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Performance Evaluation of Select Banks Using Camels Approach

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A B S T R A C T

The study intends to outline the CAMELS framework in assessing bank performance with a view of elucidating the strengths and weaknesses that banks experience to better the efficiency of banking operations through modern performance assessment systems. The CAMELS model is among the most widely accepted classification systems for bank performance evaluation as advanced by regulators across the globe. CAMELS incorporates Capital Adequacy, Asset Quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk as a useful, effective, and accurate framework for assessing banking performance and predicting future and relative risks. The CAMELS framework sees the measurement of various ratios all relevant to the financial performance of the bank. For Capital Adequacy, this refers to the Capital Adequacy Ratio. For Asset Quality, indicators like Non-Performing Loans to Net Advances and Non-Performing Loans to Net Worth ratios are used. For earnings acceptance, Return on Assets, Return on Equity, and Return on Capital Employed exist. Management Efficiency and Liquidity Management are evaluated using Liquidity Coverage Ratio, Net Stable Funding Ratio, Quick Ratio, Cash Ratio, Cost to Income Ratio, and Gross Advances to Total Deposits. In short, the CAMELS framework application, together with machine learning and early warning systems, thus provides a holistic view of banking performance assessment and risk management. The study explores the key indicators that influence the financial stability of the select banks.

Keywords: Financial stability, growth analysis, performance, liquidity, earnings quality, capital adequacy, asset quality, rating system, performance of banks, efficiency ratio.

1. INTRODUCTION

Banks safeguard financial stability and promote growth within their region and states into a vastly changing world. Banking, by its very nature, refers to activity or actions carried out with the passing of time. Two thrusts in current literature are, minimizing risks, maximizing sustainable returns. Generally, a bank's performance assessment mostly rides on financial ratio analysis, benchmarking, and budgeting. Bank Performance is the capacity of an institution to maintain stability and continual profit earnings for the longer term. Hence, this involves an ordered approach towards evaluating financial data so as to get the major areas of concern and remedial actions put into motion.

Amongst these assessment methodologies is CAMELS, the very popular model. CAMELS assesses performance in banks along six parameters, Capital Adequacy, Assets Quality, Management Efficiency, Earnings Quality, Liquidity, and Sensitivity to Market Risk. It is used by regulators, practitioners, and bank management to gain insights into the bank's financial soundness and operational stability.

CAMELS-

C: Capital Adequacy-an ability to absorb losses withstanding depositors' funds.

A: Asset quality assessment of performing and non-performing assets.

M: Management Efficiency-Resource utilization-enhancing balancing costs and profits.

E: Earnings Quality-sustainable profit generation, ensuring future viability.

L: Liquidity-capacity to meet short-term obligations with liquid assets.

S: Market Risk Sensitivity-the degree of resilience to interest rate and forex fluctuations.

2. IMPORTANCE

- Encourage Sustainability. - CAMELS is carry out green projects to cut down greenhouse gases or rely less on fossil fuels for investment decisions.

- Fuel Economic Growth. - To find clean energy, which unveils new profitable opportunities, innovation spurs job creation.
- Improve Energy Security. - Multiple sources for energy and resilience to outside forces.
- Compliance and Risk Management - As biofuels are a brand new area, ensure that investments comply with all applicable ESG requirements and reduce the associated risks.
- Supporting SDGs. - Clean energy development and climate action contribute to the larger sustainable agenda.

3. OBJECTIVES

- To apply the CAMELS model in assessing the select banks' profitability.
- To identify key indicators influencing financial stability.
- To measure the framework's effectiveness in improving banking performance.
- To analyse various ratios for overall performance assessment.
- To provide actionable insights for banks to enhance their operations.

4. LITERATURE REVIEW

The CAMELS is the framework that has been well recognized to the world for most bank performance and stability assessments. Private banks in India, as pointed out by Vyas and Solanki (2024) [1] and Suresh and Pradhan (2023) [2], appear prominent with respect to fund management, risk exposure, and profitability. However, they recommend better technology integration into their operations for further efficiency augments. Such recommendations are in agreement with those of Haralayya and Aithal (2021) [4], who assert that risk management is well exercised in private banks, while public banks encounter it, thus being recommended always for adaptive improvements of CAMELS.

Studies of Peterwanke et al. (2022) [3]and Kasim (2019) [6], taking ASEAN banks under their wing, highlight the place of critical significance given to management efficiency and liquidity for stability, and thus further developments of sustainability indicators into CAMELS. Shahid et al. (2018) [7] argued that better capital adequacy exists in foreign banks than in local banks, but local banks are worse off in terms of earnings and sensitivity comparison.

The Baltic region has put these three issues: transparency, regulation, and market-oriented developments, as the big issues brought up by Ševela et al. (2016) [9]. Improvements on CAMELS-T can be made from this. Meanwhile, comparative studies conducted by Bashatweh and Ahmed (2020) [5] and Balasubramanian et al. (2017) [8] showed that private banks are more efficient and profitable than public banks, as public banks still have better outreach and social responsibility but worse asset quality. This suggests an advocacy for innovation and adaptation for the stability and improvement of state banks at the end of time.

5. RESEARCH GAP

CAMELS in itself is all exhaustive to find out the financial soundness of any bank on the basis of parameters like Capital Adequacy, Asset Quality, Management Quality, Earnings, Liquidity and Sensitivity to Market Risk. In such instances, this tool aims at providing a complete evaluation of the entire bank regarding its overall performance as far as carrying up stress pertaining to finance and sustaining growth.

Hence, capital adequacy is ensured for absorbing losses while remaining stable; asset quality measures riskiness within the loans and investment portfolios since, if of a particular poor quality, it can create issues regarding profitability and liquidity; earnings and liquidity are extremely critical for the sustenance of operation whereby earnings promote growth while sound liquidity ensures meeting of short-term obligations. Taken together, they indicate the challenges that stretch the efficiency and the stability of banks while being used in a competitive, volatile market environment.

6. NEED OF THE STUDY

Thus, the purpose of this research study is to analyze bank performance through the CAMEL model-an assessment of significant indicators that result in the safety and initial soundness of the banking industry in terms of capital adequacy, asset quality, and earnings. It again indicates other important aspects on which banks rely for stability and growth. Hence, it will also be useful for shareholders and investors as study reports reveal beyond the front pages of standard financial statements to examine comprehensively the performance of banks.

This is an important research work for investors as it provides them with the ability to make wise investment decisions by revealing important aspects of measuring the financial health of banks. The outcome will enhance the breadth of understanding toward a good ground for use in the bank investment selection process. The study will also provide insight into regulators and watchdogs on how to come up with better regulations and policies, expose risks, and correct for enhanced stability.

The research extends its benefits further by policy recommendations for banking performance improvement and sustainability in the growth of the sector from the findings. The knowledge gained from the study will help design practical strategies for survival and development in the longer term for organizations. Apart from filling gaps in knowledge, this work also adds more to the existing literature on bank performance and, thus, contributes to bettering the financial system. It strengthens the resilience of the entire financial system in dynamic and competitive environments.

7. PROBLEM STATEMENT

The CAMELS framework forms a powerful means of assessing the financial soundness of banking institutions in relation to six key dimensions: Capital Adequacy, Asset Quality, Management Quality, Earnings, Liquidity, and Sensitivity to Market Risk. In this way, the framework gives a wholesome picture of the situation regarding the performance of the bank and its survival in financial stress while continuing to grow. Capital adequacy illustrates a bank's capacity to accept losses and consequently remain stable. The next important thing is asset quality, which deals with the risk to which the loans and investment portfolios are subjected. Poor asset quality may affect the profitability and liquidity of a bank to a great extent. These two parameters, when combined, throw light on the strength and risk asset profile of the bank.

Earnings and liquidity are the essence of a bank's sustainability. Strong earnings provide support for long-run growth while liquidity assures that it can meet short-term obligations. These would be the main factors that allow the bank to carry on smoothly under competitive and volatile market conditions. The CAMELS framework collates these parameters in order to identify the challenges for banks in balancing efficiency versus stability. These insights, in turn, help in allowing regulators, bank management, and other stakeholders to make informed decisions that could bolster financial resilience and achieve environmentally sustainable growth.

8. METHODOLOGY

The financial performance of HDFC Bank and Axis Bank as per CAMELS has been assessed using both descriptive and analytical research. The application descripts the importance, scopes, and utility of CAMELS parameters while analysis involves trends, relationships, and variances in financial health across banks. These two jointly give a complete measurement of bank performances during the years 2020 to 2024.

Source of Data

Based on secondary data, the research had obtained reliable sources like:

• Annual Reports of HDFC Bank and Axis Bank (2020-2024)

• Publications are brought from the Reserve Bank of India from internet (RBI)

• Industry platforms like Money Control and ET Now.

Data Analysis Techniques

The data analysis involves multiple techniques to comprehensively evaluate the financial performance of HDFC Bank and Axis Bank. **Trend Analysis** is used to identify and track shifts in key indicators such as Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, Liquidity, and Sensitivity to Market Risk over the study period. **Comparative Analysis** focuses on the CAMELS parameters to highlight the strengths and weaknesses of both banks. **Regression Analysis** examines the impact of critical variables like ROA, CAR, and GNPA on profitability and stability. Additionally, **Risk Appraisal** monitors and evaluates risks associated with asset quality, market sensitivity, and liquidity to ensure the banks' sound financial health.

9. REULT ANALYSIS

Comparative Analysis (2020–2024)

- **HDFC Bank consistently outperformed Axis Bank** across parameters like GNPA, ROA, and Cost-to-Income Ratio, reflecting superior operational efficiency, profitability, and asset quality.
- Axis Bank showed significant improvement in GNPA, reducing from 4.86% in 2020 to 1.95% in 2024, narrowing the gap with HDFC Bank.
- Both banks maintained robust CAR and liquidity levels, with HDFC displaying better overall financial health and stability.

Table 1. Capital Adequacy Ratio (CAR) vs. Profitability

Year	CAR (%)	Net Profit (₹ Crores)
2018	18.5	17,486
2019	18.8	21,078
2020	19.1	26,257

2021	18.7	31,116
2022	18.9	38,053

Source: www.moneycontrol.com

Table 2. Comparison of ROA and GNPA for HDFC and Axis Bank (2023)

HDFC Bank (%)	Axis Bank (%)
1.9	1.2
1.23	2.02

Source: www.moneycontrol.com

Table 3. Trends in GNPA for HDFC and Axis Bank (2020–2024)

Year	HDFC Bank GNPA (%)	Axis Bank GNPA (%)
2020	1.36	4.86
2021	1.26	3.7
2022	1.32	2.82
2023	1.23	2.02
2024	1.2	1.95

Source: www.moneycontrol.com

OVERALL ANALYSIS AND INTERPRETATION

The comparative analysis reveals HDFC Bank's consistent superiority over Axis Bank across key metrics such as GNPA, ROA, and Cost-to-Income Ratio, demonstrating its operational efficiency, profitability, and asset quality. Axis Bank has shown commendable improvement in GNPA, reducing it significantly from 4.86% in 2020 to 1.95% in 2024, thereby narrowing the gap with HDFC Bank. Both banks maintained strong Capital Adequacy Ratios (CAR) and liquidity levels, reflecting robust financial stability. However, notable differences in asset quality and operational efficiency persist between the two banks. The CAMELS framework effectively identified these trends and highlighted vulnerabilities, underscoring its value in comprehensive banking performance assessment.

10. FINDINGS

- Both HDFC Bank (19.26%) and Axis Bank (19.20%) maintained CAR well above the regulatory threshold in 2023, indicating strong financial stability.
- HDFC Bank demonstrated better credit risk management with a lower GNPA of 1.23% compared to Axis Bank's 2.02% in 2023.
- HDFC Bank showed higher operational efficiency with a Cost-to-Income Ratio of 36.50%, outperforming Axis Bank’s 45.00%.
- HDFC Bank consistently achieved higher profitability with an ROA of 1.90%, while Axis Bank had 1.20% in 2023.
- HDFC Bank exhibited stronger liquidity management with an LCR of 130%, surpassing Axis Bank’s 120% in 2023.

11. RECOMMENDATIONS

- HDFC Bank: Continue the trend of process improvement, besides exploring pathological diversification.
- Axis Bank should work towards enhancing its GNPA and Cost-to-Income ratios by leveraging technology.
- AI-based tools should be adopted by both banks for better decision-making and risk management.

12. CONCLUSION

The CAMELS framework effectively assessed the financial health of HDFC Bank and Axis Bank, highlighting HDFC's consistent leadership across key parameters such as GNPA, ROA, and operational efficiency. Axis Bank demonstrated significant improvement, especially in reducing GNPA, showcasing its potential for further growth. Both banks maintained strong CAR and liquidity levels, ensuring financial stability. Leveraging technology and enhancing risk management practices will be critical for sustaining growth in the competitive banking environment. Overall, the study underscores the value of CAMELS in comprehensive bank performance evaluation.

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