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EVALUATING THE PERFORMANCE OF PRIVATE SECTOR BANKS USING CAMEL MODEL

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ABSTRACT

In the recent years, the financial systems especially the banks have undergone numerous changes in the form of reforms, regulations and norms. Undoubtedly, being tech-savvy and full of expertise, private banks have played a major role in the development of Indian banking industry. In the process they have jolted public sector banks out of complacency and forced them to become more competitive. At present, Private Banks in India includes leading banks like ICICI Banks, Axis Bank, Kotak Mahindra Bank, HDFC Bank and International Bank, etc. Private Banks such as Axis Bank and ICICI Bank are posting a rapid increase in their asset base every year as compared to public sector. The study is mainly a comparison of the functioning and the performance of the two private banks taken into study - ICICI bank and Axis Bank. It also portrays how the banks use their deposits and advances in lending loans and making investments. It also extends to have a study of ratios. With the advances in financial tools, a comprehensive system of performance evaluation has evolved over a period of time covering all aspects of the organisation, known as CAMEL approach. Many studies have been done to analyse the performance of private banks on profitability determinants and financial indicators. However, this study will use financial ratios to analyse the bank performance based on the CAMEL model on two private sector banks, namely, ICICI bank and Axis bank for a period of nine financial years from 2010-11 to 2018-19.

KEYWORDS

ICICI bank and Axis bank, capital adequacy, asset quality, management efficiency, earnings equality, liquidity position.

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INTRODUCTION - BANKING INDUSTRY INDIA

The Indian banking system consists of 27 public sector banks, 21 private sector banks, 49 foreign banks, 56 regional rural banks, 1,562 urban cooperative banks and 94,384 rural cooperative banks, in addition to cooperative credit institutions as of January 2020. In FY17- 18, total lending increased at a CAGR of 10.94 per cent and total deposits increased at a CAGR of 11.66 per cent. India's retail credit market is the fourth largest in the emerging countries. It increased to US \$ 281 billion in December 2017 from US \$ 181 billion in December 2014.

Undoubtedly, being tech-savvy and full of expertise, private banks have played a major role in the development of Indian banking industry. In the process they have jolted public sector banks out of complacency and forced them to become more competitive. At present, Private Banks in India includes leading banks like ICICI Banks, Axis Bank, Kotak Mahindra Bank, HDFC Bank and International Bank, etc. Private Banks such as Axis Bank and ICICI Bank are posting a rapid increase in their asset base every year as compared to public sector.

SIGNIFICANCE OF THE STUDY

The study is mainly a comparison of the functioning and the performance of the two private banks taken into study - ICICI bank and Axis Bank. It also portrays how the banks use their deposits and advances in lending loans and making investments. It also extends to have a study of ratios. With the advances in financial tools, a comprehensive system of performance evaluation has evolved over a period of time covering all aspects of the organisation, known as CAMEL approach.

STATEMENT OF THE PROBLEM

In the recent years, the financial systems especially the banks have undergone numerous changes in the form of reforms, regulations and norms. Many studies have been done to analyse the performance of private banks on profitability determinants and financial indicators. However, this study will use financial ratios to analyse the bank performance based on the CAMEL model on two private sector banks, namely, ICICI bank and Axis bank for a period of nine financial years from 2010-11 to 2018-19.

OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

1. To analyse the capital adequacy of ICICI bank and Axis bank.

2. To assess the asset quality of ICICI bank and Axis bank.
3. To evaluate the management efficiency of ICICI bank and Axis bank.
4. To determine the earnings equality of ICICI bank and Axis bank.
5. To identify the liquidity position of ICICI bank and Axis bank.

METHODOLOGY

TYPE OF THE STUDY

The study can be termed as empirical in nature because of acquiring deeper insight into the various significant aspects of the problem as relativity of the objectives of the study. The facts and information available in various secondary sources are utilized to make critical evaluation and thus from this point of view, the nature of the study will also become analytical.

AREA OF THE STUDY

The study analyses the financial performance of ICICI Bank and Axis Bank.

PERIOD OF THE STUDY

A period of nine financial years from 2010-2011 to 2018-2019 have been taken for the study.

SOURCES OF DATA

The study is based on the published data. The data was extracted from the various journals and magazines. Moreover, research methodology books were used for testing the hypothesis. Websites particularly Axis Bank, ICICI Bank and RBI has been extensively used for data extraction. Graphs and tables have also been used wherever required to depict statistical data during the study period.

DATA COLLECTION METHOD

This study has been carried out with the help of secondary data only. Values used in the calculation of ratios are taken from the financial statements of the banks. All the data has been collected from the various sources such as websites and annual reports of ICICI Bank and Axis Bank and compiled as said by the need of the study.

STATISTICAL TOOLS

The financial tool used for analyzing the study is Ratio Analysis. The ratios taken into study fall under the following parameters of CAMEL Model:

- C - Capital Adequacy Ratios
- A - Asset Quality Ratios
- M - Management Efficiency Ratios
- E - Earnings Quality Ratios
- L - Liquidity Ratios

SCOPE OF THE STUDY

- This study will pave the way to the academic as well as general public about the overall efficiency at which the largest private banks are serving.
- This study will throw light on the different aspects where the ICICI Bank and Axis Bank excel and how the banks will provide an opportunity in balancing its activities to achieve the best performance.
- A properly conducted profitability analysis also provides invaluable evidence concerning the earnings potential of the banks and the effectiveness of management.

LIMITATIONS OF THE STUDY

Due to constraints of time and resources, the study is likely to suffer from certain limitations. Some of these are mentioned here under so that the findings of the study may be understood in a proper perspective. The limitations of this study are:

- The study is based on the secondary data and the limitation of using secondary data may affect the performance.

The secondary data was taken from the annual reports of the AXIS and ICICI Bank. It may be possible that the data shown in the annual reports may be window dressed which does not show the actual position of the banks.

REVIEW OF LITERATURE

Kumar V and Malhotra B (2017) in their study, "A CAMEL Model Analysis of Private Banks in India" attempted to evaluate the performance and financial soundness of selected Private Banks in India using CAMEL Model for the period 2007-2017. The private banks taken into study were Axis Bank, HDFC Bank, ICICI Bank, Kotak Mahindra and IndusInd Bank. Composite Rankings, Average, and Covariance has been applied here to reach conclusion through the comparative and significant analysis of different parameters of CAMEL. The researchers concluded that Axis bank is at the top position as assessed by the CAMEL MODEL compared to other banks under the study. Axis bank has strong performance in case of Asset Quality, Management efficiency and Earnings Ability while it lags in case of Capital Adequacy.

Sharma S and Chopra I P (2018) conducted, "A Comparative Study of Public and Private Banks in India using CAMEL Model". The main objective of the study was to evaluate and compare the financial performance of the selected public and private sector banks (top 15 public and private sector banks each). Data related to CAMEL Model indicators were collected from Indian banking association website and the bank's website for the period of 4 years from 2014 to 2017. Ranking, t-test and Mann-Whitney U test were used to meet the objectives. The results of the study indicated that the private sector banks performed better than the public sector banks on all other parameters of CAMEL Model except Management Efficiency.

DATA ANALYSIS AND INTERPRETATION

CAMEL MODEL

The CAMEL rating is a supervisory rating system originally developed in the U.S. to classify a bank's overall condition. It is basically a ratio-based model for evaluating the performance and soundness of banks. The various ratios forming CAMEL Framework are listed below:

TABLE 1: RATIOS CALCULATED UNDER CAMEL MODEL

Capital Adequacy	Assets Quality	Managerial Efficiency	Earnings Quality	Liquidity
Capital Adequacy Ratio	Net NPA To Total Asset	Return On Assets	Operating Profit To Total Assets	Liquid Asset To Total Assets
Debt-Equity Ratio	Gross NPA To Total Asset	Return On Equity	Spread Or Net Interest Margin	Liquid Asset To Total Deposit
Advances To Total Assets	NPA To Net Advance	Profit Per Employee	Interest Income To Total Income	Credit Deposit Ratio
	Total Investment To Total Asset	Business Per Employee	Non-Interest Income to Total Income	Cash Deposit Ratio

COMPOSITE CAPITAL ADEQUACY

The Composite Capital Adequacy table is constructed based on the individual rankings obtained from the sub-parameters of Capital Adequacy which indicates the financial strength and financial stability of the banks. The average of the ranking in the individual parameters has been taken.

Lower composite rank is better, indicating a more financially stable, less at-risk bank.

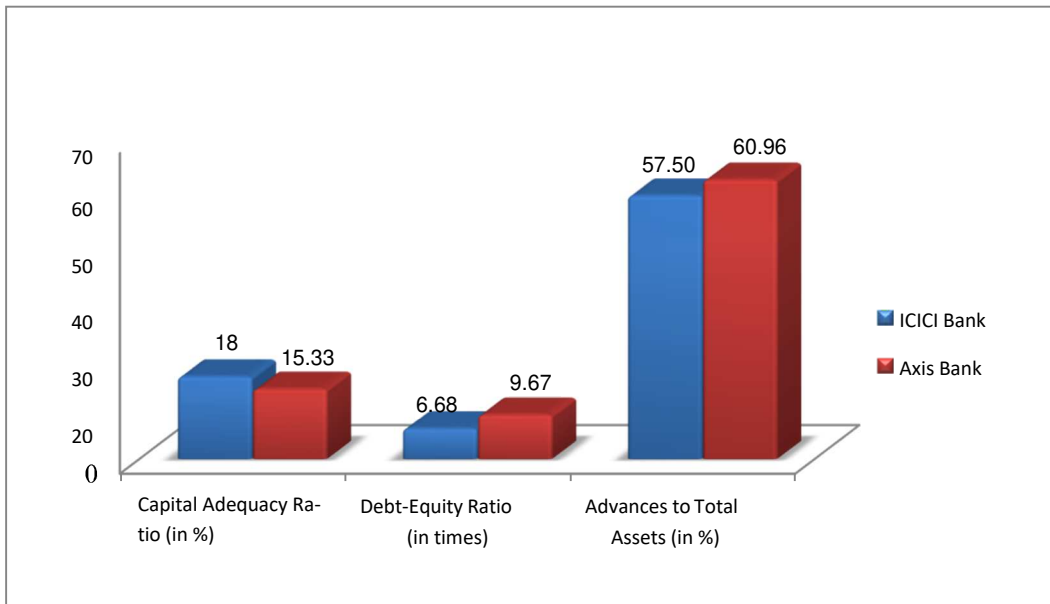
TABLE 2: COMPOSITE CAPITAL ADEQUACY

BANK	Capital Adequacy Ratio		Debt-Equity Ratio		Advances to Total Assets		Group Rank	
	Mean (%)	Rank	Mean (Times)	Rank	Mean (%)	Rank	Mean	Rank
ICICI Bank	18	1	6.68	1	57.50	2	1.33	1
Axis Bank	15.33	2	9.67	2	60.96	1	1.67	2

Source: Compiled from Annual Reports of selected banks

On the basis of group average of three ratios of Capital Adequacy expressed in Table 2, it is evident that the group average of ICICI Bank (1.33) is lower than Axis bank (1.67) for the study period. This implies that **ICICI Bank scores over Axis Bank in terms of Capital Adequacy** due to better performance in Capital Adequacy Ratio and Debt-Equity Ratio.

CHART 1: COMPOSITE CAPITAL ADEQUACY



COMPOSITE ASSET QUALITY

The Composite Asset Quality table is constructed based on the individual rankings obtained from the sub-parameters of Asset Quality which indicates the financial strength and financial stability of the banks. The average of the ranking in the individual parameters has been taken.

Lower composite rank is better, indicating a more financially stable, less at-risk bank.

TABLE 3: COMPOSITE ASSET QUALITY

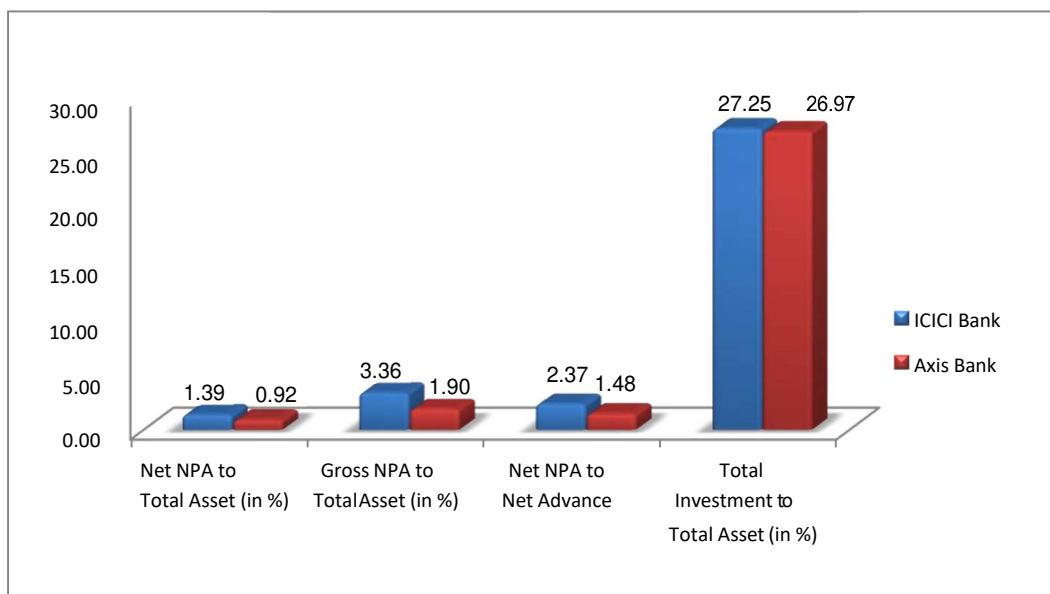
BANK	Net NPA to Total Asset		Gross NPA to Total Asset		Net NPA to Net Advance		Total Investment to Total Asset		Group Rank	
	Mean (%)	Rank	Mean (%)	Rank	Mean (%)	Rank	Mean (%)	Rank	Mean	Rank
ICICI Bank	1.39	2	3.36	2	2.37	2	27.25	2	2	2
Axis Bank	0.92	1	1.90	1	1.48	1	26.97	1	1	1

Source: Compiled from Annual Reports of selected banks

INTERPRETATION

On the basis of group average of four ratios of Asset Quality expressed in Table 3, it is evident that the group average of Axis Bank (1) is lower than ICICI bank (2) for the study period. This implies that **Axis Bank scores over ICICI Bank in terms of Asset Quality** due to better performance in all the sub-parameters.

CHART 2: COMPOSITE ASSET QUALITY



COMPOSITE MANAGEMENT EFFICIENCY

The Composite Management Efficiency table is constructed based on the individual rankings obtained from the sub-parameters of Management Efficiency which indicates the stability of the bank’s management. The average of the ranking in the individual parameters has been taken.

Lower composite rank is better, indicating a more financially stable, less at-risk bank.

TABLE 4: COMPOSITE MANAGEMENT EFFICIENCY

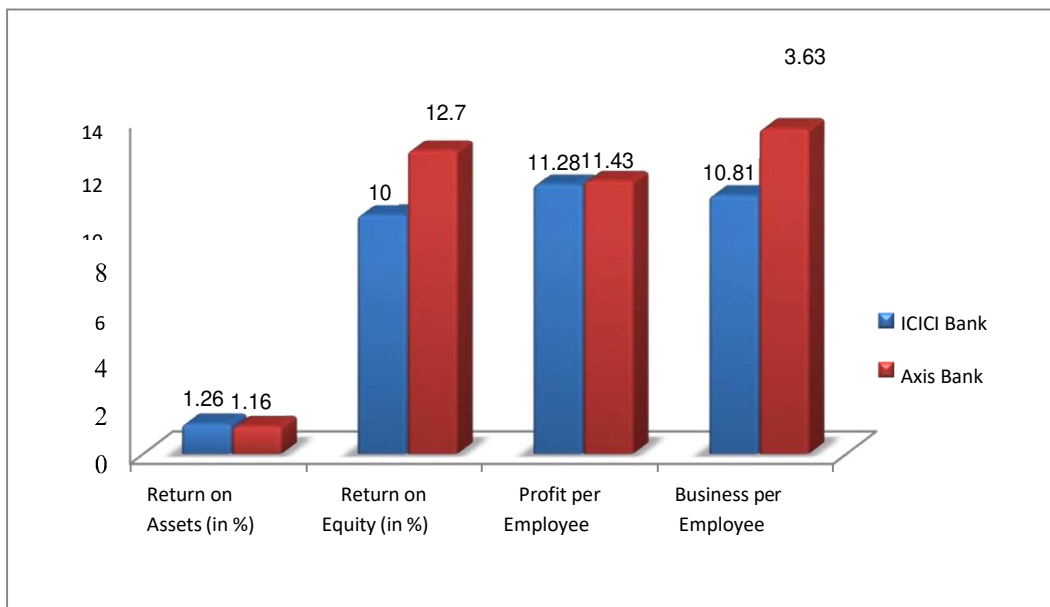
BANK	Return on Assets		Return on Net Worth		Profit per Employee		Business per Employee		Group Rank	
	Mean (%)	Rank	Mean (%)	Rank	Mean (Rs. in lakhs)	Rank	Mean (Rs. in crores)	Rank	Mean	Rank
ICICI Bank	1.26	1	10.00	2	11.28	2	10.81	2	1.75	2
Axis Bank	1.16	2	12.7	1	11.43	1	13.63	1	1.25	1

Source: Compiled from Annual Reports of selected banks

INTERPRETATION

On the basis of group average of four ratios of Management Efficiency expressed in Table 4, it is evident that the group average of Axis Bank (1.25) is lower than ICICI bank (1.75) for the study period. This implies that **Axis Bank scores over ICICI Bank in terms of Management Efficiency** due to better performance in Return on Equity, Profit per Employee and Business per Employee.

CHART 3: COMPOSITE MANAGEMENT EFFICIENCY



COMPOSITE EARNINGS QUALITY

The Composite Earnings Quality table is constructed based on the individual rankings obtained from the sub-parameters of Earnings Quality which indicates the financial stability of the banks. The average of the ranking in the individual parameters has been taken. **Lower composite rank indicates a more financially stable, less at-risk bank.**

TABLE 5: COMPOSITE EARNINGS QUALITY

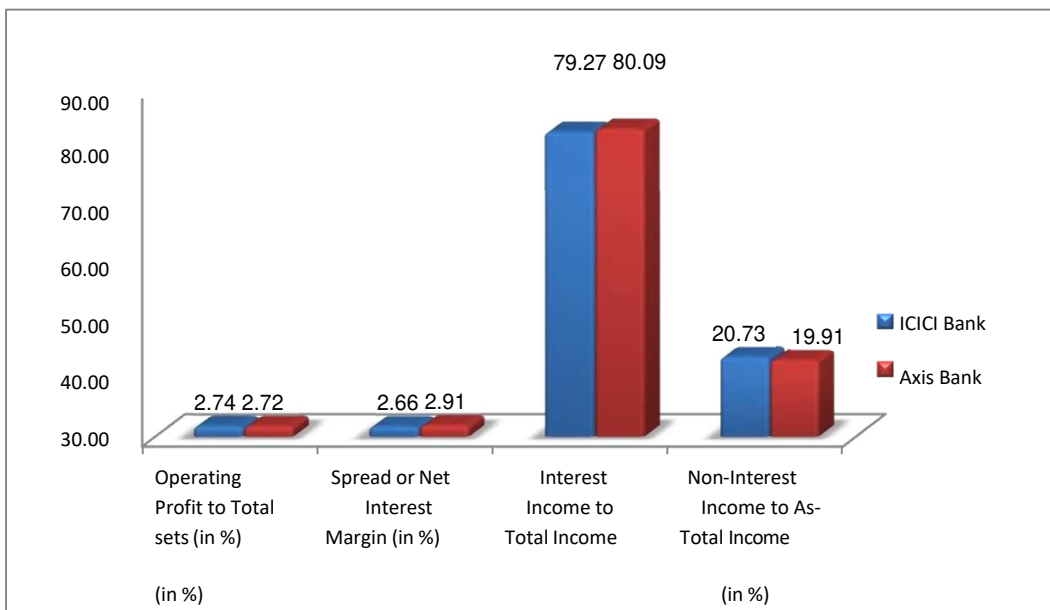
BANK	Operating Profit to Total Assets		Spread or Net Interest Margin		Interest Income to Total Income		Non-Interest Income to Total Income		Group Rank	
	Mean (%)	Rank	Mean (%)	Rank	Mean (%)	Rank	Mean (%)	Rank	Mean	Rank
ICICI Bank	2.74	1	2.66	2	79.27	2	20.73	1	1.50	0.5
Axis Bank	2.72	2	2.91	1	80.09	1	19.91	2	1.50	0.5

Source: Compiled from Annual Reports of selected banks

INTERPRETATION

On the basis of group average of four ratios of Earnings Quality expressed in Table 5, it is evident that the group average of both the Banks is equal (1.50) and hence **both ICICI Bank and Axis Bank stand on par in the Earnings quality parameter.**

CHART 4: COMPOSITE EARNINGS QUALITY



COMPOSITE LIQUIDITY

The Composite Liquidity table is constructed based on the individual rankings obtained from the sub-parameters of Liquidity which indicates the financial strength and financial stability of the banks. The average of the ranking in the individual parameters has been taken.

Lower composite rank is better, indicating a more financially stable, less at-risk bank.

TABLE 6: COMPOSITE LIQUIDITY

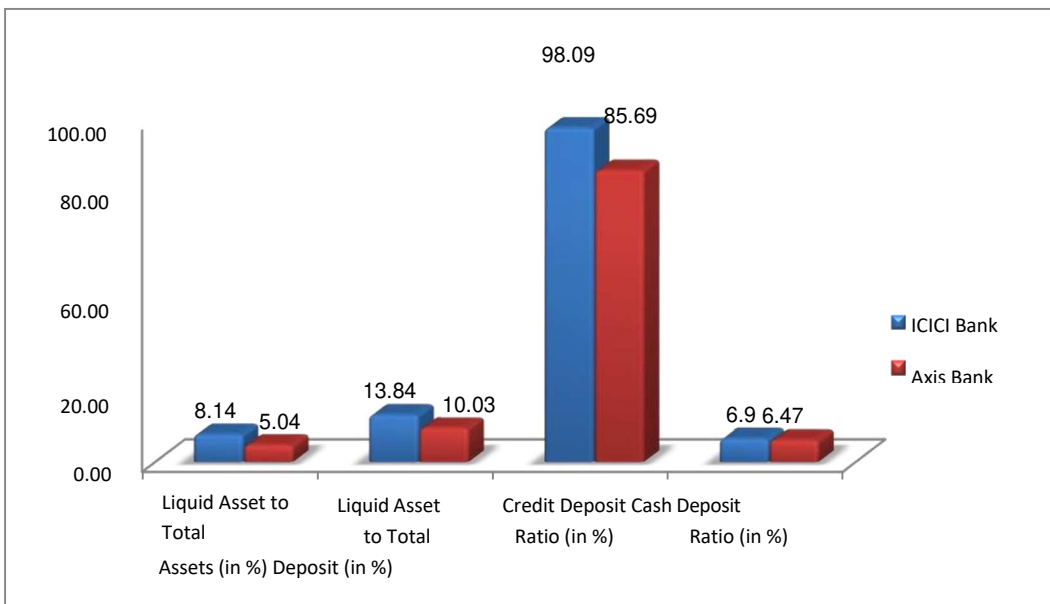
BANK	Liquid Asset to Total Assets		Liquid Asset to Total Deposit		Credit Deposit Ratio		Cash Deposit ratio		Group Rank	
	Mean (%)	Rank	Mean (%)	Rank	Mean (%)	Rank	Mean (%)	Rank	Mean	Rank
ICI Bank	8.14	1	13.84	1	98.09	1	6.90	1	1	1
Axis Bank	5.04	2	10.03	2	85.69	2	6.47	2	2	2

Source: Compiled from Annual Reports of selected banks

INTERPRETATION

On the basis of group average of four ratios of Liquidity expressed in Table 6, it is evident that the group average of ICI Bank (1) is lower than Axis bank (2) for the study period. This implies that **ICI Bank scores over Axis Bank in terms of Liquidity** due to better performance in all the sub-parameters.

CHART 5: COMPOSITE LIQUIDITY



COMPOSITE RANKING (OVERALL PERFORMANCE) OF BANKS

The composite ranking (overall performance) is determined by taking an average of the group ranking of all parameters under study (CAMEL) of both ICI Bank and Axis Bank.

TABLE 7: OVERALL RANKING

BANK	C	A	M	E	L	Average	Rank
ICI BANK	1.33	2	1.75	1.5	1	1.52	2
AXIS BANK	1.67	1	1.25	1.5	2	1.48	1

Source: Compiled from Annual Reports of selected banks

INTERPRETATION

Table 7 shows the overall performance of banks on Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality and Liquidity – CAMEL parameters for the period 2011-2019.

It is found that under the **Capital Adequacy parameter**, ICICI Bank is ranked first followed by Axis Bank. Under the **Asset Quality parameter**, Axis Bank is ranked first followed by ICICI Bank. Under the **Management Efficiency parameter**, Axis Bank is ranked first followed by ICICI Bank. Under the **Earnings Quality parameter**, both ICICI Bank and Axis Bank are on par with each other. Under the, **Liquidity parameter**, ICICI Bank is ranked first followed by Axis Bank

Taking a consolidated view, it can be observed that **Axis Bank is ranked first** because of its strong performance in Asset Quality and Management Efficiency followed by **ICICI Bank in the second position**.

FINDINGS**I. CAPITAL ADEQUACY**

- **ICICI Bank ranked first** with a **higher mean Capital Adequacy Ratio** of 18% followed by Axis Bank with a mean of 15.33% which reveals that ICICI Bank has performed better than Axis Bank in maintaining minimum capital to mitigate risks.
- **ICICI Bank ranked first** with a **lower mean Debt-Equity ratio** of 6.68 times followed by Axis Bank with a mean of 9.67 times which clearly indicates that Axis Bank has maintained a higher level of Debt-Equity ratio than that of ICICI Bank for the entire study period.
- **Axis Bank ranked first** with a **higher mean Advance to Total Assets ratio** of 60.96% followed by ICICI Bank with a mean of 57.50% which shows the growth in investment of Axis Bank.
- **ICICI Bank** performed better than Axis Bank in **Capital Adequacy parameter**. This is evident from the overall group mean of ICICI Bank (1.33) which is lower than Axis Bank (1.67) indicating that ICICI Bank has a good risk management system and has greater capacity to meet its additional capital needs.

II. ASSET QUALITY

- **Axis Bank ranked first** with a **lower mean Net NPA to Total Asset ratio** of 0.92% followed by ICICI Bank with a mean of 1.39% which reveals efficient management of assets by Axis Bank.
- **Axis Bank ranked first** with a **lower mean Gross NPA to Total Asset Ratio** of 1.90% followed by ICICI Bank with a mean of 3.36% which indicates that Axis Bank's assets are in good shape.
- **Axis Bank ranked first** with a **lower mean Net NPA to Net Advance ratio** of 1.48% followed by ICICI Bank with a mean of 2.37% which shows that Axis Bank has powerful strategies to employ advances in secured hands.
- **Axis Bank ranked first** with a **lower mean Total Investment to Total Asset ratio** of 26.97% followed by ICICI Bank with a mean of 27.25% which demonstrates that Axis Bank is adopting an aggressive policy and focussing on advancing the money rather than investing for future growth of business.
- **Axis Bank** performed better than ICICI Bank in **Asset Quality parameter**. This is evident from the overall group mean of Axis Bank (1) which is lower than ICICI Bank (2) indicating that Axis Bank has managed its assets and NPA's in a better way and has invested their assets at the right place.

III. MANAGEMENT EFFICIENCY

- **ICICI Bank ranked first** with a **higher mean Return on Assets** of 1.26% followed by Axis Bank with a mean of 1.16% which reveals that ICICI Bank is generated more revenue by efficiently managing its assets.
- **Axis Bank ranked first** with a **higher mean Return on Equity** of 12.70% followed by ICICI Bank with a mean of 10% which indicates that Axis Bank is maximising the wealth of its shareholders by earning huge profits.
- **Axis Bank ranked first** with a **higher mean Profit per Employee** of Rs. 11.43 Lakhs followed by ICICI Bank with a mean of Rs. 11.28 Lakhs which shows a higher efficiency of the employees and management of Axis Bank.
- **Axis Bank ranked first** with a **higher mean Business per Employee** of Rs. 13.63 Crores followed by ICICI Bank with a mean of Rs. 10.81 Crores which demonstrates that the manpower resources of Axis Bank are more efficient.
- **Axis Bank** performed better than ICICI Bank in **Management Efficiency parameter**. This is evident from the overall group mean of Axis Bank (1.25) which is lower than ICICI Bank (1.75) indicating that Axis Bank has greater productivity and good working management.

IV. EARNINGS QUALITY

- **ICICI Bank ranked first** with a **higher mean Operating Profit to Total Assets ratio** of 2.74% followed by Axis Bank with a mean of 2.72% which reveals that ICICI Bank has utilised its assets to its fullest capacity.
- **Axis Bank ranked first** with a **higher mean Net Interest Margin** of 2.91% followed by ICICI Bank with a mean of 2.66% which indicates that Axis Bank is effectively utilising its assets.
- **Axis Bank ranked first** with a **higher mean Interest Income to Total Income ratio** of 80.09% followed by ICICI Bank with a mean of 79.27% which shows that Axis Bank has invested in approved securities to earn interest and given more advances to its customers.
- **ICICI Bank ranked first** with a **higher mean Non-Interest Income to Total Income ratio** of 20.73% followed by Axis Bank with a mean of 19.91% which demonstrates that ICICI Bank is generating a higher proportion of fee-based income.
- Both **Axis Bank and ICICI Bank stand on par with each other** in terms of **Earnings quality parameter**. This is evident from the equal overall group mean of both the banks (1.50) indicating that both the banks have capacity to earn regular cash inflows and can earn better profits in future so as to sustain in the market.

V. LIQUIDITY

- **ICICI Bank ranked first** with a **higher mean Liquid Asset to Total Asset ratio** of 8.14% followed by Axis Bank with a mean of 5.04% which reveals that ICICI Bank is more solvent and has sufficient working capital.
- **ICICI Bank ranked first** with a **higher mean Liquid asset to Total Deposit ratio** of 13.84% followed by Axis Bank with a mean of 10.03% which indicates the greater capacity of ICICI Bank to fulfil the demand and advance money to people.
- **ICICI Bank ranked first** with a **higher mean Credit Deposit ratio** of 98.09% followed by Axis Bank with a mean of 85.69% which shows that a larger percentage of deposits mobilised has been lent to different sectors leading to an improvement in the profitability of ICICI Bank.
- **ICICI Bank ranked first** with a **higher mean Cash Deposit ratio** of 6.90% followed by Axis Bank with a mean of 6.47% which demonstrates that ICICI Bank has created more cash assets from the mobilised deposits instead of accumulating idle cash.
- **ICICI Bank** performed better than Axis Bank in **Liquidity parameter**. This is evident from the overall group mean of ICICI Bank (1) which is lower than Axis Bank (2) indicating that ICICI Bank has invested its cash in high return securities and has good amount of working capital.

SUGGESTIONS**I. CAPITAL ADEQUACY**

- To boost the confidence of creditors and depositors, **Axis bank** should increase equity or reduce debts in their capital structure.
- **ICICI Bank** should increase its advances in order to earn more interest resulting in profitability.

II. ASSET QUALITY

- **ICICI bank** should reformulate its credit appraisal techniques in order to avoid the risk of default on loans.
- **ICICI Bank** should also manage its NPA's and assets in a better way and focus on advancing their money rather than investing for future purpose.

III. MANAGEMENT EFFICIENCY

- **Axis bank** should generate more revenue by efficiently managing its assets.

- **ICICI bank** should generate more profits for maximizing the wealth of its shareholders, for the betterment of its employees and its manpower resources.

IV. EARNINGS QUALITY

- **Axis bank** has to completely utilize their assets to the full capacity and also need to add more fee-based products and services in its portfolio.
- **ICICI bank** should be able to increase their interest earning capacity in order to give in more advances to its customers, which further more will increase the interest income.

V. LIQUIDITY

- **Axis bank** should formulate an appropriate strategy of liability and assets management in order to meet the demand of its liability holders.
- **Axis bank** should also optimally use its mobilised deposits and create more cash and loan assets in order to maintain liquidity and increase profitability.

CONCLUSION

CAMEL analysis is a risk based monitoring approach that is used by supervisors to determine credit ratings for banks and the robustness of the banking system. This supervision approach which gained popularity since the financial crisis provides a simplistic, reader friendly version of presenting complex data regarding performance of a set of players in the banking industry. The ranking system also makes analysing and judging of the financial data of banks much simpler for the common man.

The current study and discussion thereon, certainly reveals the financial performance of Axis Bank and ICICI Bank. With all the challenges, we concluded that both the banks performed well on the Earnings Quality parameter. ICICI Bank performs well on the Capital Adequacy and Liquidity parameter whereas Axis Bank performs well on the Asset Quality and Management Efficiency parameter. Also, Out of the 19 ratios used in the CAMEL model, the average figures of Axis Bank is the best for 10 ratios followed by ICICI Bank (9 ratios). Thus it is established that the overall performance of Axis Bank is better compared to ICICI Bank.

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