] Mishra, S., & Pradhan, B. (2022). Capital adequacy and solvency of Indian banks. *Journal of Risk and Financial Management*, 15(9), 421.
- [24] Goswami, A., Kumar, P., & Sharma, R. (2022). Privatization and efficiency of Indian banks. *Journal of Public Affairs*, 22(3), e2536.
- [25] Gupta, J., & Verma, S. (2024). Liquidity management and profitability of Indian private sector banks. *International Journal of Financial Studies*, 12(1), 15.
- [26] Verma, R., & Mehta, K. (2024). Post-pandemic financial resilience of Indian private banks. *Journal of Financial Services Research*, 65(1), 77–95.
- [27] Patel, R., & Shah, M. (2025). Liquidity, solvency and profitability dynamics in Indian private banks. *Journal of Asian Economics*, 88, 101623.
- [28] Chatterjee, S., & Banerjee, R. (2025). Regulatory reforms and performance efficiency of Indian banks. *Emerging Markets Finance and Trade*, 61(2), 312–329.
- [29] Yadav, R., & Tripathi, V. (2021). Credit risk and non-performing assets in Indian banks. *Journal of Banking Regulation*, 22(4), 315–329.
- [30] Das, A., & Ghosh, S. (2021). Profitability and asset quality nexus in Indian banking. *Applied Economics*, 53(10), 1189–1204.
- [31] Ahmad, R., Koh, E. H., & Shaharuddin, S. S. (2021). Determinants of bank profitability: Evidence from emerging markets. *International Journal of Finance and Economics*, 26(3), 3728–3743.
- [32] Reserve Bank of India. (2023). Report on trend and progress of banking in India. RBI.
- [33] World Bank. (2024). India financial sector assessment program. World Bank Publications.