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# Performance evaluation of Indian Banks using CAMEL Approach

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**ABSTRACT**

**The economic importance of banks may be defined as promoting monetization capital formation, encouraging innovation, influence economic activity and facilitator of monetary policy as well. Banks are under great pressure to perform due to ever rising expectations of their – Stockholders, Employees, Depositors etc. Bank's financial statements are being scrutinized by investors and financial institutions whenever they go in open market for funds raising. It is been recognized that sustainability is an important part of their growth, therefore to go forward with sustainability, banks must look for better performance. As a result there is a need of performance evaluation for banks. Performance evaluation of the banking sector is an effective measure and indicator to check the soundness of economic activities of an economy. The review of the literature reveals that there is no clear concept used to assess the performance of financial institutions. The performance is mainly evaluated objectively or subjectively through a given measure that differs from one study to another. In the present study an attempt is made to evaluate the performance & financial soundness of Indian banks using CAMEL approach. The Model evaluates the performance of different banks in terms of Capital Adequacy parameter, Asset Quality parameter, Management efficiency parameter, Earning Quality parameter, and Liquidity parameter.**

**Key Words: Indian Banks, CAMEL Approach, Sustainability analysis, Performance evaluation.**

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## INTRODUCTION

Banking is becoming an increasingly global industry, without geographical boundaries. The Indian Banking Sector has witnessed phenomenal growth over the last five decades, especially after the Liberalization of the Indian Banks in 1991. Banking system is the carepart of financial and system which is known as the backbone of the modern economic system. In the 1980s, CAMEL rating system was first introduced by U.S. supervisory authorities as a system of rating for on-site examinations of banking institutions. Banking Regulation Act was amended in 1993, to the entry of new private sector banks in the Indian banking system. Therefore some certain criteria were set for the establishment of the new private sector banks.

The Study investigates the performance of selected private sector banks during 2017 and 2021 period. The focus is largely in the context of CAMEL, which is related to capital Adequacy, Assets Quality, Management efficiency, Earnings Quality and Liquidity considerations. CAMELS is a recognized international rating system that bank supervisory authorities use in order to rate financial institutions according to six factors represented by its acronym. Supervisory authorities assign each bank a score on a scale. A rating of one is considered the best, and a rating of five is considered the worst for each factor.

For each category, a score is given from one to five. One is the best score and indicates strong performance and risk management practices within the institution. On the other hand, five is the poorest rating. It indicates a high probability of bank failure and the need for immediate action to ratify the situation. If an institution's current financial condition falls between 1 and 5, it is called a composite rating.

**Statement Of The Problem:** There is a continuous change in banking and financial system in the recent years especially in the form of reforms, regulations & norms. Many studies have been done to analyze the performance of private banks on profitability determinants and the financial indicators. However this study will use internationally recognized Camel model to analyze the bank performance based on the 5 private sectors banks.

**Scope Of The Study**: The present study covers only 5 private sector banks and has used financial ratios to investigate the banking performance namely: capital adequacy ratios, asset quality ratios, management efficiency ratios, earnings quality ratios and liquidity ratios. All the required data have been collected through RBI.org and annual reports published by the selected banks and their websites. The banks selected for study are ICICI Bank, HDFC bank, Axis Bank, Yes Bank, Bandhan Bank.

**OBJECTIVES OF THE STUDY**

- ✓ To analyze the capital adequacy ofthe banks
- ✓ To analyze the asset quality of the banks
- ✓ To determine the management efficiency of banks
- ✓ To evaluate the earnings quality of banks
- ✓ To understand the liquidity position of selected banks
- ✓ To rate overall performance of the banks

## LITERATURE REVIEW

Satish, JuturSharath and Surender adopted CAMEL model to assess the performance of Indian banks. The authors analyzed the performance of 55 banks for the year 2004-05, using this model. They concluded that the Indian banking system looks sound and Information Technology will help the banking system grow in strength in future. Banks will go for 'Initial Public Offer to satisfy the requirement of their capital and gearing up for the Basel II norms.

Derviz et al (2008)investigated the determinants of the movements in the long term Standard & Poor's and CAMEL bank ratings in the Czech Republic during the period when the three biggest banks, representing approximately 60% of the Czech banking sector's total assets, were privatized (i.e., the time span 1998-2001).

Prasuna D. G (2003) analyzed the performance of Indian banks by adopting the CAMEL Model. The performance of 65 banks was studied for the period 2003-04. The author concluded that the competition was tough and consumers benefited from better services quality, innovative products and better bargains.

Siva and Natarajan (2011) empirically tested the applicability of CAMEL norms and its consequential impact on the performance of SBI Groups. The study concluded that annual CAMEL scanning helps the commercial bank to diagnose its financial health and alert the bank to take preventive steps for its sustainability.

Mishra and Aspal (2013) evaluated the performance and financial soundness of State Bank Group using CAMEL approach and rated different banks using through Capital adequacy, Asset quality Management efficiency, Earning Quality, and Liquidity.

Sangmi & Nazir (2010) has evaluated the financial performance of 2 top major banks in the northern India representing the biggest nationalized bank (i.e. Punjab national Bank, PNB) and the biggest private sector bank (i.e. Jamuna and Kashmir Bank, JKB). The results highlighted that the position of the banks under study is sound and satisfactory as far as their capital adequacy, asset quality management capability and liquidity is implicated.

Agarwal and Sinha (2010) have studied the performance of microfinance institutions in India using the CAMEL framework. Chaudhry and Singh (2012) analysed the impact of the financial reforms on the soundness of Indian Banking through its impact on the asset quality. The study identified the key players as risk management, NPA levels, effective cost management and financial inclusion. International Journal of Engineering and Management Sciences (IJEMS) Vol. 3. (2018). No. 5 DOI: 10.21791/IJEMS.2018.5.28. 279

## RESEARCH METHODOLOGY:

From the above studies it is cleared that the role of banking system is vital and crucial for the capital formation in the country and it necessitates that banks must be more closely watched for their economic efficiency and performance. In the recent past the banking regulators and policy makers have recommended bank supervision by using CAMELS (capital adequacy, asset quality, management quality, earnings, liquidity and sensitivity) rating model to assess and examine the performance and financial soundness of the bank. CAMEL model is a ratio based model for evaluating the performance of banks. It is a tool that measures capital adequacy, assets quality, management efficiency, earnings quality and liquidity of financial institutions. The present study is based on secondary data collected and prepared through analytical research design.

## RESULTS AND ANALYSIS

CAMELS rating is studied in 6 parameters and for the computation of the same few ratios under each parameter is calculated.

**Table1: Mapping of CAMEL model**

| Capital Adequacy | Assets Quality | Managerial Efficiency | Earning Capabilities | Liquidity |
|---|---|---|---|---|
| Capital Adequacy Ratio | Ratio of Secured Advances to Total Advances | Profit per Employee | Return on Assets | Cash Deposit Ratio |
| Capital Adequacy Ratio tier 1 | Ratio of Term Loans to Total Advances | ROE | Net Interest margin | Credit Deposit Ratio |
| | NNPA | | Non-interest Income to Total Asset | Investment Deposit Ratio |

### Capital Adequacy

Capital adequacy is a parameter which assesses institution's compliance with Capital norms issued by the regulatory body. It is a reflector of bank's financial soundness. Adequate Capital boost up the confidence of stakeholders in case of stressed assets. It provides a relation of bank's capital to its risk weighted credit exposure. Basel III norms states the CAR to be maintained at 8% however RBI stipulates the Capital to risk weighted assets ratio to 9%.

**Table 2: Capital Adequacy of selected Banks (%)**

| Parameters | AXIS BANK LIMITED | YES BANK LTD. | ICICI BANK LIMITED | HDFC BANK LTD. | BANDHAN BANK LIMITED | |
|---|---|---|---|---|---|---|
| Capital Adequacy Ratio | 14.95 | 17.47 | 19.12 | 18.79 | 23.47 | 2021 |
| | 16.57 | 8.46 | 16.11 | 18.52 | 27.43 | 2020 |
| | 15.84 | 16.5 | 16.89 | 17.11 | 29.2 | 2019 |
| | 17.53 | 18.4 | 18.42 | 14.82 | 31.48 | 2018 |
| | 19.12 | 17 | 17.39 | 14.55 | | 2017 |
| **MEAN** | **16.802** | **15.566** | **17.586** | **16.758** | **27.895** | |
| **Standard Deviation** | **1.44** | **3.61** | **1.07** | **1.79** | **2.93** | |
| **RANK** | **3** | **5** | **2** | **4** | **1** | |
| Tier - I capital adequacy ratio | 11.87 | 11.27 | 18.06 | 17.56 | 22.48 | 2021 |
| | 13.04 | 6.46 | 14.72 | 17.23 | 25.19 | 2020 |
| | 12.54 | 11.3 | 15.09 | 15.78 | 27.88 | 2019 |
| | 14.49 | 13.2 | 15.92 | 13.25 | 30.3 | 2018 |
| | 16.47 | 13.3 | 14.36 | 12.79 | | 2017 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **MEAN** | **13.682** | **11.106** | **15.63** | **15.322** | **26.4625** | |
| **Standard Deviation** | **1.64** | **2.48** | **1.32** | **1.98** | **2.92** | |
| **RANK** | **4** | **5** | **3** | **2** | **1** | |
| | | | | | | |
| **Composite Average** | **15.24** | **13.34** | **16.61** | **16.04** | **27.18** | |
| **Composite Rank** | **4** | **5** | **2** | **3** | **1** | |

*Source: Self compiled from annual reports of respective banks*

As per the table above Bandhan Bank Ltd is maintaining highest level of Capital Adequacy Ratio, far above the stipulated norms. Gradually it is decreasing over the years, still the bank is having higher CAR which indicates stability of a bank, lowering down the risk of insolvency. ICICI Bank & HDFC Bank are also maintaining high CAR followed by AXIS Bank Ltd. This indicates banks are keeping high provisions and insulating themselves from potential losses. Tier 1 Capital is intended to absorb losses without fettering business operations. Yes Bank's Asset quality is lowest among the five banks. Even the standard deviation is also on the higher side indicating more volatility. In the year 2020 the CAR ratio was even less than the required norms stipulated by RBI.

**Asset Quality**

Asset quality of bank signify the credit risk associated with its loan portfolio. Higher credit risk lowers the asset quality and banks have to preserve more capital and create more provisions to counter credit risk. As loans forms the greatest part of the balance sheet, the quality of loan portfolio has the major impact on the risk to the capital.

**Table 3: Asset Quality of Selected banks**

| **Parameters** | AXIS BANK LIMITED | YES BANK LTD. | ICICI BANK LIMITED | HDFC BANK LTD. | BANDHAN BANK LIMITED | |
|---|---|---|---|---|---|---|
| **Ratio of Secured Advances to Total Advances** | 73.27 | 79.91 | 73.83 | 70.73 | 40.88 | 2021 |
| | 72.54 | 76.05 | 73.79 | 70.59 | 34.61 | 2020 |
| | 71.23 | 81.64 | 72.47 | 73.03 | 10.71 | 2019 |
| | 71.13 | 72.9 | 75.21 | 74.49 | 92.94 | 2018 |
| | 77.86 | 74.22 | 79.17 | 76.03 | 88.31 | 2017 |
| **MEAN** | **73.206** | **76.944** | **74.894** | **72.974** | **53.49** | |
| **Standard Deviation** | **2.46** | **3.33** | **2.31** | **2.11** | **31.98** | |
| **RANK** | **3** | **1** | **2** | **4** | **5** | |
| | | | | | | |
| **Ratio of Term Loans to Total Advances** | 70.41 | 78.27 | 71.27 | 74.35 | 97.06 | 2021 |
| | 69.83 | 79.37 | 68.97 | 72.54 | 98.09 | 2020 |
| | 66.47 | 81.17 | 69.23 | 71.41 | 97.54 | 2019 |
| | 65.67 | 80.89 | 69.3 | 71.17 | 96.13 | 2018 |
| | 70.25 | 77.23 | 73.48 | 70.73 | 97.95 | 2017 |
| **MEAN** | **68.526** | **79.386** | **70.45** | **72.04** | **97.354** | |
| **Standard Deviation** | **2.03** | **1.51** | **1.72** | **1.30** | **0.71** | |
| **RANK** | **5** | **2** | **4** | **3** | **1** | |
| | | | | | | |
| **% of NNPA** | 1.05 | 5.88 | 1.14 | 0.32 | 3.51 | 2021 |
| | 1.56 | 5.03 | 1.41 | 0.4 | 0.58 | 2020 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 2.06 | 1.86 | 2.06 | 0.36 | 0.58 | 2019 |
| | 3.4 | 0.64 | 4.77 | 0.39 | 0.58 | 2018 |
| | 2.11 | 0.81 | 4.89 | 0.4 | | 2017 |
| **MEAN** | 2.036 | 2.844 | 2.854 | 0.374 | 1.3125 | |
| **Standard Deviation** | 0.78 | 2.19 | 1.64 | 0.03 | 1.27 | |
| **RANK** | 2 | 5 | 4 | 1 | 3 | |
| **Composite Average** | **47.92** | **53.06** | **49.40** | **48.46** | **50.72** | |
| **Composite Rank** | **1** | **5** | **3** | **2** | **4** | |

*Source: Self compiled from annual reports of respective banks*

Ratio of Secured advances to total advances has been considerably increased for Yes bank over the past five years. ICICI Bank and Axis Bank also has significant ratio of secured advances to total advances in comparison to HDFC Bank and Bandhan bank. Whereas Bandhan bank has highest ratio of Term loans to total advances. Followed by Yes Bank and HDFC Bank. Despite the above facts its percentage to NNPA is also the highest, which makes Yes Bank's asset quality weaker among all the five banks. HDFC has the lowest NNPA percentage in past five years followed by Axis and Bandhan bank.

**Management Effieceincy**

Management efficiency measures the proficiency of management and business to strive through tough times and its strategy to cope with financial stress. Operating efficiency can be assessed through the ratio of Profit per employee. High ratio is an indicator of high productivity which translates into higher efficiency of the banks. For Financial efficiency Return on Equity (ROE) is analysed. High ROE specifies management efficiency in generating income and growth from its equity based financing.

**Table4: Management Efficiency Ratios**

| | AXIS BANK LIMITED | YES BANK LTD. | ICICI BANK LIMITED | HDFC BANK LTD. | BANDHAN BANK LIMITED | |
|---|---|---|---|---|---|---|
| **Profit per Employee** | 8.66 | -15.1 | 16.9 | 26 | 5 | 2021 |
| | 2.4 | -73.4 | 8.25 | 24 | 8 | 2020 |
| | 7.61 | 8.9 | 4 | 23 | 6 | 2019 |
| | 0.47 | 23 | 8 | 20 | 5 | 2018 |
| | 6.68 | 20 | 12 | 16 | 5 | 2017 |
| **MEAN** | **5.164** | **-7.32** | **9.83** | **21.8** | **5.8** | |
| **Standard Deviation** | **3.17** | **35.65** | **4.35** | **3.49** | **1.17** | |
| **RANK** | **3** | **5** | **2** | **1** | **4** | |
| **ROE** | 7.06 | -12.61 | 12.27 | 16.6 | 13.53 | 2021 |
| | 2.15 | -67.52 | 7.05 | 16.4 | 22.91 | 2020 |
| | 7.19 | 6.53 | 3.15 | 16.5 | 18.96 | 2019 |
| | 0.46 | 17.67 | 6.61 | 17.87 | 19.46 | 2018 |
| | 6.76 | 18.58 | 10.33 | 17.95 | 28.58 | 2017 |
| **MEAN** | **4.724** | **-7.47** | **7.882** | **17.064** | **20.688** | |
| **Standard Deviation** | **2.85** | **32.06** | **3.16** | **0.69** | **4.96** | |
| **RANK** | **4** | **5** | **3** | **2** | **1** | |
| **Composite Average** | **4.944** | **-7.395** | **8.856** | **19.432** | **13.244** | |
| **Composite Rank** | **4** | **5** | **3** | **1** | **2** | |

*Source: Self compiled from annual reports of respective banks*

Profit per employee is a metric that computes net income per employee, indicating the employee efficiency in generating profits. As per the table HDFC Bank & ICICI Bank both leads in management efficiency. Having the largest employee base in Indian banking industry, both the bans are able to get highest profit per employee over the five years. Whereas Yes bank has a negative figure in both the cases. Due to high NPA Yes Bank's ROE is also falling from past three years which is being reflected in Profit per employee also. Interestingly Bandhan bank in spite of challenging environment is able to deliver high operational and management efficiency.

**Earning Quality**

Earning efficiency in banking sector determines the long term viability in terms of appropriate returns to face the competition and financial stress. Return on Asset, Net interest margin and non-interest income to total assets indicated the earning capability to face harsh economic conditions in the market. ROA indicates the profitability of the banks in relation to total assets.

Banks integral part of income is interest income but in the world of competition banks are striving to have sustainable income from other sources as well. So earning efficiency of the banks is well signposted by Net Interest Income and Noninterest income.

**Table 5: Earning Quality Ratios**

| | AXIS BANK LIMITED | YES BANK LTD. | ICICI BANK LIMITED | HDFC BANK LTD. | BANDHAN BANK LIMITED | |
|---|---|---|---|---|---|---|
| **ROA** | 0.7 | -1.43 | 1.42 | 1.97 | 2.13 | 2021 |
| | 0.2 | -5.39 | 0.81 | 2.01 | 4.18 | 2020 |
| | 0.63 | 0.52 | 0.39 | 1.9 | 4.25 | 2019 |
| | 0.04 | 1.78 | 0.87 | 1.93 | 4.03 | 2018 |
| | 0.65 | 1.81 | 1.35 | 1.88 | 4.46 | 2017 |
| **MEAN** | **0.444** | **-0.542** | **0.968** | **1.938** | **3.81** | |
| **Standard Deviation** | **0.27** | **2.70** | **0.38** | **0.05** | **0.85** | |
| **RANK** | **4** | **5** | **3** | **2** | **1** | |
| **NIM** | 3.06 | 2.18 | 3.53 | 3.96 | 7.32 | 2021 |
| | 2.94 | 2.13 | 3.23 | 4.05 | 8.54 | 2020 |
| | 2.91 | 2.83 | 2.93 | 4.18 | 8.92 | 2019 |
| | 2.88 | 2.93 | 2.79 | 4.16 | 8.14 | 2018 |
| | 3.17 | 3.05 | 2.91 | 4.13 | 9.62 | 2017 |
| **MEAN** | **2.992** | **2.624** | **3.078** | **4.096** | **8.508** | |
| **Standard Deviation** | **0.11** | **0.39** | **0.27** | **0.08** | **0.77** | |
| **RANK** | **4** | **5** | **3** | **2** | **1** | |
| **Non-interest Income to Total Asset** | 1.55 | 1.26 | 1.63 | 4.54 | 2.04 | 2021 |
| | 1.81 | 3.71 | 1.59 | 1.68 | 2.09 | 2020 |
| | 1.76 | 1.32 | 1.57 | 1.53 | 2.11 | 2019 |
| | 1.7 | 1.98 | 2.11 | 1.53 | 1.89 | 2018 |
| | 2.05 | 2.19 | 2.61 | 1.58 | 1.65 | 2017 |
| **MEAN** | **1.774** | **2.092** | **1.902** | **2.172** | **1.956** | |
| **Standard Deviation** | **0.16** | **0.89** | **0.41** | **1.19** | **0.17** | |
| **RANK** | **5** | **2** | **4** | **1** | **3** | |
| **Composite Average** | **1.74** | **1.39** | **1.98** | **2.74** | **4.76** | |
| **Composite Rank** | **4** | **5** | **3** | **2** | **1** | |

*Source: Self compiled from annual reports of respective banks*

As per the table above Bandhan Bank has the highest rank in all the earning efficiency indicator ratios. Higher business growth and an improvement in collection efficiency bank rides on the top chart in term of profitability. Average NIM is 8.508 which is quite high in comparison to peers in the industry which runs in the average of 3 to 3.15. Followed by HDFC bank & ICICI Bank where cost of funds have been down and without pressurizing the margins, banks are able to perform well. Although Yes bank finding difficult to stand against all odds where ROA average is -.054, bank is able to strive for its earnings. Although NIM is marginally less in compare to peers, bank is able to diversify its income via non-interest income sources which is on average 2.092 scoring 2nd rank among other banks.

**Liquidity**

This category of CAMELS examines the growth and development of banks to ensure proper functioning of credit flow in the market. In banking industry liquidity is of prime importance as lack of liquid money can challenge the bank drastically. Liquidity risk arises when banks are not able to meet its future cash outflows without disturbing day to day operations.

**Table 6: Liquidity Analysis of selected banks**

| | AXIS BANK LIMITED | YES BANK LTD. | ICICI BANK LIMITED | HDFC BANK LTD. | BANDHAN BANK LIMITED | |
|---|---|---|---|---|---|---|
| **Cash Deposit ratio** | 7.32 | 4.18 | 4.94 | 7.29 | 6.71 | 2021 |
| | 13.27 | 5.64 | 4.58 | 6.29 | 11.12 | 2020 |
| | 6.4 | 4.74 | 5.8 | 5.07 | 8.97 | 2019 |
| | 7.82 | 5.69 | 5.9 | 13.27 | 8.38 | 2018 |
| | 7.45 | 4.87 | 6.47 | 5.89 | 25.88 | 2017 |
| **MEAN** | **8.452** | **5.024** | **5.538** | **7.562** | **12.212** | |
| **Standard Deviation** | **2.45** | **0.57** | **0.68** | **2.94** | **6.98** | |
| **RANK** | **2** | **5** | **4** | **3** | **1** | |
| **Credit Deposit Ratio** | 88.18 | 102.42 | 78.68 | 84.85 | 104.67 | 2021 |
| | 89.27 | 162.72 | 83.7 | 86.6 | 116.73 | 2020 |
| | 90.21 | 106.7 | 89.85 | 88.68 | 91.7 | 2019 |
| | 96.92 | 101.39 | 91.34 | 83.46 | 87.73 | 2018 |
| | 90.03 | 92.57 | 94.73 | 86.16 | 72.49 | 2017 |
| **MEAN** | **90.922** | **113.16** | **87.66** | **85.95** | **94.664** | |
| **Standard Deviation** | **3.08** | **25.20** | **5.74** | **1.75** | **15.07** | |
| **RANK** | **3** | **1** | **4** | **5** | **2** | |
| **Investment Deposit Ratio** | 31.97 | 26.58 | 30.16 | 33.24 | 32.26 | 2021 |
| | 24.49 | 41.68 | 32.37 | 34.15 | 26.89 | 2020 |
| | 31.9 | 39.333 | 31.82 | 31.75 | 23.22 | 2019 |
| | 33.92 | 34.07 | 36.19 | 30.71 | 24.72 | 2018 |
| | 31.08 | 35.02 | 32.96 | 33.32 | 23.75 | 2017 |
| **MEAN** | **30.672** | **35.3366** | **32.7** | **32.634** | **26.168** | |
| **Standard Deviation** | **3.23** | **5.19** | **1.98** | **1.23** | **3.29** | |
| **RANK** | **3** | **1** | **2** | **4** | **5** | |
| **Composite Average** | **43.35** | **51.17** | **36.50** | **42.05** | **44.35** | |
| **Composite Rank** | **3** | **1** | **5** | **4** | **2** | |

*Source: Self compiled from annual reports of respective banks*

From the above table it can be outlined that Bandhan Bank is having highest Cash deposit ratio i.e. average of 12.21% against the peers in the industry. Bank is enjoying high liquidity whereas Yes bank have the lower cash deposit ratio. It gives an indication of quantum of cash maintained from the total deposits, the bank availed. Credit deposit ratio is highest for Yes Bank followed by Bandhan Bank. High credit deposit ratio indicates credit risk is rising and can give further rise to NPA's. Although Yes Bank has highest investment deposit ratio also i.e. average of 35.33% which indicates high level of liquidity. Bandhan bank has lowest investment deposit ratio i.e. average of 26.16% and higher credit ratio among the peers which indicates higher risk in terms of liquidity.

**Composite Ranking**

Overall Ranking of the selected banks is done on the various parameters of CAMEL Rating is concluded in the Table no.7. Composite Ranks were calculated on the various ratios calculated under the model. Bandhan Bank is ranked top among the selected banks. The last position under the CAMEL analysis is taken by YES Bank for the period 2017-2021.

**Table 7 : Composite CAMEL Rating of selected banks**

| | | AXIS BANK LIMITED | YES BANK LTD. | ICICI BANK LIMITED | HDFC BANK LTD. | BANDHAN BANK LIMITED |
|---|---|---|---|---|---|---|
| C | Capital Adequacy Ratio | **3** | **5** | **2** | **4** | **1** |
| | Tier - I capital adequacy ratio | **4** | **5** | **3** | **2** | **1** |
| A | Ratio of Secured Advances to Total Advances | **3** | **1** | **2** | **4** | **5** |
| | Ratio of Term Loans to Total Advances | **5** | **2** | **4** | **3** | **1** |
| | % of NNPA | **1** | **5** | **3** | **2** | **4** |
| M | Profit per Employee | **3** | **5** | **2** | **1** | **4** |
| | ROE | **4** | **5** | **3** | **2** | **1** |
| **E** | ROA | **4** | **5** | **3** | **2** | **1** |
| | NIM | **4** | **5** | **3** | **2** | **1** |
| | Non-interest Income to Total Asset | **5** | **2** | **4** | **1** | **3** |
| L | Cash Deposit ratio | **2** | **5** | **4** | **3** | **1** |
| | Credit Deposit Ratio | **3** | **1** | **4** | **5** | **2** |
| | Investment Deposit Ratio | **3** | **1** | **5** | **4** | **2** |
| | Total | 44 | 47 | 42 | 35 | 27 |
| | Composite Rank | **4** | **5** | **3** | **2** | **1** |

## CONCLUSION

By considering various parameters of CAMEL Model, Bandhan Bank is getting the first rank among the selected banks. The Capital adequacy of the bank is highest among the peers in the industry. The other parameter which makes it to the top is high net interest margins and high return on assets. Earnings is also backed up by strong liquidity ratios which is making it more safe and profitable at the same time. HDFC Bank scored the second position followed by ICICI Bank Ltd. Both HDFC & ICICI Bank are having high earning capabilities along with high tier 1 Capital. Both the banks have also controlled percentage of NNPA which boosts their Asset quality. In the last position is Yes Bank which scored the last rank among the selected banks. In the period taken under study, Yes Bank was struggling to improve its asset quality and tried to infuse more capital. Although liquidity position and ratios of secured loans is highest but at the same time high ratio of NNPA leads to negative asset quality which erodes the capital of the bank. So in order to improve CAMEL score banks having low ratios in any of the parameters must work on improving the weak areas.

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