

**COMPARATIVE ANALYSIS OF PROFITABILITY OF SELECTED PUBLIC SECTOR AND PRIVATE SECTOR BANKS BY USING CAMEL MODEL**

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**ABSTRACT**

*Banking sector helps in stimulation of capital formation, Innovation and monetization in addition to facilitation of monetary policy. For an efficient and healthy financial system and economy, it is essential to carefully evaluate and analyse the performance of banks. The profitability depends on the effective utilization of funds to procure maximum profit for growth. It is discussed how banks relate to their clients, how they operate, which banks fall under which categories, and other relevant information. There are various models of evaluating the performance of banks, but in this study discusses about the CAMEL Model to evaluate the performance of banks. The research has been done on the performance of 4 banks selected on the basis of market capitalisation (i.e., Canara Bank, Bank of Baroda and Axis Bank, HDFC bank).*

**KEYWORDS:** Capital Adequacy, Asset Quality, Banking System, Earning Quality, Liquidity and Management Efficiency.

**I. INTRODUCTION:** The banking industry in India has seen a number of changes as a result of globalisation and deregulation. Currently, the banking sector employs about 11,75,150 people, has 1,09,811 branches throughout India and 171 branches abroad, and manages deposits of Rs. 67504.54 billion and bank credit worth Rs. 52604.59 billion. The amount of the profit indicates the efficiency of the organization the larger the profit higher the growth rate. The profitability depends on the effective utilization of funds to procure maximum profit for growth. . For an efficient and healthy financial system and economy, it is essential to carefully evaluate and analyse the performance of banks. Since nationalization, the Indian banking system has grown significantly, with an extensive network of branches and a wide range of financial instruments. The CAMEL rating is a supervisory rating system that was developed in the United States to categorise a bank's overall position. One of the best terms to measure the financial performance is CAMEL model which measures the performance in terms of five features i.e, Capital Adequacy, Assets Quality, Management, Earning Quality and Liquidity. For each CAMEL component, the banks were given a score ranging from "1" to "5"

**OBJECTIVES:**

1. To investigate the financial performance of selected public and private sector bank.
2. To compare the performances of selected banks.

**II. REVIEW OF LITERATURE**

1) **(Rao & Ch. Srinivasa Rao , 2022): “Performance and Efficiency Analysis of Selected Private Sector banks in India.”**-This study examines the effectiveness and performance of a few private sector banks in relation to various important metrics, including total deposits, total advances, total assets, net profit, and total assets and Ten-year non-performing asset list. Each indicator's absolute values and average annual growth rates (AAGR) during a ten-year period were calculated, and the rankings were determined as a result.

2) **(Mohanty, 2021): “A Comparative Financial Performance of Selected Public and Private Sector Banks in India.”**- The researcher compares the performances of two banks using a few chosen ratios. It is evident from the analysis that, with the exception of CD% and CAR%, IOB has solid liquidity position during the last five years compared to liquidity ratio. As a result, it can be shown from the total comparison analysis of the two selected banks' performances that ICICI Bank has performed better than IOB during the research period.

3) **(Pandey & Tamanna Joshi, 2021): “Assessing Financial Strength of Selected Public and Private Sector Banks Using Camel Model”**- This research aims to evaluate the relative performance of banks in public and private sectors. Based on their revenue earnings, banks are chosen. The data is compiled from annual reports of a few chosen banks between 2015 and 2019. To compare their respective financial strength, 13 CAMEL model parameters are taken into consideration. The findings show that public sector banks were operating at a higher level than private sector banks. Overall, public sector banks demonstrated a higher performance compared to their private counterparts, perform better.

4) **(Dubey & Yogesh Puri, 2021): “A Study on Financial Performance of Selected Public and Private Sector Banks – A Comparative Analysis”**- . According to the study, Kotak Mahindra performed better and ranked first among all banks, while Punjab National Bank ranked last. The top five positions are held by private sector banks, with Bank of Baroda, a public sector bank, ranking third with HDFC bank. Private sector banks have a much higher profit per employee ratio than public sector banks. To stay in business, every bank must be profitable in the market and at the top of the competition graph Bank performance is also heavily influenced by its ability to earn money. Yes Bank tops the list in terms of earnings performance when compared to all other selected banks.

5) **(Mrs.CT.SANTHI & Dr.G.KARUNANITHI, 2021): “PERFORMANCE EVALUATION OF PUBLIC SECTOR AND PRIVATE SECTOR BANKS- A COMPARATIVE STUDY.”**- This study uses the CAMEL technique in an effort to assess the financial soundness and performance of various public and private sector banks. When public sector banks concentrate on upholding criteria for dividend payout ratio and debt equity ratio, they will have sparkling opportunities. When private sector lenders focus on the ratio of government securities to total investments, the gross non-performing assets ratio, and the dividend payout ratio, they will be in a fantastic position.

#### IV. DATA AND METHODOLOGY:

The present research study is a cross sectional as well as longitudinal study. As it is concerned about the comparison of performance of the selected banks for a period of 5 years. The tool used to analyse the data is the ratio analysis. All the calculation is performed in excel

#### Hypothesis of the study:

H<sub>0</sub> – The performance of selected banks are same over a period of 5 years.

H<sub>A</sub> - The performance of selected banks are not same over a period of 5 years.

#### DATA ANALYSIS AND FINDINGS:

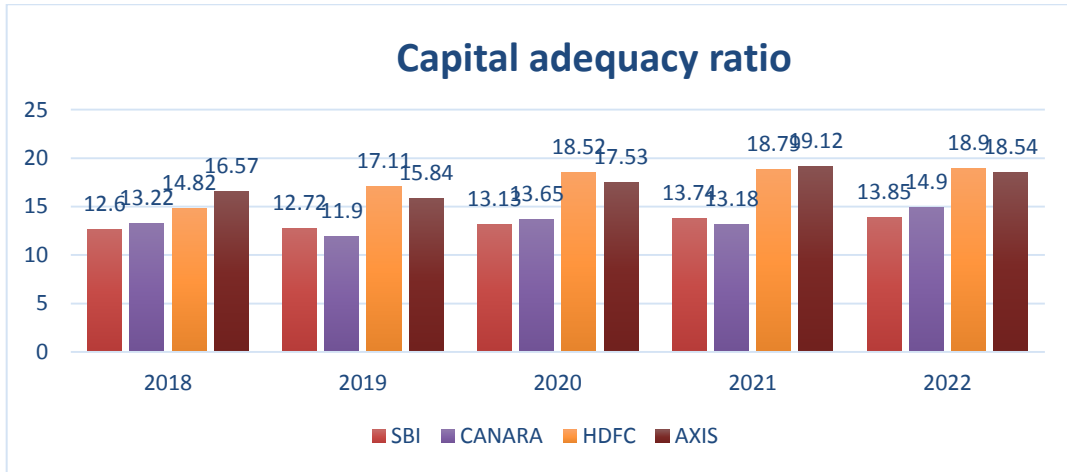
##### 1. Capital Adequacy Ratio (CAR) -

The capital adequacy ratio is used by banks to assess the strength of their capital while taking their exposures into consideration. The amount of core capital held by a bank is stated as a proportion of its risk-weighted assets in capital adequacy ratios.

Capital Adequacy Ratio = (Tier 1 Capital + tier 2 Capital) / Risk Weighted Assets.

**Table: 1 Capital Adequacy Ratio**

Year	SBI	CANARA	HDFC	AXIS
2018	12.6	13.22	14.82	16.57
2019	12.72	11.9	17.11	15.84
2020	13.13	13.65	18.52	17.53
2021	13.74	13.18	18.79	19.12
2022	13.85	14.9	18.9	18.54



*Interpretation:* The minimum ratio indicates that the bank does not have sufficient capitalisation compared to other banks. The maximum ratio indicates the enough capital compared to other banks. From the values depicted in the table above it is clear that values of capital adequacy is not same among the selected banks. Therefore, the null hypothesis get rejected.

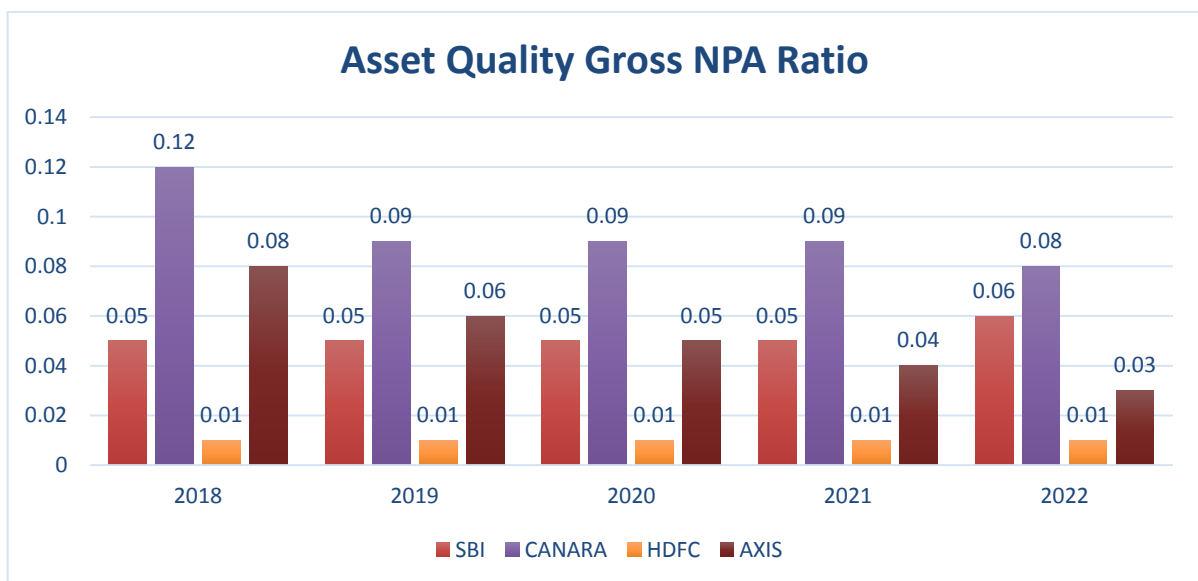
**Asset Quality Gross NPA ratio:**

The primary goal of asset quality measurement is to determine the percentage of non-performing assets in total assets. It is computed from the formula below.

$$\text{Asset Quality Gross NPA ratio} = \text{Gross NPA} / \text{Gross Advances}$$

**Table: 2 -Asset Quality Gross NPA ratio**

Year	SBI	CANARA	HDFC	AXIS
2018	0.05	0.12	0.01	0.08
2019	0.05	0.09	0.01	0.06
2020	0.05	0.09	0.01	0.05
2021	0.05	0.09	0.01	0.04
2022	0.06	0.08	0.01	0.03



*Interpretation:* It is observed from the table and the graph that the ratio of each bank is similar for the selected period. Very little deviation is found when it is compared within the bank for the different periods. But when the comparison is made between the different banks the difference is found. It says that the banks performance when it comes to Asset quality is stable.

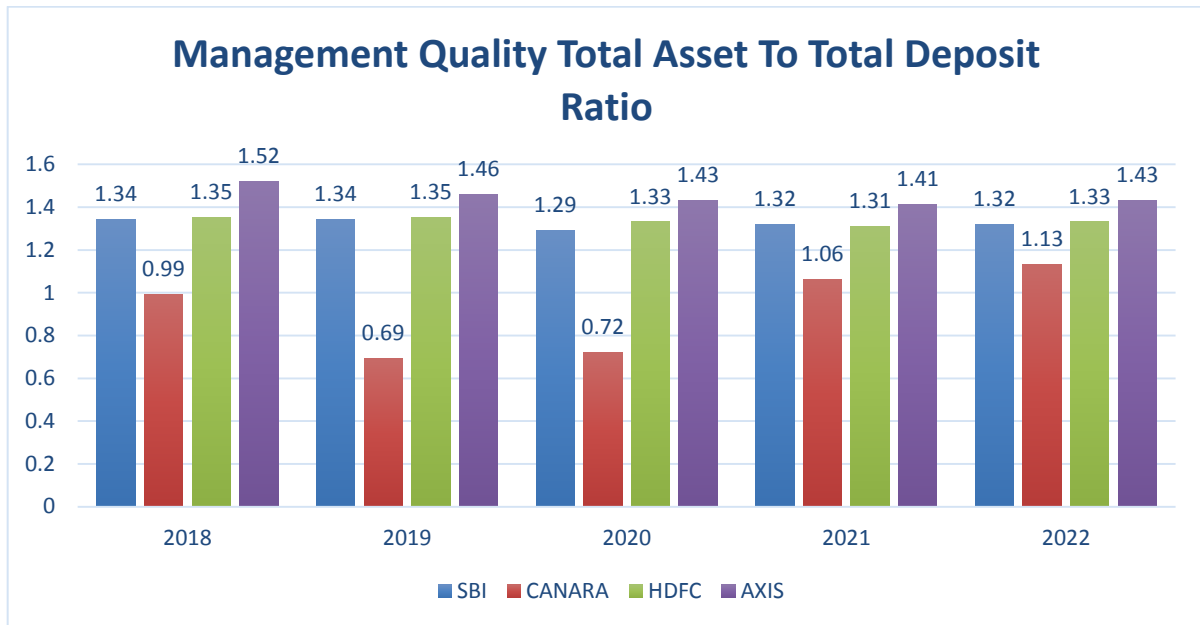
**Management Quality:**

CAMEL’s rating system for management is based on a few areas such as business strategy and financial performance, internal controls, loan to share ratio and so on. The other internal factors which speaks about the quality of management is its profitability, assets and liabilities and etc. the below table shows how the assets is related to the deposits.

Total assets to total deposits ratio = Total assets/ Total deposits

**Table: 3 -Management Quality Total assets to total deposits ratio**

Year	SBI	CANARA	HDFC	AXIS
2018	1.34	0.99	1.35	1.52
2019	1.34	0.69	1.35	1.46
2020	1.29	0.72	1.33	1.43
2021	1.32	1.06	1.31	1.41
2022	1.32	1.13	1.33	1.43



*Interpretation:* from the value depicted in table and graph it could be observed that SBI (public sector bank), HDFC (Private sector bank) and AXIS (Private sector bank) are having similar ratio though little variation is there. But the Canara bank is not in the same line as the other three banks.

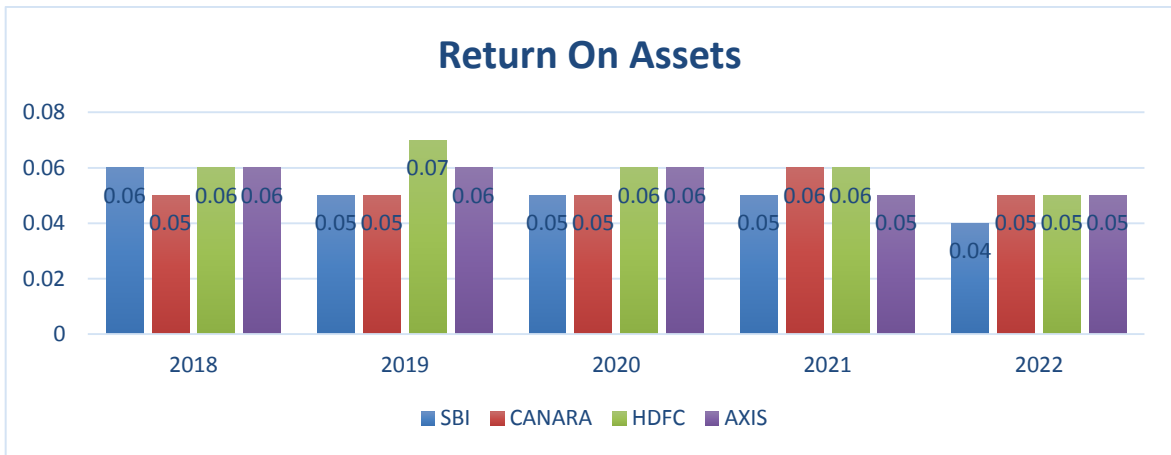
**RETURN ON ASSETS (ROA):**

One more ratio which speaks about the Management efficiency of the bank is rate of return for the assets. ROA is computed with the formula below.

Return on Assets = Net Income /Average Total Assets

**Table: 4 - Return on Assets (%)**

Year	SBI	CANARA	HDFC	AXIS
2018	0.06	0.05	0.06	0.06
2019	0.05	0.05	0.07	0.06
2020	0.05	0.05	0.06	0.06
2021	0.05	0.06	0.06	0.05
2022	0.04	0.05	0.05	0.05



*Interpretation:* The observation of table value and graph shows that the values for selected banks over a period of 5 years is almost similar. Therefore, the null hypothesis in relation with ROA is proved to be true.

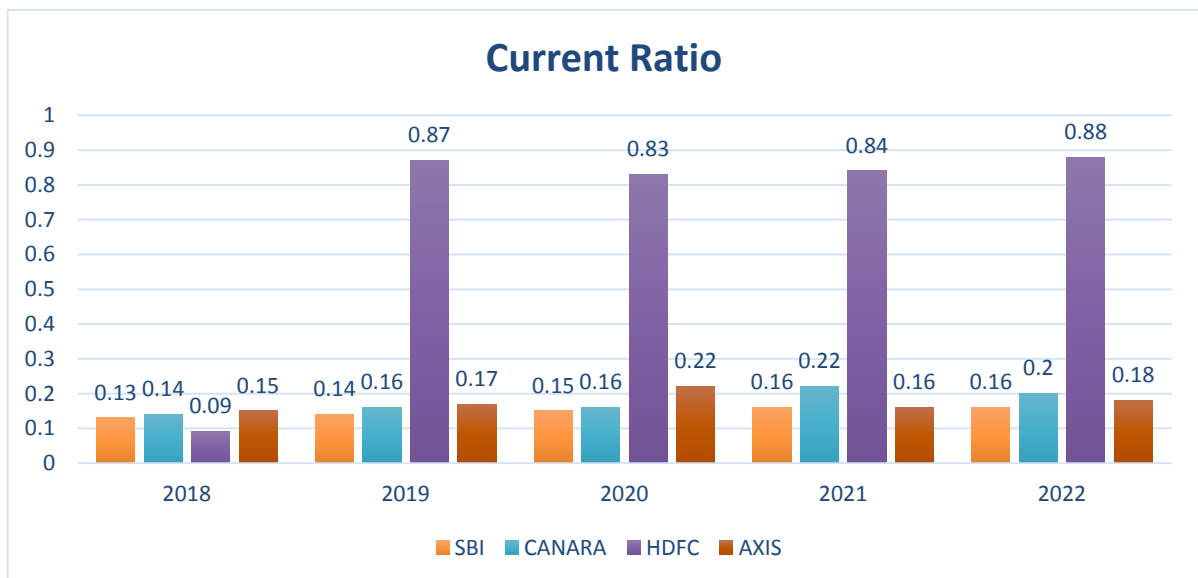
**Liquidity Position:**

Liquidity refers to the ability of the banks to meet their short-term obligations. An adequate liquidity position means a situation, where the bank can get sufficient liquid funds. It may be in the form of increasing the liability or converting the assets into cash. The below ratio is used to test the liquid position of the bank.

Current ratio = Current assets/ Current liabilities

**Table: 5 - Liquidity Current ratio**

Year	SBI	CANARA	HDFC	AXIS
2018	0.13	0.14	0.09	0.15
2019	0.14	0.16	0.87	0.17
2020	0.15	0.16	0.83	0.22
2021	0.16	0.22	0.84	0.16
2022	0.16	0.20	0.88	0.18



*Interpretation:* The result which is represented in the table gives the clear picture of liquidity position of the selected banks. HDFC bank which is in the private sector has high liquid position when compared to the other three banks.

Finally it could be concluded about the analysis that the null hypothesis gets rejected in all the performance ratio except for ROA where similarity is found.

## V. CONCLUSION:

The CAMEL technique is a key instrument for evaluating the financial condition of institutions. The purpose of this study was to compare the performance of two public sector banks and two private sector banks operating in India. It was calculated by using the five parameters of the CAMEL framework. The findings of this study are based on the size, liquidity, and profitability ratios of the banks. In accordance with the data, Private Bank has demonstrated a reasonable level of profitability and liquidity when compared to Public Bank. Reject the null hypothesis, as the performance of selected private bank and public bank are not same.

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