Analysis Of Financial Performance of Indian Private Sector Banks

1. **Dr Nidhi,** *Associate Professor, Gargi College, University of Delhi*
2. **Nupur Tyagi***Assistant Professor, Gargi College, University of Delhi*

ABSTRACT

Banking is an institution that deals in money and credit, safeguards the savings of the public, and grants loans and advances to the borrowers. Banks are the lifeline of any economy and are responsible for maintaining its financial stability. The sound financial health of the banking system is of significant importance to all its stakeholders, viz., its depositors, shareholders, employees and the general public. However, after the financial frauds observed in some banks lately, Indian depositors are concerned about their deposits' safety. Depositors are now interested in assessing banks' strength, security, and stability. The present study examines the top ten Indian private banks (as per their value of total assets) for five years, from 2015-16 to 2021-22. The data is analysed using the CAMEL Model to measure the performance of the banks based on the five parameters: Capital adequacy, Asset quality, Management, Earnings, and Liquidity. The model depicts the Bank's overall financial health and facilitates comparative analysis through bank rankings. The CAMEL model revealed IndusInd Bank, HDFC Bank, and Kotak Mahindra Bank as the top-performing banks.

Keywords: Banking system, financial performance, Private Banks, CAMEL Model, Ratio Analysis.

1. INTRODUCTION

Banking is an institution that deals in money and credit. It safeguards the savings of the public and grants loans and advances to the borrowers. It plays a pivotal role in boosting the economic growth of a country. Banking Companies Act, 1949 defines banking as "accepting for lending or investment of depositing money from the public, repayable on demand or otherwise and withdrawable by cheque draft or otherwise". Banks are the kingpins and important financial pillars of the financial system of a country and are responsible for sustaining its financial stability. They act as the intermediary between the savers and the borrowers to create a foundation for a robust financial sector. We can safely say that the banking system mirrors the country's economic well-being.

Public sector banks have subjugated India since the nationalisation of banks in 1969 and 1980. During the economic liberalisation in 1991, the RBI allowed the entry of private players in the banking sector and gave licenses to 10 private banks. RBI granted licences to Kotak Mahindra Bank and Yes Bank in 2003 and 2004, respectively, and clearance to IDFC and Bandhan Financial Services to open banks in 2014. The private sector banks re-emerged and became the new generation of tech-savvy banks. Since then, they have experienced faster growth, thanks to contemporary and advanced technology, and provided the latest innovations and outstanding customer service in the banking industry. The RBI also introduced new models such as payments and small finance banks.

However, after the ICICI and IDBI money laundering case, PNB scam case, PMC bank fraud episode & Yes Bank fiasco, the Indian depositors are majorly concerned over the safety of the deposits in their banks. As a result, initiatives have been taken from time to time to measure the financial position of individual banks. One such widely accepted measure is the CAMEL rating system. The **CELS** or **CAMELS rating** is a supervisory rating system initially developed in the US in 1979 to assess a bank's overall condition. It is a ratio-based model that helps evaluate the performance of the banks based on five parameters: **C**apital adequacy, **A**sset quality, **M**anagement, **E**arnings, and **L**iquidity. RBI adopted this model in 1996 on the recommendations of the Padmanabhan Working Group committee to analyse the performance of Indian commercial banks and foreign banks operating in India. CAMEL ranking estimates the banks' financial potency and soundness *vis-a-vis* the other banks. It helps describe the Bank's overall condition and facilitates comparative analysis through rankings.

2. LITERATURE REVIEW

Kumar et al., 2012; Mathiraj and Ramya, 2014; Kumar and Malhotra, 2017; Talreja and Shivappa, 2016; Dudhe, 2018; Sharma and Chopra, 2018 and Balakrishnan, 2019 studied the financial performance of various private banks in India with the help of the CAMEL model. They found that private sector banks have higher economic soundness than public banks. Sharma and Arora, 2016 found similar results when they analysed fifteen institutions for 2014-15, including eight public sector banks and seven private sector banks.

On the other hand, a few other studies have focussed only on the financial performance of the public sector banks. Aspal and Malhotra, 2012 evaluated the financial performance of all the public sector banks other than the state bank of India for five years, from 2007 to 2011, using the CAMEL approach. According to their analysis Bank of Baroda was on top in financial performance, and United Bank was last. Gupta 2014; and Biswas 2014 too investigated the public sector banks using the CAMEL model. The former study concluded that Andhra Bank topped the list, followed by Bank of Baroda and State Bank of Hyderabad, with United Bank of India taking the final position. The latter also found that the Andhra Bank performed comparatively better regarding Management Efficiency and Earning Quality. Kaur et al. 2015 highlighted the importance of the CAMEL approach to measure and compare the performance of the banks from the viewpoint of the investors and the depositors. They assessed the performance of the top five public sector banks based on the model's parameters for 2009-14 and concluded that Bank of Baroda was at the top, followed by Punjab National bank. Using the CAMEL model's indicators, Shelly and Singhal 2020measured and ranked all public sector banks during 2008-19. Indian Bank took the top spot in the composite ranking, while the Central Bank of India came in last. They also found that the asset quality of the public sector banks deteriorated over the years and accounted for three-fourths of the total NPA.

Several other studies, *viz.* Srinivasan and Saminathan, 2016;Meena, 2016;Bothra and Purohit, 2018;Kiran, 2018; Chaki et al., 2019;Mahajan and Singh, 2020 compared the private and public sector banks. These studies highlighted that the CAMEL ratios of the selected Public Sector Banks, Private Sector Banks, and Foreign Banks in India are significantly different. The study results further show that private sector banks outperformed public sector banks as the private sector banks secured the initial ranks. Chaki et al., 2019 compared public and private sector banks on various financial metrics from 2005 to 2018. They split their period of research into three phases in the third section: before the global financial crisis (2004-2008), after the global financial crisis (2008-2015), and after the implementation of regulatory measures between 2015-16 and 2018-2019). They looked at the Bank's performance over three years to see how the global financial crisis and BASEL rules affected the banking sector. They found that private sector banks are more stable, consistent, resilient, and proactive than government-owned banks.

3. THE PRESENT STUDY

An analysis of the literature review reveals that existing studies evaluate the banks based on the CAMEL model, considering only a few public and private sector banks or comparing the performance of the two sectors. Very few papers have focused on measuring the financial position, performance, and efficiency of the top private banks listed on the stock exchange, along with evaluating the relative economic strength of these private banks. Besides, we could not notice the impact of covid-19 in the analysis. Given the above, the objective of this study is

- To appraise and assess the working and performance of the top ten listed private banks in India (as per the value of total assets) using the CAMEL model in the pre and post-pandemic time;
- To compare and analyse the performance of Private Banks with each other based on the parameters calculated

The nature of the present study is descriptive. We have selected the top ten private banks according tothe value of the total assets held by the Bank from the list on BSE. The banks included in the study are HDFC Bank, ICICI Bank, Axis Bank, Yes Bank, Kotak Mahindra Bank, IndusInd Bank, Federal Bank, IDFC First Bank, J & K Bank, and South Indian Bank. As we are aware, due to severe worsening and corrosion of the financial performance of Yes Bank, especially its asset quality, the RBI in March 2020 announced that State Bank of India is interested in investing in Yes Bank. After investing in the equity of Yes Bank, the SBI will occupy and maintain 49% shareholding in it. This restructuring scheme has been considered and is required to revitalise the troubled Bank and prevent its failure and downfall.

Consequently, the inclusion of Yes Bank in the analysis is essential. Furthermore, IDFC Bank was incorporated as a new bank in the private sector in 2014 and started its operations in 2015. In January 2018, IDFC Bank and Capital First Ltd. declared their merger and finally, on 18th December, they combined to form a new entity called IDFC First Bank. At present, it is among the top 10 private banks per total assets, so its inclusion in the analysis will facilitate the assessment of the Bank's performance in the last six years or since its inception. The study period is from 2015-16 to 2021-22. The study relies on secondary data collected from the banks' annual reports & financial statements available on the individual bank websites. The CAMEL model has been used to analyse the financial strength of the selected banks. Selected Ratios have been calculated for each acronym or parameter of CAMEL for each Bank. Averages and Composite ranking have been used to reach a conclusion with the help of comparative analysis based on the model's parameters. CAMEL ranking technique has been applied to all ratios to estimate the relative positions of the banks. First, all the private banks in the list have been ranked on each sub-parameter under the model's primary parameter. Then, the ranks for each sub-parameter are combined by a simple average to calculate the group rank and determine the Bank's performance in a particular parameter vis-a-vis the other banks in the list. Once grades for each major parameter are assessed, they have been again combined using the simple average to determine the overall or the composite position based on the CAMEL model to evaluate the overall performance of the banks.

4. ANALYSIS AND INTERPRETATION

This section analyses the overall performance of the selected private banks based on the CAMEL framework. As discussed earlier, the CAMEL approach is a ratio-based model that helps evaluate the performance of the banks based on five parameters:**C**apital adequacy, **A**sset quality, **M**anagement, **E**arnings, and **L**iquidity. The methodology followed is to explain each acronym of the CAMEL model initially followed by calculating the actual ratios for each Bank for seven years and their rankings. We start with an understanding of Capital Adequacy.

Table 1: Capital Adequacy Ratios

CAPITAL ADEQUACY			
Ratio	**Formula**	**Interpretation**	**Criteria**
Capital adequacy ratio (CAR)	(Tier 1 Capital + Tier 2 Capital) / Risk weighted Assets	Capital Adequacy Ratio determines the capacity of a bank to absorb a reasonable amount of loss. The Basel III norms specified a minimum capital to risk-weighted assets of 8%.	Higher the ratio, the better
Debt-Equity Ratio	Outside liabilities /Net worth	Debt-equity ratios signify the proportion of debt capital and equity capital used to finance the operations. It is also a measure of risk as it indicates the availability of shareholder equity to repay all the financial obligations in the event of liquidation. A lower ratio implies greater protection for the depositors.	Lower the ratio, the better
Advance to assets ratio	Total advances/ Total assets	A higher Advance to assets ratio indicates that a bank has an aggressive lending policy, which results in greater profitability.	Higher the ratio, the better
Government securities to total investment ratio	Government securities / Total investment	Government securities are considered one of the safest debt instruments, as a result of which it gives a low return. The government security to total investment ratio indicates the proportion of government securities in the total investments of the banks and their ability to take the risk. A higher percentage signifies that the Bank follows a low risk-low profit strategy.	Higher the ratio, the better

Table 2 below displays the group ranking of all the selected private banks for the first parameter, i.e., Capital Adequacy based on the above four ratios. According to the table, the first position is bagged by HDFC bank, followed by Kotak Bank and then Federal Bank, whereas the Jammu and Kashmir Bank hold the last position.

Table 2: Group ranking for Capital adequacy

	Ranks assigned to each sub-parameter					
Banks	**CRAR**	**D/E**	**Advances /Assets**	**Govt Sec./Inv.**	**Average of ranks**	**Rank**
Axis Bank	5	5	5	7	**5.5**	**4**
Federal bank	8	6	1	6	**5.25**	**3**
HDFC Bank	4	7	2	2	**3.75**	**1**
IndusInd Bank	7	8	4	4	**5.75**	**5**
ICICI Bank	2	3	9	10	**6**	**8**
IDFC Bank	3	1	10	9	**5.75**	**5**
J&K Bank	10	4	7	5	**6.5**	**10**
Kotak Bank	1	2	8	8	**4.75**	**2**
South Indian Bank	9	10	3	1	**5.75**	**5**
Yes Bank	6	9	6	3	**6**	**8**

Source: self-compiled from Annual Reports of respective banks.

Table 3 and 4 below depicts the second parameter, i.e., Asset Quality, based on its four ratios. According to the table, there is a tie between HDFC Bank and IndusInd banks for the first position, followed by Federal Bank, whereas South Indian Bank holds the bottom position.

Table 3: Assets Quality Ratios

ASSET QUALITY			
Ratio	**Formula**	**Interpretation**	**Criteria**
Net NPAs to Net advances ratio	Net NPAs / Net advances	Non-performing assets are those that ceases to generate income for the Bank. It is a loan or advance given by the Bank on which either the interest, principal amount, or both are due for more than 180 days. Net NPAs to Net advances ratio is an indicator of the credit efficiency of the Bank. A higher ratio is a sign of increased credit risk or the likelihood of a large number of credit defaults	Lower the ratio, the better
Net NPAs to total assets ratio	Net NPAs / Total assets	Net NPAs to total assets ratio indicates the Bank's efficiency in evaluating and monitoring their credit risk and ability to recover the loans or advances in time. It is a barometer of better utilisation of assets and the performance of the Bank	Lower the ratio, the better

Total Investment to total assets ratio	Total Investment/ total assets	The total investment to total assets ratio specifies the extent or the proportion of the investments in the total assets against the advances. It is an estimate of how many assets are locked up as investments. A higher ratio adversely affects the profitability of the Bank	Lower the ratio, the better
Percentage change in Net NPA	(Current year NPA-Previous year NPA)/Previous Year NPA	Percentage change in Net NPA measures the degree of change in the value of NPA over a period of time	Lower the change, the better

Table 4: Group ranking for Asset quality

	Ranks assigned to each sub-parameter					
Banks	**Net NPA/ Net Adv**	**Net NPA/ TA**	**Total Inv/Total Assets**	**%Change in Net NPA**	**Average of ranks**	**Rank**
Axis Bank	**6**	**8**	**4**	**7**	**6.25**	**6**
Federal bank	**5**	**5**	**2**	**4**	**4**	**3**
HDFC Bank	**1**	**1**	**6**	**6**	**3.5**	**1**
IndusInd Bank	**2**	**3**	**1**	**8**	**3.5**	**1**
ICICI Bank	**7**	**7**	**9**	**3**	**6.5**	**7**
IDFC Bank	**4**	**4**	**10**	**1**	**4.75**	**5**
J&K Bank	**10**	**10**	**7**	**2**	**7.25**	**9**
Kotak Bank	**3**	**2**	**8**	**5**	**4.5**	**4**
South Indian Bank	**9**	**9**	**5**	**9**	**8**	**10**
Yes Bank	**8**	**6**	**3**	**10**	**6.75**	**8**

Source: As of Table 2.

Tables 5 and 6 exhibits the third parameter, i.e., Management Efficiency, based on its four ratios. According to the scores in table 6, the HDFC bank secures the first position, and the second position is bagged by ICICI and Kotak Bank, whereas the last position is held by Jammu and Kashmir Bank and South Indian Bank

Table 5: Management Efficiency Ratios

Management Efficiency			
Ratio	**Formula**	**Interpretation**	**Criteria**
Business per Employee	Revenue/Number of Employees	Business per Employee reveals the capability or the productivity of the employees of the Bank to generate the business or the revenue	Higher the ratio, the better
Profit Per Employee	(Revenue – Operating Expenses)/ Employees	Profit Per Employee indicates the ability or competency of the employees to generate profit for the Bank.	Higher the ratio, the better
Return on Net Worth	Net Income/Shareholder's Equity	Return on net worth is a measure of the profitability of the Bank. It shows the Bank's proficiency in generating income with the shareholder capital. It is	Higher the ratio, the better

		also an indicator of how well the banks management is utilising the shareholder capital	
Total Advances to Total Deposits Ratio	Total Advances/Total Deposits	Total Advances to Total Deposits Ratio indicates the capability of the Bank to convert their deposits into advances which in turn increase their earning capacity.	Higher the ratio, the better

Table 6: Group ranking for Management Efficiency

	Ranks assigned to each sub-parameter					
Banks	**B/Em**	**P/Em**	**ROE**	**Ad/TD**	**Average of ranks**	**Rank**
Axis Bank	6	6	6	5	**5.75**	**6**
Federal bank	4	5	5	8	**5.5**	**5**
HDFC Bank	5	1	1	7	**3.5**	**1**
IndusInd Bank	9	2	3	6	**5**	**4**
ICICI Bank	8	3	4	4	**4.75**	**2**
IDFC Bank	7	7	8	1	**5.75**	**6**
J&K Bank	1	8	9	10	**7**	**9**
Kotak Bank	10	4	2	3	**4.75**	**2**
South Indian Bank	3	9	7	9	**7**	**9**
Yes Bank	2	10	10	2	**6**	**8**

Source: As of Table 2.

Tables 7 and 8 below explain the fourth parameter, Earings Quality, followed by the group ranking of all the selected private banks for the fourth parameter. According to the table, the HDFC bank secures the first position, and the second position is bagged by IndusInd Bank, whereas the last two positions are held by ICICI ban and Yes Bank.

Table 7: Earnings Quality Ratios

EARNINGS			
Ratio	**Formula**	**Interpretation**	**Criteria**
Return on assets	Net profits after tax/ Total Assets	Return on assets refers to the Bank's ability or efficiency to generate income using their assets. A higher ROA indicates that Bank can use their assets efficiently. A Negative ROA means that the Bank's assets yield a negative return	Higher the ratio, the better
Net interest margin to total assets ratio	(Interest income from borrowers– Interest paid to the depositors) / Total Assets	Net Interest margin is the excess of interest earned over interest expended relative to the total assets. A higher ratio indicates financial stability.	The higher the ratio, the better it is.
Operating profits to total assets ratio	Operating profits / total assets	The operating profits to total assets ratio shows the Bank's operating income generated per rupee invested in the assets. It determines the operational efficiency of the Bank	The higher the ratio, the better it is.

Cost-to-income ratio	Operating expenses/Operating Income	The cost-to-income ratio shows the Bank's cost with its income. It determines the profitability of the Bank and how well a bank operates. A higher cost-to-income ratio indicates high expenses or costs incurred as compared to the income earned.	The lower the ratio, the better it is.

Table 8: Group ranking for Earnings Quality Ratio

	Ranks assigned to each sub-parameter					
Banks	**ROA**	**NIM/TA**	**OP/TA**	**Cost/Income**	**Average of ranks**	**Rank**
Axis Bank	6	6	6	5	**5.75**	**5**
Federal bank	5	8	2	1	**4**	**3**
HDFC Bank	2	2	1	2	**1.75**	**1**
IndusInd Bank	3	3	4	4	**3.5**	**2**
ICICI Bank	4	7	10	10	**7.75**	**9**
IDFC Bank	8	5	7	3	**5.75**	**5**
J&K Bank	9	4	5	7	**6.25**	**7**
Kotak Bank	1	1	8	9	**4.75**	**4**
South Indian Bank	7	10	3	8	**7**	**8**
Yes Bank	10	9	9	6	**8.5**	**10**

Source: As of Table 2

The fifth parameter, i.e., Liquidity, is explained in Tables 9 and 10 below. According to the figures, Kotak Bank secures the first position, followed by the IDFC First Bank, whereas Axis Bank and Jammu and Kashmir Bank hold the last two positions.

Table 9: Liquidity Ratios

LIQUIDITY			
Ratio	**Formula**	**Interpretation**	**Criteria**
Liquid Assets to Total Assets ratio	Liquid Assets / Total Assets	The liquid Assets to Total Assets ratio is a measure of the near-cash assets of the Bank in proportion to the total assets. (NOTE: Liquid Assets = Cash in Hand, Balance with the RBI, Balance with Other Banks (Both in India and Abroad), and Money at Call and Short Notice.)	The higher the ratio, the better it is.
Liquid Assets to Total Deposits Ratio	Liquid Assets / Total Deposits	The liquid Assets to Total Deposits ratio measures the near-cash assets of the Bank in proportion to the total deposits. It is an indicator of the ability of the Bank to meet its financial obligations with the available liquid funds	The higher the ratio, the better it is.
Government Securities to Total Assets Ratio	Government Securities / Total Assets	Government Securities to Total Assets Ratio indicates the value of government securities, i.e., less risky investments in proportion to total assets.	The higher the ratio, the better it is.

Liquid Assets to Demand Deposits Ratio	Liquid Assets / Demand Deposits	The liquid Assets to Demand deposits ratio is a measure of the near-cash assets of the Bank in proportion to the demand deposits. It is an indicator of the capability of the Bank to meet its short-term financial obligations with the available liquid funds or meet the demand from depositors during a particular year.	The higher the ratio, the better it is.

Table 10: Group ranking for Liquidity

	Ranks assigned to each sub-parameter					
Banks	**LA/TA**	**LA/TD**	**Govt Sec./TA**	**LA/DD**	**Average of ranks**	**Rank**
Axis Bank	5	6	10	8	**7.25**	**9**
Federal bank	6	8	8	3	**6.25**	**7**
HDFC Bank	8	7	2	9	**6.5**	**8**
IndusInd Bank	1	4	7	7	**4.75**	**3**
ICICI Bank	3	2	9	5	**4.75**	**3**
IDFC Bank	10	3	3	1	**4.25**	**2**
J&K Bank	7	9	4	10	**7.5**	**10**
Kotak Bank	2	1	5	6	**3.5**	**1**
South Indian Bank	9	10	1	2	**5.5**	**6**
Yes Bank	4	5	6	4	**4.75**	**3**

Source: As of Table 2

Table 11 demonstrates the overall ranking of the top 10 private banks based on the CAMEL Model. The group averages and ranks have been combined to calculate the composite ranks. According to the calculations, HDFC Bank holds the top position, followed by Kotak Mahindra Bank (2nd position) and IndusInd Bank (3rd position) and Federal Bank (4th position). The three least performing banks are Jammu and Kashmir Bank (10th rank, i.e. Last rank), South Indian Bank (9th rank, i.e., second last rank), and Yes Bank (8th rank, i.e., last third rank)

Table 11: Composite Ranking for the overall performance of the selected Private Banks

Banks	**Composite Rank (Capital Adequacy)**	**Composite Rank (Asset Quality)**	**Composite Rank (Management)**	**Composite Rank (Earnings)**	**Composite Rank (Liquidity)**	**Average of ranks**	**Overall Ranks**
Axis Bank	4	6	6	5	9	**6**	**7**
Federal bank	3	3	5	3	7	**4.2**	**4**
HDFC Bank	1	1	1	1	8	**2.4**	**1**
IndusInd Bank	5	1	4	2	3	**3**	**3**
ICICI Bank	8	7	2	9	3	**5.8**	**6**
IDFC Bank	5	5	6	5	2	**4.6**	**5**
J&K Bank	10	9	9	7	10	**9**	**10**

Kotak Bank	2	4	2	4	1	**2.6**	**2**
South Indian Bank	5	10	9	8	6	**7.6**	**9**
Yes Bank	8	8	8	10	3	**7.4**	**8**

Source: As of Table 2

CONCLUSIONS

The present study uses the CAMEL model to analyse the financial strength of the selected private banks. CAMEL approach is a powerful tool to evaluate and appraise the relative financial strength of the Bank. It helps to measure the banks' financial position, performance, and efficiency on specific parameters such as **C**apital adequacy, **A**sset quality, **M**anagement, **E**arnings, and **L**iquidity.

In this study, we calculated twenty ratios under the five parameters of the CAMEL model for the top 10 private banks selected as per the value of their total assets. The ratios were calculated for five years, starting from 2015 to 2022. The banks were given the ranks based on their performance in a particular sub-parameter and group ranks for significant parameters. Finally, composite ranks have been estimated based on the overall performance of the banks. The method of assigning ranks is considered simple and user-friendly as it enables a common person to analyse complex financial data to make safe and sound decisions. The results obtained are as follows.

Regarding capital adequacy, the top-performing banks are HDFC Bank, Kotak Mahindra Bank, Federal Bank, Axis Bank, IndusInd Bank, IDFC first Bank, and South Indian Bank. Jammu and Kashmir Bank, Yes Bank, and ICICI Bank are the least performing banks. Also, it has been observed that all the banks have maintained a capital adequacy ratio of above 9% (minimum requirement as per Basel III) throughout the five years, which is a good sign of the availability of enough capital and protection to the depositors.

Regarding Asset Quality, the top-performing banks are HDFC Bank, IndusInd Bank, Federal Banks, Kotak Mahindra Bank, and IDFC First Bank. The least performing banks are South Indian Bank, Jammu and Kashmir Bank, Yes Bank, ICICI Bank and Axis Bank. The highest percentage increase in the net NPA in the last seven years has been observed in Yes Bank and South Indian Bank at 112.70% and 49.02%, respectively, which indicates high credit risk or likelihood of a large number of credit defaults. In fact, on 5th March 2020, the RBI imposed a moratorium on Yes bank and proposed a reconstruction scheme for the Bank due to the worsening of asset quality.

In terms of Management, the top-performing banks are HDFC Bank, ICICI Bank, Kotak Mahindra Bank, IndusInd Bank, and Federal Banks. South Indian Bank, Jammu and Kashmir Bank, Yes Bank, Axis Bank, and IDFC First Bank are the least performing banks. The Return on net worth is negative for Yes Bank, IDFC First Bank, and Jammu and Kashmir bank, which may point to the incompetency and inefficiency of these banks in generating income.

In terms of Earnings, the top-performing banks are HDFC Bank, IndusInd Bank, Federal Bank, Kotak Mahindra Bank, Axis Bank, and IDFC First Bank. The least performing banks are Yes Bank, ICICI Bank, South Indian Bank, and Jammu and Kashmir Bank. Three banks, namely Yes Bank, Jammu and Kashmir Bank, and IDFC First Bank, have a negative ROA which is a sign that the banks may not be using their assets effectively to generate income and need to adopt an efficient course of action to improve the ratio.

In terms of Liquidity, the top-performing banks are Kotak Mahindra Bank, IDFC First Bank, ICICI Bank, IndusInd Bank, and Yes Bank. The least performing banks are Jammu and Kashmir Bank, Axis Bank, HDFC Bank, Federal Bank, and South Indian Bank.

Based on the overall ranking of the top 10 private banks based on the CAMEL, the highest rank is secured by HDFC Bank, followed by IndusInd Bank and Kotak Mahindra Bank with second. The fourth position is bagged by Federal Bank, fifth by IDFC First Bank, sixth by ICICI Bank, and Axis Bank gets the seventh rank. The bottom three positions are held by Jammu and Kashmir Bank, South Indian Bank, and Yes Bank, with the tenth, ninth and eighth places, respectively.

Therefore, based on the study's findings, the policymakers of the lowest ranking banks can take fundamental and mandatory steps to find critical solutions to refurbish their weakness and boost their overall condition and performance. These banks must strengthen themselves to be more resilient in a competitive environment. Though these outcomes cannot be relied on wholly or exclusively,banks' financial situation and performance are also affected by other external factors. Still, the depositors and investors must keep in mind all these ratios while investing in a bank.

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