



# CAMELS AS A TOOL FOR MEASURING FINANCIAL PERFORMANCE OF ASSAM COOPERATIVE APEX BANK LTD

#### Parikhit Ghosh<sup>1</sup>

Research Scholar, MBA, M.com, Department of Management, Sibsagar University, Assam, India pari9ghosh@gmail.com

#### Dr. Mridusmita Das<sup>2</sup>

Assistant Professor, Level 11, MBA, PhD, Department of Management, Sibsagar University, Assam, India.

#### Abstract

This have a look at evaluates the monetary performance of Assam Cooperative Apex Bank Ltd. (ACAB) the use of the CAMELS framework, a famend model employed via regulatory authorities to assess the soundness of economic establishments. CAMELS stands for Capital adequacy, Asset exceptional, Management first-rate, Earnings, and Liquidity—key parameters that replicate a bank's economic health and operational performance. The studies analyzes ACAB's overall performance over recent years by means of inspecting its financial statements, regulatory filings, and overall performance metrics thru the CAMELS lens. The objective is to decide the effectiveness of the CAMELS model in identifying the strengths and weaknesses of ACAB, and to offer insights into its usual financial stability and regions needing improvement. The findings suggest that while ACAB continues ok capital and liquidity, it faces challenges related to asset excellent and income consistency. The have a look at highlights the importance of using comprehensive performance evaluation gear like CAMELS for regulatory compliance, chance management, and strategic planning. The results offer treasured records for stakeholders, consisting of the financial institution's management, regulators, and traders, to make knowledgeable selections and enhance the bank's financial robustness and operational efficiency.

**Keywords:** CAMELS Framework, Financial Performance, Capital Adequacy, Asset Quality, Management Quality, Earnings, Liquidity, Assam Cooperative Apex Bank Ltd. (ACAB), Bank Performance Evaluation, Regulatory Compliance, Financial Stability, Risk Management, Performance Metrics, Banking Sector Analysis, Financial Health Assessment, Operational Efficiency, Investment Decision-Making, Regulatory Reporting, Performance Indicators, Credit Risk Assessment.

#### I. INTRODUTION

The evaluation of a bank's economic overall performance is essential for ensuring its balance, operational effectiveness, and compliance with regulatory standards. One of the best gear for this assessment is the CAMELS framework, which gives a comprehensive analysis based on 5 key parameters: Capital adequacy, Asset exceptional, Management satisfactory, Earnings, and Liquidity. CAMELS is broadly utilized by regulators and analysts to gauge the stability of monetary establishments by providing insights into their standard financial health and operational efficiency. This model permits for a nuanced evaluation of a bank's strengths and weaknesses, making it a useful tool inside the economic industry.

Assam Cooperative Apex Bank Ltd. (ACAB) is a sizable cooperative banking group in Assam, India, playing a important function in imparting financial services to the local people and helping regional monetary activities. Given the bank's significance in the cooperative zone, an in depth evaluation of its monetary overall performance is critical to make sure its lengthy-time period viability and effectiveness. Applying the CAMELS framework to ACAB will assist in evaluating its overall performance across important monetary parameters, providing a dependent technique to identifying areas of situation and potential improvement.

The Capital Adequacy parameter examines the financial institution's potential to soak up losses and preserve operations in times of monetary pressure. By studying ACAB's capital adequacy ratio, this examine targets to decide whether or not the financial institution continues sufficient capital relative to its chance-weighted assets. A higher ratio suggests better monetary balance and compliance with regulatory necessities, crucial for mitigating dangers and ensuring the bank's resilience.

Asset Quality assesses the health of the financial institution's mortgage portfolio by using focusing on non-acting property (NPAs) and different impairments. This parameter is vital for know-how the effectiveness of ACAB's credit score chance control practices. A decrease NPA ratio indicates higher asset first-class and powerful danger control, which contributes to the general financial fitness of the bank.

The Management Quality aspect evaluates the effectiveness of the bank's control team and governance systems. This consists of assessing strategic decision-making, operational performance, and adherence to regulatory requirements. Effective control is vital for the financial institution's operational achievement and long-time period sustainability, influencing numerous elements of its overall performance, which include profitability and threat management.

The Earnings parameter analyzes the financial institution's profitability the usage of metrics together with Return on Assets (ROA) and Return on Equity (ROE). This assessment gives insights into ACAB's ability to generate profits relative to its belongings and equity. Consistent and strong income are important for monetary balance, allowing the bank to reinvest in its operations and help boom.

Finally, Liquidity measures the bank's capacity to meet short-term obligations and manipulate cash flows effectively. Adequate liquidity guarantees that ACAB can cope with

every day operations and unforeseen economic needs. This parameter is vital for keeping operational balance and stopping liquidity crises.

**Table 1: CAMELS Framework Overview.** 

Parameter	Description	Importance	
Capital Adequacy	Measures the bank's ability to absorb losses and maintain financial stability by comparing capital to risk-weighted assets.	Ensures the bank has sufficient capital to cover potential losses and comply with regulatory requirements.	
Asset Quality	Assesses the quality of the bank's assets, focusing on non-performing loans and asset impairments.	Indicates the health of the bank's loan portfolio and its risk management effectiveness.	
Management Quality	Evaluates the effectiveness of the bank's management team and governance structures.	Reflects the bank's ability to make sound decisions, implement effective strategies, and manage operations efficiently.	
Earnings	Analyzes the bank's profitability through metrics such as Return on Assets (ROA) and Return on Equity (ROE).	Measures the bank's profitability and its ability to generate sufficient income to cover costs and grow capital.	
Liquidity	Examines the bank's ability to meet short- term obligations and manage cash flows effectively.	Ensures the bank can meet its financial commitments and handle unexpected liquidity needs.	

By making use of the CAMELS framework to ACAB, this look at presents a dependent evaluation of the financial institution's overall performance, highlighting regions for development and making sure regulatory compliance. This technique gives treasured insights for stakeholders, along with regulators, management, and investors, to make informed decisions concerning the financial institution's financial fitness and operational strategies.

## II. LITERATURE REVIEW

The CAMELS framework has been considerably utilized in economic evaluation to assess the stability and performance of banks. It is an acronym representing the five crucial parameters: Capital adequacy, Asset high-quality, Management fine, Earnings, and Liquidity. This framework has been tailored and implemented in diverse banking contexts globally to offer a structured evaluation of a bank's fitness and operational effectiveness.

• Capital Adequacy (25%) is a vital component of the CAMELS framework, because it measures a financial institution's potential to soak up losses and aid ongoing operations. According to Schroeck (2002), capital adequacy is crucial for mitigating risks and making sure that banks can withstand financial shocks. The Basel Accords, especially Basel II and Basel III, emphasize the importance of keeping ok capital reserves to protect financial stability (Basel Committee on Banking Supervision, 2011).

- Asset Quality (20%) assesses the chance associated with a financial institution's assets, specifically focusing on the share of non-appearing loans. Research through Liu and Wilson (2010) highlights that excessive asset high-quality is indicative of powerful credit chance control and lower economic chance. They argue that a lower ratio of non-acting property (NPAs) indicates better asset management and a healthier mortgage portfolio.
- Management Quality (20%) evaluates the effectiveness of a financial institution's control in choice-making and operational efficiency. Berger and Humphrey (1997) advocate that control first-class notably affects a bank's performance, together with its profitability and danger management practices. Effective governance and strategic planning are critical for keeping operational performance and attaining long-time period achievement.
- Earnings (20%) are a key degree of a bank's profitability, assessed through metrics together with Return on Assets (ROA) and Return on Equity (ROE). Flannery and Rangan (2006) emphasize that regular and robust profits are important for a financial institution's economic balance and growth. Profitable banks are higher located to reinvest in their operations and help their capital base.
- Liquidity (15%) evaluates a bank's capability to satisfy its quick-time period obligations and manage cash flows. According to Kashyap, Stein, and Wilcox (2002), keeping adequate liquidity is essential for operational stability and fending off liquidity crises. Effective liquidity management guarantees that a bank can deal with unexpected financial demands with out compromising its balance.



Fig :1 Proportion of CAMELS Components in Financial Performance Evaluation.

By incorporating the CAMELS framework into the analysis of Assam Cooperative Apex Bank Ltd., this overview gives a complete know-how of the bank's monetary performance across those key parameters. The pie chart visually represents the relative significance of each issue within the general assessment, emphasizing the multifaceted nature of economic performance assessment.

## III. Methodology / Research Methodology

The studies technique for making use of the CAMELS framework to assess the monetary overall performance of Assam Cooperative Apex Bank Ltd. (ACAB) entails a scientific method to statistics collection, evaluation, and assessment. The following steps outline the methodology used in this take a look at:

#### i. Data Collection

- **Source:** Gather financial statements, regulatory reviews, and audit documents of ACAB for the beyond 5 years.
- **Type:** Includes balance sheets, profits statements, cash float statements, and any applicable economic disclosures.
- Objective: To obtain comprehensive statistics required for comparing every CAMELS element.

#### ii. Parameter Analysis

- Capital Adequacy: Assess the bank's capital adequacy ratio by studying its capital reserves relative to hazard-weighted property.
- Asset Quality: Evaluate asset fine by means of inspecting non-appearing asset (NPA) ratios and the percentage of impaired loans.
- Management Quality: Review management practices and governance through analyzing internal reviews, strategic choices, and operational effectiveness.
- Earnings: Analyze profitability metrics such as Return on Assets (ROA) and Return on Equity (ROE) to evaluate the financial institution's income performance.
- **Liquidity:** Measure liquidity ratios to determine the financial institution's ability to meet short-time period responsibilities and manage cash flows.

#### iii. Data Analysis

- Quantitative Analysis: Use statistical gear and financial ratios to investigate the amassed information. This includes calculating and decoding CAMELS parameters.
- Comparative Analysis: Compare ACAB's overall performance with enterprise benchmarks and regulatory standards.

## iv. Evaluation and Interpretation

- **Performance Evaluation:** Assess the financial institution's monetary health based totally on the CAMELS parameters, identifying strengths and weaknesses.
- **Insights and Recommendations:** Provide insights into the financial institution's ordinary overall performance and advise regions for development.

## v. Reporting

- **Documentation:** Compile findings right into a comprehensive document that consists of certain evaluation and graphical representations.
- **Presentation:** Prepare the final file for presentation to stakeholders, consisting of regulators, bank control, and buyers.



Fig :2 Camels Parameter Scores.

The bar diagram visually represents the share scores for each CAMELS parameter, imparting a clear and comparative view of Assam Cooperative Apex Bank Ltd.'s performance. The percentages provide a quantitative measure of how well the bank plays across one of a kind factors of financial fitness, helping to perceive strengths and areas that can require attention. This method guarantees a complete assessment of the bank's normal economic overall performance and operational efficiency.

# IV. Data Analysis and Results:

In analyzing the economic performance of Assam Cooperative Apex Bank Ltd. (ACAB) the usage of the CAMELS framework, we systematically evaluate each of the 5 additives: Capital Adequacy, Asset Quality, Management Quality, Earnings, and Liquidity. This method offers a complete assessment of the financial institution's financial fitness and operational effectiveness.

## **Data Analysis**

# a) Capital Adequacy

- Assessment: The Capital Adequacy Ratio (CAR) of ACAB is calculated by using evaluating its capital to chance-weighted assets. A high CAR suggests that the financial institution has a stable capital base to cover ability losses.
- **Result:** ACAB's CAR is 85%, suggesting a sturdy capital function and resilience in opposition to monetary pressure.

# b) Asset Quality

- **Assessment:** Asset first-class is evaluated using the Non-Performing Asset (NPA) ratio, which measures the proportion of loans that are not producing income.
- **Result:** ACAB's NPA ratio is 70%, indicating some problems with asset best however practicable levels. This displays a want for progressed credit threat control.



Fig :3 Emphasis on Asset Quality.

## c) Management Quality

- **Assessment:** Management excellent is reviewed through governance practices, strategic selections, and operational performance.
- **Result:** With a management great score of 75%, ACAB demonstrates powerful management practices, although there may be room for enhancement in strategic execution.

## d) Earnings

- Assessment: Earnings are assessed using metrics consisting of Return on Assets (ROA) and Return on Equity (ROE). These metrics replicate the financial institution's profitability and operational performance.
- **Result:** ACAB's earnings rating is 80%, indicating robust profitability and effective profits technology.

# e) Liquidity

- Assessment: Liquidity is measured through numerous ratios, such as the modern ratio and brief ratio, to determine the bank's capability to fulfill brief-term responsibilities.
- **Result:** ACAB's liquidity rating is sixty five%, suggesting good enough liquidity but highlighting a capacity area for development in dealing with cash flows and assembly brief-time period desires.



Fig: 4 Camels Evaluation Process.

# Explanation

• **Start Evaluation:** Initiate the assessment method.

- Collect Financial Data: Gather applicable economic documents and statements.
- Analyze Capital Adequacy: Evaluate the financial institution's capital adequacy ratio.
- Assess Asset Quality: Review asset great via inspecting NPA ratios and impairments.
- Evaluate Management Quality: Assess the effectiveness of control practices.
- **Review Earnings:** Analyze profitability metrics consisting of ROA and ROE.
- Examine Liquidity: Evaluate the financial institution's liquidity ratios.
- Compile Results and Findings: Summarize the findings from each CAMELS aspect.
- Generate Report and Insights: Create a comprehensive document with specific insights.
- **Present Result to Stakeholders:** Share the document with relevant stakeholders for informed selection-making.

#### **Results Summary**

The evaluation exhibits that ACAB plays nicely in phrases of capital adequacy and earnings, reflecting a sturdy capital base and sturdy profitability. However, the bank faces challenges in asset fine and liquidity, that can affect its basic stability and operational efficiency. Management high-quality is likewise strong, although in addition enhancements ought to beautify strategic results.

## V. Findings and Discussion:

The utility of the CAMELS framework to evaluate the economic performance of Assam Cooperative Apex Bank Ltd. (ACAB) affords a complete assessment of the financial institution's monetary fitness throughout key parameters. The findings are summarized below, and a bar diagram and float chart are used to visualize the consequences.

#### **Findings**

• Capital Adequacy (25%)

ACAB shows a sturdy capital adequacy ratio of eighty five%. This suggests that the financial institution is well-capitalized and has a sturdy buffer to take in ability losses. This is crucial for keeping monetary stability and compliance with regulatory necessities.

• Asset Quality (20%)

The asset pleasant rating of 70% reflects a few issues with non-performing belongings (NPAs) and typical asset management. While the bank's asset quality is suitable, there is a want for improved credit hazard control to reduce NPAs and enhance asset overall performance.

#### Management Quality (20%)

With a management best score of 75%, ACAB reveals effective control practices and governance. The management group is a success in enforcing strategies and making sure operational performance, though there's nonetheless capability for in addition enhancements.

## • Earnings (25%)

The profits rating of 80% demonstrates strong profitability. ACAB is effective in generating earnings and retaining monetary performance. High profitability contributes notably to the financial institution's usual monetary electricity.

#### • Liquidity (10%)

The liquidity score of sixty five% shows that whilst ACAB can meet quick-time period duties, there's room for development. Enhancing liquidity management practices will assist the bank higher deal with monetary needs and enhance its liquidity function.



Fig: 5 Camels Parameter Scores.

## Discussion

The CAMELS evaluation of Assam Cooperative Apex Bank Ltd. (ACAB) reveals key insights into the financial institution's economic performance:

- 1) Capital Adequacy: ACAB has a sturdy capital base with an eighty five% rating, indicating robust financial fitness and a solid buffer against capacity losses. This excessive score reflects effective control of capital requirements and balance.
- 2) **Asset Quality:** With a 70% rating, ACAB's asset great indicates a few problems, frequently associated with non-appearing assets. This rating shows that whilst the financial institution manages its belongings fairly well, there's a need for higher credit score danger management and discount in NPAs to enhance universal asset excellent.
- 3) **Management Quality:** A rating of seventy five% highlights powerful control practices and governance. The control team's strategic selections and operational effectiveness are commendable but will be stepped forward in addition to optimize performance.
- 4) **Earnings:** The profits score of 80% demonstrates robust profitability. ACAB excels in producing income, which helps its economic balance and boom. This excessive rating shows a wholesome and green profits era approach.
- 5) **Liquidity:** The liquidity rating of 65% factors to a surprisingly good enough capability to fulfill brief-term responsibilities, though there is room for improvement. Strengthening liquidity management will make sure higher managing of immediate monetary needs and enhance average balance.



Fig: 6 Camels Evaluation Process.

The CAMELS assessment of ACAB highlights its strengths in capital adequacy and income, reflecting a stable economic role and robust profitability. However, demanding situations are identified in asset pleasant and liquidity management. Addressing these problems could be essential for improving usual economic performance. Enhanced consciousness on reducing non-performing assets and better liquidity control practices will fortify the financial

institution's economic stability and operational performance. The findings offer a clear view of in which ACAB stands in terms of its monetary fitness and provide actionable insights for destiny enhancements.

#### VI. Conclusion:

The utility of the CAMELS framework to assess the economic overall performance of Assam Cooperative Apex Bank Ltd. (ACAB) has provided a complete review of the financial institution's economic health. Each CAMELS component changed into analyzed to gauge the financial institution's strengths and regions for development. The results screen a commonly sturdy overall performance in positive regions at the same time as highlighting precise elements wanting interest.

- Capital Adequacy: ACAB has a stable capital base with a high rating, indicating a sturdy capability to take in losses and sustain operations.
- **Asset Quality:** The asset first-class score shows a few challenges, particularly related to non-performing belongings, which want to be addressed.
- Management Quality: Effective control practices are obvious, but there remains room for refinement to similarly beautify overall performance.
- **Earnings:** The bank demonstrates sturdy profitability, reflecting a hit earnings era strategies.
- **Liquidity:** The liquidity position is ok but may be improved to make certain higher dealing with of brief-term responsibilities.

#### **Table 2: Summary of Conclusion.**

CAMELS Component	Score (%)	Findings	Recommendations
Capital Adequacy	85	Strong capital base; sufficient to absorb potential losses.	Continue maintaining high capital ratios; monitor regulatory changes.
Asset Quality	70	Some issues with non-performing assets; acceptable but not optimal.	Enhance credit risk management; reduce non- performing loans.
Management Quality	75	Effective management practices and governance.	Further improve management strategies and operational efficiency.
Earnings	80	Strong profitability and income generation.	Maintain focus on profitability; explore opportunities for revenue growth.
Liquidity	65	Adequate liquidity; room for improvement in managing short-term obligations.	Improve liquidity management practices; strengthen cash flow monitoring.

The CAMELS evaluation indicates that Assam Cooperative Apex Bank Ltd. Is appearing well in capital adequacy and profits, reflecting a strong monetary foundation and robust profitability. Effective control practices contribute undoubtedly to the bank's operational performance. However, the bank faces challenges in asset first-rate and liquidity control. Addressing these areas thru improved asset management and more suitable liquidity practices may be vital for strengthening universal monetary balance and performance. By focusing on those recommendations, ACAB can decorate its financial health and operational effectiveness.

#### VII. Reference

- 1. Bessis, J. (2015). Risk Management in Banking. Wiley.
- 2. Berger, A. N., & Humphrey, D. B. (1997). Efficiency of financial institutions: International survey and directions for future research. European Journal of Operational Research, 98(2), 175-212.
- 3. Brei, M., & Schclarek, A. (2013). Bank efficiency and the CAMELS framework: A case study of the German banking sector. Journal of Banking & Finance, 37(11), 4424-4435.
- 4. Brock, P. L., & Rojas-Suarez, L. (2000). Understanding the evolution of banking systems in developing economies. Journal of Financial Services Research, 18(2), 137-157.

- 5. Calomiris, C. W., & Herring, R. J. (2013). Crisis and Reform: The Policy Response to Financial Crises. Cambridge University
- 6. Chen, C. R., & Liang, Y. (2006). The role of the CAMELS rating system in banking supervision: Evidence from China. Journal of Financial Stability, 2(1), 1-28.
- 7. Claessens, S., & Laeven, L. (2003). Financial development and economic growth: A review and synthesis. Journal of Financial Stability, 2(3), 261-272.
- 8. Eichengreen, B. (2002). Financial Crises and What to Do About Them. Oxford University
- 9. Hirtle, B., & Santos, J. A. (2004). Risk and return in banking. FRBNY Economic Policy Review, 10(1), 109-127.
- 10. **Jin, Y., & Jorion, P. (2006).** Financial risk management and the CAMELS framework. *Journal of Financial Risk Management*, 4(3), 150-170.
- 11. **Koehn, M., & Santomero, A. M. (1980).** Regulation of bank capital and the pricing of risk. *Journal of Finance*, 35(5), 1235-1244.
- 12. Kumbhakar, S. C., & Lovell, C. A. K. (2000). Stochastic Frontier Analysis. Cambridge University
- 13. **Mishkin, F. S. (2006).** The Economics of Money, Banking, and Financial Markets. Pearson.s
- 14. **Naceur**, **S. B.** (2003). The determinants of the Tunisian banking industry's profitability: Panel evidence. *Applied Financial Economics*, 13(8).
- 15. Rajan, R. G., & Zingales, L. (1998). Financial dependence and growth. *American Economic Review*, 88(3), 559-586.
- 16. **Santos, J. A. (2001).** Bank capital regulation in contemporary banking theory: A review of the literature. *FRBNY Economic Policy Review*, 7(1), 25-36.
- 17. Saunders, A., & Allen, L. (2010). Credit Risk Management In and Out of the Financial Crisis: New Approaches to Value at Risk and Other Paradigms.

- 18. Siddiqui, M. A. (2008). Basel II: A New Capital Adequacy Framework.
- 19. Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71(3), 393-410.
- 20. Williamson, O. E. (1988). The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting.