

EVALUATING FINANCIAL PERFORMANCE THROUGH RATIO ANALYSIS: A STUDY OF HDFC BANK

***Dr. Venkataiah Pasunoori**

Department of Commerce, Badruka College of Commerce & Arts, Hyderabad, India.

Article Received: 11 June 2026, Article Revised: 01 July 2026, Published on: 21 July 2026

***Corresponding Author: Dr. Venkataiah Pasunoori**

Department of Commerce, Badruka College of Commerce & Arts, Hyderabad, India.

Doi: <https://doi-doi.org/101555/ijarp.1412>

ABSTRACT

The banking sector plays a crucial role in promoting economic growth by mobilizing savings, facilitating credit, and supporting investment activities. In an increasingly competitive financial environment, evaluating a bank's financial performance has become essential for investors, regulators, management, and other stakeholders. Ratio analysis is one of the most widely used tools for assessing the operational efficiency, profitability, liquidity, solvency, and overall financial health of banking institutions. This study evaluates the financial performance of HDFC Bank over the five-year period from FY2020–21 to FY2024–25 through comprehensive ratio analysis.

The study is based on secondary data collected from the official annual reports, financial statements, investor presentations, and publications of HDFC Bank, along with reports from the Reserve Bank of India (RBI). Various financial ratios relating to profitability, liquidity, asset quality, efficiency, and solvency are analyzed to understand the bank's financial position. Special attention is given to the impact of the merger between HDFC Bank and HDFC Ltd. in July 2023, which significantly influenced the bank's balance sheet, loan portfolio, and capital structure. Official annual reports and financial disclosures provide the primary data for this analysis.

The analysis indicates that HDFC Bank maintained strong profitability, stable capital adequacy, sound asset quality, and consistent growth in deposits and advances throughout the study period. Although the merger temporarily affected certain financial ratios, the bank demonstrated resilience through effective risk management, improved operational efficiency, and sustained profitability. The findings suggest that HDFC Bank remains one of India's strongest private sector banks with significant long-term growth potential.

KEYWORDS: Financial Performance, Ratio Analysis, Profitability, Liquidity, HDFC Bank, Banking Sector, Financial Ratios, Asset Quality.

INTRODUCTION

The Indian banking industry has witnessed significant transformation over the past two decades due to financial liberalization, technological advancements, digital banking, regulatory reforms, and increased competition. Private sector banks have played a vital role in promoting financial inclusion and economic growth through innovative products and technology-driven services. Among them, HDFC Bank has consistently demonstrated strong financial performance and operational excellence. Established in 1994, HDFC Bank has become one of India's leading private sector banks, offering a wide range of retail, wholesale, treasury, and digital banking services. The merger with HDFC Ltd. in July 2023 significantly expanded its scale of operations and strengthened its market position, while also influencing certain financial indicators. Financial performance evaluation helps assess a bank's profitability, liquidity, solvency, and operational efficiency. Ratio analysis is a widely used tool that enables stakeholders to evaluate financial health, identify strengths and weaknesses, and support informed decision-making. For banks, key indicators include profitability, capital adequacy, asset quality, credit growth, and non-performing assets. The study covers the period from FY2020–21 to FY2024–25, encompassing the post-pandemic recovery and the HDFC Ltd. merger. It evaluates HDFC Bank's financial performance through ratio and trend analysis to assess its financial strength, operational efficiency, and long-term sustainability.

Review of Literature

Financial performance analysis has long been recognized as a critical tool for evaluating banking institutions. Researchers have extensively employed financial ratios to measure profitability, liquidity, efficiency, solvency, and risk management. Edward I. Altman (1968) demonstrated that financial ratios are powerful indicators of organizational financial health and predictive performance. His work established ratio analysis as an important decision-making tool for investors and financial analysts. David Cole (2004) emphasized that profitability, liquidity, and capital adequacy remain the three fundamental pillars of commercial bank performance. According to his research, efficient asset utilization directly contributes to shareholder value creation. Joseph F. Sinkey Jr. (2007) highlighted that ratio analysis assists regulators and bank management in identifying operational inefficiencies and maintaining financial stability. Recent studies focusing on Indian banking indicate that

private sector banks have generally outperformed many public sector banks in terms of profitability, operational efficiency, and asset quality. Researchers have attributed this performance to superior technology adoption, effective risk management, and diversified revenue streams. Following the merger of HDFC Bank and HDFC Ltd., recent analyses have examined its implications for liquidity, loan growth, deposit mobilization, and profitability. While certain ratios such as the loan-to-deposit ratio and net interest margin experienced temporary pressure, analysts expect these metrics to improve as integration progresses and funding structures normalize. Despite numerous studies on banking performance, relatively few provide a comprehensive five-year ratio analysis covering the pre-merger and post-merger periods of HDFC Bank. This study seeks to bridge that gap by integrating profitability, liquidity, solvency, efficiency, and asset quality measures into a single analytical framework.

Research Gap

Existing literature indicates that financial performance analysis of banks has been widely studied using financial ratios to assess profitability, liquidity, solvency, operational efficiency, and asset quality. However, several research gaps remain. Most previous studies have focused on comparative analyses of public and private sector banks rather than providing a comprehensive evaluation of HDFC Bank over an extended period. In addition, the merger of HDFC Bank with HDFC Ltd. in July 2023 significantly changed the bank's financial structure, yet limited research has examined its impact on key financial indicators such as profitability, capital adequacy, liquidity, and asset quality. Furthermore, only a few studies integrate all major financial ratios with trend analysis over a continuous five-year period. Therefore, the present study addresses these gaps by conducting a comprehensive ratio-based analysis of HDFC Bank's financial performance for the period FY2020–21 to FY2024–25 using official financial statements and annual reports.

Need for the Study

The banking industry is experiencing rapid changes due to digital transformation, financial innovation, and increasing competition, making financial performance evaluation essential. Ratio analysis provides a reliable framework for assessing a bank's profitability, liquidity, solvency, and operational efficiency. HDFC Bank's merger with HDFC Ltd. in 2023 has significantly influenced its financial structure, creating the need for a comprehensive post-merger assessment. The findings of this study will provide valuable insights for investors,

researchers, policymakers, and bank management in evaluating the bank's financial health and supporting strategic decision-making.

Objectives of the Study

1. To analyse the profitability performance of HDFC Bank.
2. To evaluate the liquidity position of the bank.
3. To examine operational efficiency using financial ratios.
4. To assess the bank's solvency and capital adequacy.
5. To evaluate asset quality through Gross and Net Non-Performing Asset ratios.
6. To analyse the impact of the HDFC Ltd. merger on the bank's financial performance.
7. To provide suggestions for improving long-term financial sustainability.

Research Hypotheses: The study tests the following hypotheses:

Null Hypothesis (H_0): There is no significant improvement in the financial performance of HDFC Bank during FY2020–21 to FY2024–25.

Alternative Hypothesis (H_1): There is a significant improvement in the financial performance of HDFC Bank during FY2020–21 to FY2024–25.

RESEARCH METHODOLOGY

Research Design: The study adopts a **descriptive and analytical research design**, as it aims to evaluate the financial performance of HDFC Bank using historical financial data.

Nature of Data: The study is based entirely on **secondary data**.

Sources of Data, Period of Study and Tools Used for Analysis

The present study is based on secondary data collected from HDFC Bank Annual Reports for the financial years 2020–21 to 2024–25, publications of the Reserve Bank of India (RBI), investor presentations, NSE and BSE disclosures, books, peer-reviewed journals, research articles, and other government and financial databases. The official annual reports of HDFC Bank constitute the primary source of financial data used in the study. The analysis covers a period of five financial years, from FY2020–21 to FY2024–25. To evaluate the bank's financial performance, the study employs various analytical techniques, including comparative statement analysis, trend analysis, ratio analysis, percentage analysis, and graphical analysis. These tools facilitate a comprehensive assessment of the bank's profitability, liquidity, solvency, operational efficiency, and overall financial performance over the study period.

Limitations of the Study

The present study has certain limitations. It is based entirely on secondary data obtained from published financial statements and other official sources, and therefore its findings depend on the accuracy and reliability of these data. The analysis is limited to a five-year period (FY2020–21 to FY2024–25) and focuses exclusively on HDFC Bank without making comparisons with other public or private sector banks. Furthermore, while the study acknowledges the influence of macroeconomic factors such as inflation, monetary policy, and global economic conditions on banking performance, these variables are discussed qualitatively and are not incorporated into the statistical analysis.

Financial Performance Analysis of HDFC Bank (FY2020–21 to FY2024–25)

Financial performance analysis provides a systematic assessment of a bank's operational efficiency, profitability, liquidity, solvency, and asset quality. This study evaluates HDFC Bank's performance over five financial years using ratio analysis and trend interpretation. The analysis highlights the bank's financial resilience during the COVID-19 recovery period, sustained business expansion, and the transformational merger with HDFC Ltd. in July 2023. The selected ratios represent the key dimensions of banking performance and provide meaningful insights into management effectiveness, financial stability, and shareholder value creation.

Profitability Analysis: Profitability reflects the ability of a bank to generate earnings from its assets, equity, and core banking operations. A consistently profitable bank is better positioned to expand its business, strengthen capital, and create value for shareholders.

Table 1: Profitability Indicators of HDFC Bank.

Financial Year	ROA (%)	ROE (%)	NIM (%)	EPS (₹)
FY2020–21	1.93	16.1	4.1	56.5
FY2021–22	1.98	17.3	4	67.4
FY2022–23	1.9	16.8	4.1	71.9
FY2023–24*	1.7	14.9	3.4	85.3
FY2024–25	1.8	14.6	3.48	88.3

*FY2023–24 reflects the impact of the merger and is therefore not fully comparable with earlier years.

Interpretation: The profitability analysis indicates that HDFC Bank maintained strong earnings throughout the study period. ROA remained close to 2% before the merger and moderated slightly thereafter due to the enlarged asset base. ROE also declined marginally

following the merger because of increased equity and integration costs but remained at a healthy level. Although Net Interest Margin (NIM) narrowed during FY2023–24 and FY2024–25 due to higher funding costs, the bank continued to generate strong interest income. The consistent growth in Earnings per Share (EPS) reflects sustained profitability and continued value creation for shareholders.

Liquidity Analysis: Liquidity represents the bank's ability to meet withdrawal demands and fund future lending activities without financial stress.

Table 2: Liquidity Indicators.

Year	Deposits Growth	Advances Growth	Credit–Deposit Ratio (%)
FY2020–21	Moderate	Moderate	87.5
FY2021–22	Strong	Strong	88.9
FY2022–23	Strong	Strong	89.7
FY2023–24	Very High	Exceptional	104
FY2024–25	Healthy	Moderate	96.5

Interpretation: HDFC Bank has historically maintained a healthy liquidity position. However, the merger with HDFC Ltd. significantly increased the loan portfolio while deposits took longer to catch up, temporarily increasing the credit–deposit ratio above historical levels. During FY2024–25, deposit mobilisation strengthened considerably, reducing the ratio to approximately 96.5%, reflecting improved liquidity management and balance-sheet optimisation. Management has indicated a medium-term objective of returning the ratio to its pre-merger range of 85–90%.

Solvency Analysis: Capital adequacy indicates the bank's capacity to absorb unexpected losses while continuing normal business operations.

Table 3: Capital Adequacy.

Year	Capital Adequacy Ratio (%)
FY2020–21	18.8
FY2021–22	18.9
FY2022–23	18.3
FY2023–24	18.8
FY2024–25	19.6

Interpretation: HDFC Bank maintained capital levels well above the Reserve Bank of India's minimum regulatory requirement throughout the study period. The improvement to 19.6% in FY2024–25 demonstrates strong capital planning and provides sufficient capacity to support future business expansion while maintaining resilience against potential economic shocks.

Asset Quality Analysis: Asset quality is one of the most important indicators of banking performance because it directly influences profitability and financial stability.

Table 4: Non-Performing Assets.

Year	Gross NPA (%)	Net NPA (%)
FY2020–21	1.32	0.4
FY2021–22	1.17	0.32
FY2022–23	1.12	0.27
FY2023–24	1.24	0.33
FY2024–25	1.33	0.43

Interpretation: HDFC Bank consistently maintained one of the lowest NPA ratios among large Indian commercial banks. The gradual improvement observed between FY2020–21 and FY2022–23 reflected prudent credit appraisal, effective recovery mechanisms, and disciplined risk management. The slight increase in FY2024–25 is attributable to portfolio integration following the merger and stress in certain lending segments. Even so, Gross NPA remained at a relatively low 1.33%, indicating sound asset quality compared with many peers.

Operational Efficiency: Operational efficiency measures how effectively management converts income into profits while controlling operating expenses.

Table 5: Cost-to-Income Ratio.

Year	Cost-to-Income Ratio (%)
FY2020–21	39.4
FY2021–22	39.1
FY2022–23	40.4
FY2023–24	40.2
FY2024–25	40.5

Interpretation: The cost-to-income ratio remained stable at approximately 40% during the study period, demonstrating HDFC Bank's ability to control operating expenses while continuing to invest in branch expansion, technology, and digital infrastructure. The slight increase after the merger reflects integration costs and investments in scaling operations, rather than a deterioration in operational discipline.

Trend Analysis

The five-year trend analysis indicates that HDFC Bank recorded steady growth in deposits and advances, with deposits reaching approximately ₹27.15 lakh crore in FY2024–25. Profit after tax continued to increase despite merger-related integration expenses, reflecting the bank's resilient earnings performance. Asset quality remained strong, with Gross NPA consistently maintained between 1% and 1.5%, while capital adequacy improved throughout the study period, strengthening the bank's financial stability. Although the Net Interest Margin moderated following the merger due to higher funding costs and balance-sheet realignment, it remained competitive compared to other leading private sector banks in India.

Major Findings

Profitability: HDFC Bank maintained strong profitability throughout the study period. Although ROA and ROE declined marginally after the merger with HDFC Ltd., the bank continued to generate healthy profits and consistent growth in EPS.

Liquidity Position: The bank maintained a sound liquidity position. While the Credit–Deposit Ratio increased temporarily following the merger, it improved with stronger deposit mobilisation in FY2024–25.

Capital Adequacy: The Capital Adequacy Ratio remained well above RBI's prescribed norms, indicating strong financial stability and adequate capital to support future growth.

Asset Quality: HDFC Bank maintained excellent asset quality with low Gross and Net NPA ratios, reflecting effective credit risk management and recovery practices.

Operational Efficiency: The Cost-to-Income Ratio remained stable during the study period, demonstrating efficient cost control despite merger integration and continued investment in digital banking.

Overall Financial Performance: Overall, HDFC Bank exhibited strong financial performance, supported by sustained profitability, sound capital adequacy, efficient operations, and high asset quality, reinforcing its position as one of India's leading private sector banks.

Suggestions

Based on the findings of the study, the following suggestions are recommended to further strengthen the financial performance of HDFC Bank:

Strengthen Deposit Mobilisation: Increase low-cost CASA deposits through improved digital banking services and customer engagement initiatives.

Improve Net Interest Margin: Optimize the loan portfolio and funding mix to enhance Net Interest Margin and improve asset–liability management.

Enhance Digital Banking Services: Invest in digital technologies, artificial intelligence, cybersecurity, and data analytics to improve operational efficiency and customer experience.

Maintain High Asset Quality: Strengthen credit appraisal, monitoring, and recovery mechanisms to sustain low NPA levels.

Diversify Revenue Sources: Expand fee-based services, wealth management, insurance, and treasury operations to improve profitability.

Promote Sustainable Finance: Increase focus on green financing and ESG initiatives to support sustainable business growth.

Strengthen Risk Management: Continuously monitor credit, market, operational, and cybersecurity risks to ensure long-term financial stability.

CONCLUSION

The study evaluated the financial performance of HDFC Bank during FY2020–21 to FY2024–25 using ratio analysis to assess profitability, liquidity, solvency, operational efficiency, and asset quality. The findings reveal that HDFC Bank maintained a strong financial position despite economic challenges and the merger with HDFC Ltd. Although certain ratios, such as the Net Interest Margin and Credit–Deposit Ratio, experienced temporary pressure following the merger, the bank continued to demonstrate sound profitability, strong capital adequacy, efficient operations, and superior asset quality. Overall, the study concludes that HDFC Bank remains one of India's leading private sector banks with a strong foundation for sustainable growth and long-term value creation.

REFERENCES

1. Altman, E. I. (1968). *Financial ratios, discriminant analysis and the prediction of corporate bankruptcy*. *The Journal of Finance*, 23(4), 589–609.
2. Brealey, R. A., Myers, S. C., & Allen, F. (2020). *Principles of Corporate Finance* (13th ed.). McGraw-Hill Education.

3. Gupta, S. P. (2021). *Statistical Methods*. Sultan Chand & Sons.
4. HDFC Bank Limited. (2021). *Annual Report 2020–21*. <https://www.hdfcbank.com>
5. HDFC Bank Limited. (2022). *Annual Report 2021–22*. <https://www.hdfcbank.com>
6. HDFC Bank Limited. (2023). *Annual Report 2022–23*. <https://www.hdfcbank.com>
7. HDFC Bank Limited. (2024). *Annual Report 2023–24*. <https://www.hdfcbank.com>
8. HDFC Bank Limited. (2025). *Annual Report 2024–25*. <https://www.hdfcbank.com>
9. Khan, M. Y., & Jain, P. K. (2022). *Financial Management: Text, Problems and Cases* (9th ed.). McGraw-Hill Education.
10. Kumbirai, M., & Webb, R. (2010). A financial ratio analysis of commercial bank performance in South Africa. *African Review of Economics and Finance*, 2(1), 30–53.
11. Pandey, I. M. (2021). *Financial Management* (12th ed.). Vikas Publishing House.
12. Reserve Bank of India. (2024). *Report on Trend and Progress of Banking in India*. Reserve Bank of India. <https://www.rbi.org.in>
13. Reserve Bank of India. (2025). *Financial Stability Report*. Reserve Bank of India. <https://www.rbi.org.in>
14. Rose, P. S., & Hudgins, S. C. (2022). *Bank Management and Financial Services* (10th ed.). McGraw-Hill Education.
15. Sinkey, J. F., Jr. (2007). *Commercial Bank Financial Management in the Financial Services Industry* (6th ed.). Pearson Education.
16. Van Horne, J. C., & Wachowicz, J. M. (2019). *Fundamentals of Financial Management* (14th ed.). Pearson Education.