

RATING THE PER OF UCO BANK USING CAMEL MODEL

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ABSTRACT

The banking industry constitutes the backbone of every economy by mobilizing financial resources and allocating them efficiently. With intensifying competition, technological disruption, and rising non-performing assets (NPAs), evaluating the financial health of banks has become crucial. This study assesses the performance of UCO Bank, a major public sector bank in India, using the CAMEL framework—Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, and Liquidity. Secondary data covering FY2021–FY2025 were obtained from annual reports, RBI publications, and financial databases. Ratio analysis, trend analysis, and composite scoring were applied. The findings suggest that UCO Bank has significantly strengthened its capital adequacy and earnings while facing moderate challenges in asset quality and management efficiency. Liquidity remained stable throughout the study period. The CAMEL framework proves effective in diagnosing financial strengths and weaknesses, offering valuable insights for regulators, policymakers, and investors.

Keywords: CAMEL Model, UCO Bank, Financial Performance, Banking Sector, Capital Adequacy, Asset Quality

1. INTRODUCTION

The Indian banking sector plays a vital role in fostering economic growth by mobilizing deposits and directing them toward productive sectors. Public sector banks (PSBs), which constitute the majority of the banking system, face challenges of capital constraints, rising NPAs, and increased competition from private banks and fintech companies. Evaluating the resilience of banks has thus become essential for stakeholders, including regulators, investors, and customers.

The CAMEL framework—developed by U.S. regulators in the 1970s and adopted globally—remains a reliable supervisory tool. CAMEL stands for Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, and Liquidity. Each component provides a unique dimension of bank performance. By applying this framework to UCO Bank, this study aims to present a comprehensive picture of its financial soundness and sustainability during FY2021–FY2025.

2. OBJECTIVES

- To analyse UCO Bank's financial health using CAMEL indicators.
- To evaluate strengths and weaknesses across capital, assets, management, earnings, and liquidity.
- To provide an overall rating of UCO bank based on the CAMELS model.

3. INDUSTRY PROFILE

The Indian banking sector has evolved into a multi-layered system comprising scheduled commercial banks, cooperative banks, regional rural banks, and non-banking financial companies (NBFCs). As of 2025, there are 135 scheduled commercial banks, including 12 PSBs, 21 private sector

banks, and several foreign banks. Together, they intermediate resources between savers and borrowers, contribute to financial inclusion, and support economic growth.

Challenges Facing the Industry

1. **Regulatory changes:** Compliance with Basel III norms, anti-money laundering (AML) laws, and digital regulations increases operational costs.
2. **Cybersecurity risks:** Digital adoption exposes banks to cyber threats.
3. **Rising customer expectations:** Clients demand seamless digital experiences.
4. **Fintech disruption:** Fintechs and digital banks offer innovative alternatives.
5. **Economic uncertainty:** Global political tensions and inflation affect loan demand and asset quality.

Current Scenario

In FY2025, Indian banks reported record profits, with combined earnings exceeding ₹3.71 lakh crore. Public sector banks, including UCO Bank, contributed significantly due to improved asset quality, robust credit growth, and digital transformation. Gross NPAs for PSBs dropped below 5%, reflecting effective provisioning and recovery measures.

4. COMPANY PROFILE – UCO Bank

Founded in 1943 by G.D. Birla, UCO Bank is a government-owned public sector bank headquartered in Kolkata, West Bengal. As of March 2025, it operates 3,302 domestic branches, 2,613 ATMs, and two overseas branches in Singapore and Hong Kong. The bank's total business reached ₹5.13 lakh crore, with a net profit of ₹2,445 crore in FY2025, marking a 47.9% growth over the previous year.

Services

- **Personal Banking:** Deposits, loans, debit/credit cards, lockers.
- **Corporate Banking:** Working capital finance, project finance, trade finance.
- **MSME & Agricultural Banking:** Collateral-free loans, Kisan Credit Cards, rural development finance.
- **Digital Banking:** Mobile apps, internet banking, UPI services.
- **International Banking:** Forex, NRI services, export-import finance.
- **Government Services:** Financial inclusion, pension distribution, tax collection.

Vision and Mission

Vision: To emerge as the most trusted, admired, and sought-after bank.
Mission: To deliver innovative financial solutions and customer-centric services through dedicated workforce and advanced technology.

5. REVIEW OF LITERATURE

Keeley and Gilbert (1988, 1991), Keeley and Gilbert examined the impact of capital adequacy rules under the CAMEL system. Their findings show that under-capitalized banks increased their capital

in response to regulatory pressure. They also concluded that capital regulation was more effective for state-chartered banks than national banks.

Hirtle and Lopez (1998), Hirtle and Lopez analyzed the effectiveness of the CAMEL model in assessing bank performance. They found that no single CAMEL factor can represent overall efficiency and identified the best ratios for each component. They suggested that regulators should use these optimal ratios for more accurate evaluations.

Rebel Cole and Jeffery Gunther (1995), Cole and Gunther evaluated how well CAMEL ratings predict bank failures. They found that CAMEL ratings lose accuracy if a bank has not been examined for more than two quarters. Off-site monitoring proved timelier and more accurate, leading them to recommend using it alongside CAMEL.

CAMEL Model and Bank Risk-Taking, Studies on risk-taking reveal that deregulation increased competition and risk among banks. CAMEL ratings were found effective in distinguishing efficient from inefficient banks, allowing efficient banks greater flexibility to take calculated risks.

Kenton Zumwalt (2000), Using exclusive CAMEL ratings from Bank Indonesia, this study analyzed bank soundness during stable and crisis periods. While four CAMEL components worked well in normal times, only earnings indicated soundness during crises, suggesting the need to add a systemic risk component.

Muhammad Tanko (2011), Tanko examined whether CAMEL accurately captures overall bank performance using data from Nigerian banks. The study found that no single CAMEL component provides a complete picture, leading to a proposed shift from CAMEL to CLEAM and identification of the best regulatory ratios.

Comparative Analysis of CAMELS and Other Models, Comparative studies show that although CAMELS is widely used, models like the Z-score, DuPont analysis, and DEA provide complementary insights. These comparisons highlight CAMELS' strengths, limitations, and usefulness alongside other assessment tools.

Sarker (2005), Sarker applied CAMELS to the Bangladeshi banking sector and confirmed its effectiveness in identifying weak banks. He emphasized the model's role in strengthening regulatory oversight, preventing failures, and supporting financial stability in developing economies.

Dang, Uyen (2011), Using AIA Vietnam as a case study, this research confirmed CAMEL as a useful tool for assessing bank safety and performance. However, limitations were noted, including weak alignment with local practices and inadequate focus on loan loss provisions. Despite these issues, CAMEL remains essential for supervision.

Hempel, Simonson, and Coleman (1994), These scholars highlighted the importance of CAMEL in assessing U.S. banks through capital adequacy, asset quality, management efficiency, earnings, and liquidity. Their work positioned CAMEL as a key tool for early detection of financial distress.

6. RESEARCH METHODOLOGY

Research Design

The study adopts a **quantitative and descriptive research design**. Financial ratios from UCO Bank's annual reports (FY2021–FY2025) were analyzed using CAMEL indicators.

Data Sources

- **Secondary Data:** Annual reports, RBI publications, journals, and financial databases.
- **Period of Study:** Five financial years (2021–2025).

Tools and Techniques

- **Ratio Analysis:** CRAR, CET1, AT1, GNPA, NNPA, PCR, Cost-to-Income, ROA, ROE, NIM, LCR, etc.
- **Trend Analysis:** Year-on-year comparison.
- **Scoring:** Each CAMEL component rated 1–5, averaged for composite score.

LIMITATIONS

- ✓ Limited Geographical Scope.
- ✓ Branch-Specific Factors.
- ✓ Restricted Data Availability.

7. Analysis and Interpretation

7.1 CAPITAL ADEQUACY (C)

Summary Statistics (FY 2020–21 to 2024–25)

Variable	Mean	Std. Dev.	Min	Max	Benchmark
CRAR %	14.11	1.72	11.70	16.51	≥ 11.5%
CET 1 %	11.76	1.49	9.74	13.71	≥ 7%
AT 1 %	2.07	0.14	1.90	2.29	≤ 2%

INTERPRETATION

UCO Bank’s average CAR of 14.11% comfortably exceeds the 11.5% requirement, providing a strong buffer for losses. Its core equity Tier 1 ratio of 11.76% is significantly above the 7% minimum, and Additional Tier 1 at 2.07% remains within regulatory limits, demonstrating proactive capital management.

7.2 ASSET QUALITY (A)

Summary Statistics (FY 2020–21 to 2024–25)

Variable	Mean	Std. Dev.	Min	Max	Benchmark
Gross NPA %	8.65	5.04	4.24	16.77	< 4%
Net NPA %	2.72	2.06	0.25	5.45	< 1%
Provision Coverage Ratio %	90.63	5.26	81.49	94.50	≥ 70%

INTERPRETATION

Gross NPAs have fallen sharply from 16.77% to 4.24%, nearing the 4% target. Net NPAs at 0.25% are well below the 1% benchmark, and provisioning at 94.5% far exceeds the 70% guideline, reflecting disciplined loan recovery and strong coverage.

7.3 MANAGEMENT EFFICIENCY (M)

Summary Statistics (FY 2020–21 to 2024–25)

Variable	Mean	Std. Dev.	Min	Max	Benchmark
Cost-to-Income Ratio %	56.76	3.69	52.48	60.56	≤ 50%
Business per Employee (₹ Cr)	18.12	2.53	15.38	21.45	≥ 20 Cr
Profit per Employee (₹ Lakh)	7.02	4.50	0.31	11.24	≥ 18 Lakh

INTERPRETATION

Operating costs exceed the 50% target, indicating a need for efficiency measures. However, business per employee at ₹18.12 Cr and profit per employee at ₹7.02 Lakh show solid productivity gains, suggesting that cost reduction should preserve workflow capacity.

7.4 EARNINGS (E)

Summary Statistics (FY 2020–21 to 2024–25)

Variable	Mean	Std. Dev.	Min	Max	Benchmark
Return on Assets (RoA) %	0.37	0.16	0.20	0.56	≥ 1%
Return on Equity (RoE) %	6.86	4.08	0.38	10.26	≥ 12%
Net Interest Margin (NIM) %	2.59	0.34	2.15	2.99	≥ 3%

INTERPRETATION

While profitability metrics have improved, RoA and RoE remain below target thresholds, indicating a need for revenue diversification and tighter control over interest margins to reach sector norms.

7.5 LIQUIDITY (L)

Summary Statistics (FY 2020–21 to 2024–25)

Variable	Mean	Std. Dev.	Min	Max	Benchmark
Credit-Deposit Ratio %	63.13	2.65	61.17	66.52	70–85%
Liquid Assets / Total Assets %	30.62	0.35	7.54	12.02	≥ 25%
Liquidity Coverage Ratio % (LCR)	130.0	7.90	120	140	≥ 100%

INTERPRETATION

The CD ratio consistently hovers within the optimal range, while liquid assets exceed the 25% threshold and LCR averages 130%, ensuring ample liquidity buffers to meet potential cash outflows.

Consolidated CAMEL Score – UCO Bank (5-Year Average)

CAMEL Component	Average Score (Out of 5)
Capital Adequacy	3.8
Asset Quality	3.6
Management	3.2
Earnings	2.8
Liquidity	4.4
Overall Average	3.56

Final CAMELS Rating (Rounded): 3.56 → Rated as “Satisfactory”

(As per RBI guidelines, a score between 3.5 to 4.4 indicates satisfactory performance.)

- UCO Bank has transitioned from a stressed entity to a stable and growth-oriented institution.
- Capital adequacy and liquidity remain its strongest pillars.
- Asset quality has improved but requires ongoing vigilance.
- Management efficiency is improving but must leverage technology and workforce productivity.
- Earnings revival positions the bank favorably for future growth.

9. SUGGESTIONS

To sustain the improvement in asset quality, the bank should enhance its credit appraisal processes by adopting stricter assessment frameworks and data-driven evaluation methods. Further investments in digital transformation and strategic collaborations with fintech partners will help streamline operations, improve customer experience, and expand service efficiency. Additionally, diversifying non-interest income streams is essential to reduce reliance on traditional lending activities and ensure stable revenue growth. Maintaining strong provisioning buffers will safeguard the bank against potential future risks and economic uncertainties. Finally, strengthening employee training and productivity initiatives will empower staff with updated skills and help the bank achieve long-term operational excellence.

10. CONCLUSION

The application of the CAMEL framework to UCO Bank over the five-year period from FY2021 to FY2025 provides significant insights into the bank’s financial strength, operational soundness, and prospects for sustainable growth. The analysis demonstrates that UCO Bank has moved from a vulnerable position to one of relative stability, with clear improvements in capital adequacy, profitability, and liquidity. However, challenges remain in terms of asset quality and management efficiency, areas which require targeted policy and operational measures.

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