# Original Researcher Article

# Performance Evaluation of Selected Indian Banks using the CAMEL Model: A Comparative Study of State Bank of India (SBI) and HDFC Bank

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# **ABSTRACT**

The Indian banking industry has played a crucial role in driving the nation's economic growth, despite facing challenges such as economic turmoil, declining asset quality, corporate governance issues, and a slowing economy. To address these challenges, the banking sector has undergone significant reforms, laws, and normative changes. This research focuses on the CAMEL (Capital Adequacy, Asset Quality, Management, Earnings, and Liquidity) framework, a supervisory internal rating method used to evaluate banks' overall performance. The CAMEL Rating system considers these five aspects to assess a bank's performance. By analyzing select Indian public and private sector banks, particularly HDFC Bank from the private sector and State Bank of India (SBI) from the public sector, this research aims to gain a better understanding of their performance and access additional data. HDFC Bank and SBI are recognized leaders in their respective sectors, making them ideal subjects for this research.

**Keywords:** CAMEL Model, Capital Sufficiency, Asset Quality, Managerial Effectiveness, Earnings, Liquidity, HDFC, SBI.

#### **INTRODUCTION**:

The banking industry in India is the one that is expanding the fastest. By enabling the distribution of loans to other economic sectors and the accumulation of savings and deposits, the banking industry greatly contributes to the growth and development of the whole nation. Numerous studies have found that countries with more established banking systems have more economic expansion than those with less developed banking systems. Three of the most crucial characteristics a nation's banking industry should work to maintain are an economy's growth, stability, and health. Therefore, it is necessary to evaluate the financial status of the country's different banking institutions and design proper strategies and policies in order to promote and foster efficiency among these many sectors (Chapter 14 ICSI). By offering high interest rates, they encourage deposits and then convert the money from those deposits was converted into active loans and advances, which were then given to companies actively engaged in economic development. This promotes the expansion of crucial industries including agriculture, trade, and small businesses (Deolalkar, ----).

Performance evaluation of the Indian banking industry may be challenging due to the additional criteria that must be taken into account when grading banks from outstanding to poor performers. The two ways used to assess the financial performance of the banking banks are external rating agencies and internal management and supervision level of the banks themselves (referred

to as "internal ratings"). The main objectives of these internal supervisory and regulatory rating systems are to routinely assess the internal performance of the bank and make sure the bank continues on the correct path. These ratings are properly maintained only the top echelons of management inside the bank have access to them (Vanlalzawna 2016).

# SIGNIFICANCE OF CREDIT RATINGS IN ECONOMIC GROWTH

Credit ratings, as is well known, may encourage economic growth in any country, increase consumers' access to essential resources, and support a more equal distribution of risk, costs, and economic and financial institutions. The ratings provided by these credit rating organizations are used by many banks and other financial institutions to assess the risk premium that they would impose on their clients for loans and corporate bonds that they issue. An increased risk premium brought on by a lower credit rating will increase interest rates for both consumers and businesses. Organizations with better credit ratings may be able to raise money at a lower interest rate (Siegfried Utzig 2010). There are just a handful of well-known credit rating companies, and the majority of them use their own unique procedures to produce credit scores. This has a larger degree of impact the credit rating system's degree of regularization.

# CONCEPT OF CAMEL RATING

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A ratio-based internal rating, monitoring, regulatory, and supervisory tool called the CAMEL model evaluates banks' financial health using both on- and off-site surveillance techniques. It was created to control and oversee the financial sector. An organized, methodical, and careful instrument utilized in the evaluation process is called CAMEL (Malihe Rostami 2015). Through its tried-and-true approach, the CAMEL model encourages openness, advancement, and change inside financial institutions. It researches important quantitative financial ratios as well as qualitative and quantitative variables. The qualitative approach, on the other hand, relates to the subjective elements that support financial institution operations (Uyen Dang 2011). The CAMEL Rating System is a very effective internal rating tool that motivates banks to take corrective action, despite being founded by the American financial system prior to a failure.

The abbreviation CAMEL stands for "Capital Adequacy, Asset Quality, Management Quality, Earnings Ability, and Liquidity Management".

#### **CAMEL RATING SYSTEM**

The government policy circle, central banks that oversee commercial banks, and non-governmental policy research institutes evaluate the soundness of a saving association or bank using the internal rating system known as CAMEL. After the Federal Reserve of the United States made a proposal in 1979, the Uniform Financial Institutions Rating System (UFIRS) was put into place at financial institutions all throughout the country and eventually the world. The technique first came to the notice of people worldwide because to the acronym CAMEL. This system was created by ACCION, or Americans for Community Cooperation in other countries. The CAMEL method was created by North American bank regulators in the 1980s to assess the management and financial dependability of commercial lending institutions (Milligan, 2002). To accomplish this, enable North American financial regulators.

# SIGNIFICANCE OF CAMEL MODEL IN BANKS SUPERVISION & PUBLIC MONITORING

The effectiveness of private supervisory information in policing and overseeing financial organisations like banks has been the subject of several studies. CAMEL ratings are used to evaluate the general performance of banks if it is feasible to predict the demise of a bank. Due to the increasing level of competition on the international financial markets, this is important. It properly portrays the present conditions at banks and their entire system by utilising both on-site and off-site monitoring technologies. Its main objective is to offer a precise, trustworthy, and accurate evaluation of a bank's financial statements, condition, and performance in terms of capital adequacy, asset quality, management abilities, earnings, and liquidity management. CAMELS ratings' direct public exposure of confidential regulatory information will benefit depositors, stockholders, and investors in Bank(comptroller of currency Annual report 2013).

#### **REVIEW OF LITERATURE**

Prasuna (2004) used the CAMEL Model to analysis the performance of Indian financial institutions He looked into the performance of 65 different commercial banks during the years 2003 and 2004. According to the study, Indian banks will be in a transitional stage throughout the upcoming fiscal year. As a result, the banks will need to continue to focus on raising interest rates and other aspects of their businesses. He also came to the conclusion that customers gain from the severe competition amongst banks.

CAMEL ratings have been utilised by all financial regulatory organisations in the author's region for a sizable length of time. They discovered this while doing their investigation (Cinko and Avci (2008). The CAMEL ratings are calculated over a 15-year period, from 1996 to 2000, in this particular research effort employing a variety of financial metrics. The position of commercial banks with reference to the SDIF in 2001 was likewise predicted using these ratios. The author has therefore demonstrated that it is extremely challenging to predict a bank's transition to SDIF using CAMEL ratios.

Dash and Das (2010) used the CAMEL model to analyse the Indian banking industry. The study employed a representative sample of fifty-eight active financial banks in India, of which twenty-nine were public sector banks and twenty-nine were private sector or foreign banks. For this investigation, secondary data from 2003–2004 to 2007–2008 were used. The data used in the study, which was based on the CAMEL paradigm, comprised both financial variables and financial ratios. For foreign-run private banks to function better, be more accurate, and be more profitable, these two factors must be present. The study's results showed that the performance of private and foreign banks is superior to that of the state sector.

Khan (2011) examined mergers and acquisitions as well as other facets of India's banking sector at a time of liberalisation. The CAMEL parameter was used to compare the financial performance of the banks both before and after mergers. A number of accounting and financial measures, including "the net profit margin, return on equity, return on capital invested, operational profit margin," and others were calculated using data spanning three years to achieve this. Following the analysis, the pre-merger and post-merger ratios for the merged and acquiring banks' mean values and standard deviations were compared. The researchers came to the conclusion that mergers and acquisitions are beneficial for the development and growth of banks after examining the implications that these transactions also have on the acquiring banks.

Rozzani and Rahman (2013) employed the CAMEL Model to conduct research on Malaysia's 19 Islamic and 16 Conventional banks, examining both groups' performance. The three-year study period ran from 2008 to 2011, and the data were taken from the author's yearly reports. The analysis's conclusion - that conventional

How to cite: Deepak Saroha and Meenu Gupta. Performance Evaluation of Selected Indian Banks using the CAMEL Model: A Comparative Study of State Bank of India (SBI) and HDFC Bank. Advances in Consumer Research. 2025;2(5):475-486. and Islamic banks performed largely similarly - suggests

the possibility of cooperation between the two types of financial institutions.

Aspal and Mishra (2013) The CAMEL rating model and statistical tests like ANOVA, Kolmogorov-Smirov, and Shapirowilk are used by the study's author to assess the performance of the SBI group. After the analysis is complete, the conclusions are discussed. The author came to the conclusion that SBI deserved to be placed lower despite being significantly larger than its partner banks due to its subpar performance in terms of debtequity ratio, advances to assets ratio, and other factors. The State Bank of Patiala, the State Bank of Bikaner, and the State Bank of Jaipur, on the other hand, continued to hold the top rank because of their superior performance in terms of asset quality and liquidity management.

In the study by CA. Ruchi Gupta (2014), the author made an effort to assess the performance of Indian Public Sector Banks during a five-year period between 2009 and 2013 using the CAMEL Rating. This was done to test the theory and determine whether there was a notable variation in the means of CAMEL ratios among the various banks. The one-way ANOVA was performed, and the findings showed that there was a significant difference between the banks' mean values as determined by CAMEL ratings, at least at the 5% level of significance. The theory was shown to be incorrect by these results and the considerable changes that have occurred in India's banking industry.

Chowdhary (2014), the report's author, used the CAMEL technique to conduct a study to assess the performance of banks in both the public and private sectors. The results of the study, which used secondary data and covered the years 2009 to 2011, revealed that private-sector banks outperformed public-sector banks over the study's analytical period. This was a result of the private sector banks' rapid development.

Majumdar (2016) examined 15 Bangladeshi banks' financial results from 2009 to 2013 in his study. For this analysis, the years 2009, 2010, 2011, and 2013 were taken into account. The CAMEL model was used to conduct a study to determine which financial institutions had the highest levels of stability. Following an ANOVA on the data, average calculation, and composite ranking, the findings were presented. The study came to the conclusion that the performance of a small number of institutions has significantly varied from that of other comparable organisations. The study's findings show that in order to address these weaknesses, financial banks must take the proper changes.

Using the CAMEL method, Ramya (2017) assesses the financial performance of the State Bank of India during the course of the research period, which spans from 2012 to 2016 and includes the whole study period. When it became clear that a certain course of action was necessary to raise SBI's status in relation to a few different factors, it was agreed what kind of action should be taken. The debt-to-equity ratio, operational

profit, and the non-interest income ratio to total income are some of the metrics employed here.

Singh (2019) conducted research from 2006 to 2015 during a five-year period to evaluate the performance of India's commercial and public sector banks in terms of the degree of capital adequacy they maintained. It was discovered that, with the exception of the Central Bank of India, all of the banks were in favourable circumstances with regard to their capital sufficiency.

Panboli and Birda (2020) examined both private and public sector banks in their examination of industry performance in the years 2012-2013 and 2016-2017. "The Canara Bank, the State Bank of India, the Punjab National Bank, the Bank of Baroda, and the United Bank of India" were the five public sector banks taken into consideration for this study. ICICI, HDFC, Axis, YES, and Kotak Mahindra are the five financial institutions that fall under the private sector umbrella. The five CAMEL model criteria were used to analyse the performance of these financial institutions, and the results revealed that private-sector banks outperformed public-sector banks.

# RESEARCH METHODOLOGY **Research Objectives:**

- 1. To examine the financial performance of the State Bank of India and HDFC Bank in relation to a number of factors, such as Capital Adequacy, Asset Quality, Management, Earnings Quality, and Liquidity.
- To determine whether there is a sizable performance disparity between State Bank of India and HDFC Bank?

# **Research Hypothesis:**

- 1. H01: There is no significant difference in the performance of SBI and HDFC Bank.
- Ha1: There is a significant difference in the performance of SBI and HDFC Bank.

#### **Data Sources**

The current investigation were assembled by using the secondary data. Websites, yearly reports from financial institutions, and articles from newspapers and publications are the main sources of data. Sample Selection

The banks were selected for this study based on the current market share in their respective markets. We have selected one bank to represent the public sector, one to represent the private sector, and one to represent both sectors based on market capitalization. As a result, the State Bank of India and the HDFC bank were picked to represent the public and private sectors, respectively.

a) History and Profile of SBI: Established on July 1, 1955, the State Bank of India (SBI) is now regarded as India's most important and biggest public sector banking organization. Its main office may be found in Mumbai. As of the 31st of March 2016, SBI had 49,577 automated

- teller machines, while SBI group possessed 58,541 ATMs and 293,459 employees.
- b) History and Profile of HDFC: "Housing Development Finance Corporation Ltd." created HDFC Bank on August 30, 1994, making it one of the biggest private financial services organizations in India. HDFC Bank is a subsidiary of Housing Development Finance Corporation Ltd. Its main office is in Mumbai.

As of the 30th of June in 2016, it had a total of around 76,286 employees throughout its network of 4,541 branches and 12,013 ATMs.

#### **Data Analysis**

The performance of the financial banks was evaluated using the CAMEL Model. The various ratios that make up the model have been projected for a ten-year period for both banks, starting in 2013 and going through 2022.

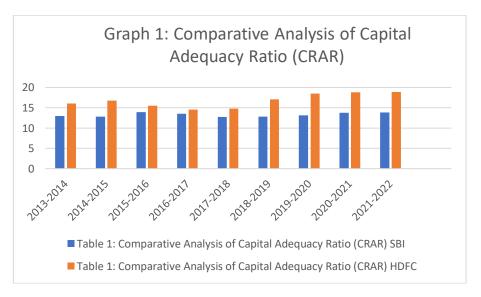
#### **Data Analysis and Interpretation**

#### A. Capital Adequacy

It establishes if the financial banks' capital bases are large enough to withstand unexpected loan losses or other eventualities. It outlines the relationship between the equity of financial institutions and their risk-weighted assets, how to grow equity, and how to evaluate how well the organisation can track loan losses. It also offers advice on how to increase equity. As is common knowledge, the CAMEL architecture's initial element is referred to as "capital adequacy." Financial institutions are able to avoid going bankrupt and go on with their profitable operations thanks to the risk against unanticipated losses provided by the availability of cash. It stands for management's capacity to report the escalating need for more capital, the makeup of the balance sheet, and a financial institution's capital admittance marketplaces and other funding sources, such as financial support from a parent holding firm. According to the RBI's recommendations, banks have to have a CAR of at least 9%. It is calculated by dividing the total capital in Tiers I and II by the aggregate value of the assets with a risk-weighted value. In order to assess if banks' capitalization levels are sufficient, ratios are utilised. The amount left over after subtracting all obligations from all assets is referred to as capital. Any loss brought on by NPAs increases the danger that banks won't be able to meet depositor demands(Johnson\_H Risk in Banking Chapter 3).

Table 1: Comparative Analysis of Capital Adequacy Ratio (CRAR)

| Year(s)   | SBI   | HDFC  |
|-----------|-------|-------|
| 2013-2014 | 12.96 | 16.07 |
| 2014-2015 | 12.79 | 16.79 |
| 2015-2016 | 13.94 | 15.53 |
| 2016-2017 | 13.56 | 14.56 |
| 2017-2018 | 12.74 | 14.82 |
| 2018-2019 | 12.85 | 17.11 |
| 2019-2020 | 13.13 | 18.52 |
| 2020-2021 | 13.74 | 18.80 |
| 2021-2022 | 13.83 | 18.90 |
| Mean      | 13.28 | 16.78 |
| Rank      | 2     | 1     |



The degree of a bank's capital adequacy offers information about the overall health of the bank's finances and how well the bank can manage any additional capital requirements. The Reserve Bank of India has enforced a 12% threshold. SBI and HDFC bank have overall capital adequacy ratios higher than the threshold ratio as shown in Table-I. On the other hand, HDFC Bank has a capital adequacy ratio much higher than the minimum required threshold. This suggests that

How to cite: Deepak Saroha and Meenu Gupta. Performance Evaluation of Selected Indian Banks using the CAMEL Model: A Comparative Study of State Bank of India (SBI) and HDFC Bank. *Advances in Consumer Research*. 2025;2(5):475–486. HDFC bank has a larger capacity to absorb losses in the event of a winding up, and as a consequence, it can provide depositors with more protection.

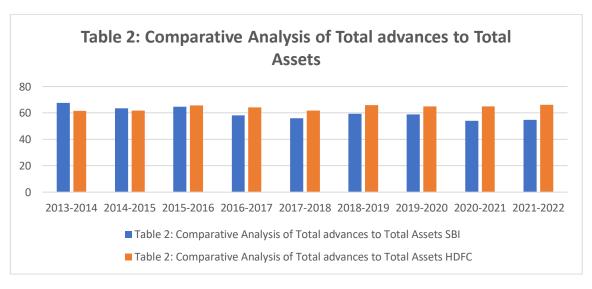
# B. Asset Quality

It examines the portfolio's risk profile as well as the efficiency of the long-term assets and serves as a gauge of the quality of the asset portfolio that banks are tasked with managing. An asset's quality. It is the CAMEL structure's second most significant component. The quality of the bank's earning assets, which largely consist of its loan and advances portfolio (which carries credit risk), investments portfolio (which carries market risk), and off-balance sheet items, is determined by their asset quality (guarantees, letters of credit, and derivative instruments, etc.). Assessing the risk linked with the advances being underpaid for some of the principal and interest is the primary objective in establishing the quality of the assets. Because the provision of loans is the primary activity of a bank, the primary source of variation in earnings is the deterioration and development in the quality of the bank's assets. It has been observed that the primary cause for the collapse of the majority of banks is poor asset quality. The variables that are taken into consideration by the supervisory and regulatory authorities during on-site monitoring and assessment of the bank's asset quality also affect the quality of the loan that is ultimately approved(C. DUDHE 2018).

- ▶ Before sanctioning the loan, a thorough evaluation of the risk involved, an examination of the terms and circumstances, and a check for adequate collateral should be analyzed.
- > The evaluation and decision of the non-performing assets, including restructured and postponed loans, susceptible to administrative and judicial action for collection.
- > To determine the likelihood of success in collecting receivables and assets that are not operating as expected.

Table 2: Comparative Analysis of Total advances to Total Assets

|           | Table 2. Comparative Analysis of Total advances to Total Assets |       |  |
|-----------|---|-------|--|
| Bank      | SBI   | HDFC  |  |
| 2013-2014 | 67.5  | 61.63 |  |
| 2014-2015 | 63.4  | 61.89 |  |
| 2015-2016 | 64.8  | 65.6  |  |
| 2016-2017 | 58.06   | 64.2  |  |
| 2017-2018 | 56.01   | 61.88 |  |
| 2018-2019 | 59.38   | 65.84 |  |
| 2019-2020 | 58.85   | 64.93 |  |
| 2020-2021 | 54.02   | 64.84 |  |
| 2021-2022 | 54.81   | 66.17 |  |
| Mean      | 59.64   | 64.11 |  |
| Rank      | 2   | 1     |  |

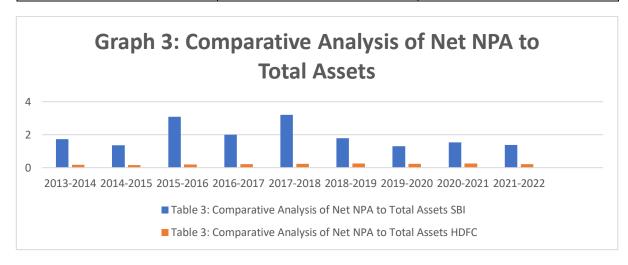


The average ratio of total advances held by HDFC Bank is greater—64.11 percent—than the ratio of total advances to total assets held by SBI, which is 59.64%. This suggests that HDFC Bank is more engaged in lending activities than SBI, which may help HDFC Bank be more profitable than SBI.

Table 3: Comparative Analysis of Net NPA to Total Assets

| Bank      | SBI  | HDFC |
|-----------|------|------|
| 2013-2014 | 1.73 | 0.17 |
| 2014-2015 | 1.35 | 0.15 |
| 2015-2016 | 3.09 | 0.19 |

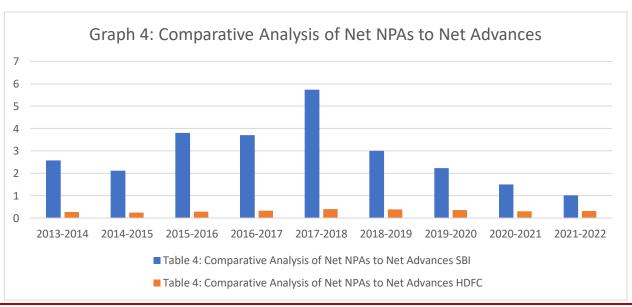
| 2016-2017 | 2.00 | 0.21 |
|-----------|------|------|
| 2017-2018 | 3.21 | 0.24 |
| 2018-2019 | 1.79 | 0.26 |
| 2019-2020 | 1.31 | 0.23 |
| 2020-2021 | 1.54 | 0.26 |
| 2021-2022 | 1.37 | 0.21 |
| Mean      | 1.93 | 0.21 |
| Rank      | 2    | 1    |



This ratio indicates the overall quality of the assets. The ratio should be as low as possible for the best progress quality. HDFC Bank has a net non-performing asset to total assets ratio of around 0.21%, while SBI bank has a net non-performing asset to total assets ratio of approximately 1.93%. This demonstrates that HDFC Bank's advances are far higher quality than those offered by SBI.

Table 4: Comparative Analysis of Net NPAs to Net Advances

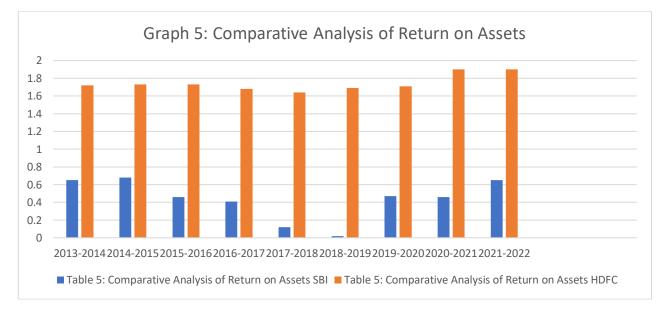
| Bank      | SBI  | HDFC |
|-----------|------|------|
| 2013-2014 | 2.57 | 0.27 |
| 2014-2015 | 2.12 | 0.25 |
| 2015-2016 | 3.81 | 0.28 |
| 2016-2017 | 3.71 | 0.33 |
| 2017-2018 | 5.73 | 0.4  |
| 2018-2019 | 3.01 | 0.39 |
| 2019-2020 | 2.23 | 0.36 |
| 2020-2021 | 1.50 | 0.3  |
| 2021-2022 | 1.02 | 0.32 |
| Mean      | 2.85 | 0.32 |



How to cite: Deepak Saroha and Meenu Gupta. Performance Evaluation of Selected Indian Banks using the CAMEL Model: A Comparative Study of State Bank of India (SBI) and HDFC Bank. *Advances in Consumer Research*. 2025;2(5):475–486. It serves as a gauge for the general quality of the bank's loan book. For HDFC Bank, the ratio of net non-performing assets (NPAs) to net loans is now 0.32%, whereas, for SBI, it is around 2.85%. This shows that compared to SBI, HDFC Bank has higher quality loans in its loan book.

Table 5: Comparative Analysis of Return on Assets

| Bank      | SBI  | HDFC |
|-----------|------|------|
| 2013-2014 | 0.65 | 1.72 |
| 2014-2015 | 0.68 | 1.73 |
| 2015-2016 | 0.46 | 1.73 |
| 2016-2017 | 0.41 | 1.68 |
| 2017-2018 | 0.12 | 1.64 |
| 2018-2019 | 0.02 | 1.69 |
| 2019-2020 | 0.47 | 1.71 |
| 2020-2021 | 0.46 | 1.9  |
| 2021-2022 | 0.65 | 1.9  |
| Mean      | 0.43 | 1.74 |
| Rank      | 2    | 1    |



This ratio is essential for determining how much money the bank makes. When compared to SBI, whose return on assets is 0.43 percent on average, the return on assets that HDFC bank generates, which is 1.74 percent, is much greater. Compared to SBI, it is possible to assert that HDFC Bank is in a more advantageous position regarding the ratio of total investments to total assets.

# C. Management Quality

The third component of CAMEL is management quality, which evaluates "the experience, standing, and technical knowledge of the management team, as well as their honesty and integrity, willingness to maintain an appropriately regulated environment, strategic planning, and ability to maintain effective internal and external leadership and monitoring." These are the important factors when analyzing the bank's performance. The efficacy of managers and staff in maximizing profit from all available earning assets while simultaneously keeping expenses under control is an evaluation of management quality. In addition, management is accountable for the overall performance of the banks and the assessment of their risk profiles. The ratios are used as a measurement tool to determine how successful and efficient the management is. It evaluates the regular performance of the board of directors, top management, and other staff resource management to determine whether or not they are carrying out the duties assigned to them. Additionally, it determines whether or not they provide their staff with the appropriate guidance and all available facilities.

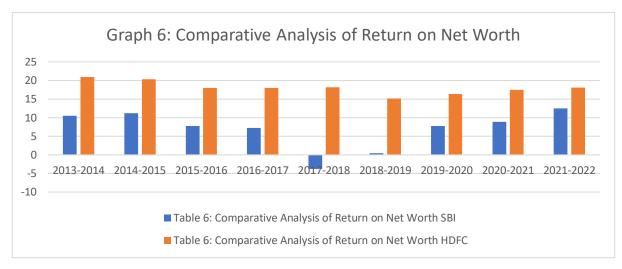
# When rating the quality of management, the following factors are taken into consideration:

- The bank's board of directors and its senior management team need to have the capabilities to analyze the bank's business operations and the risks associated with those activities, as well as the ability to devise alternative strategies for protecting the bank from any future issues.
- Management's primary job is to establish and implement the plans, policies, and procedures, MIS, effective leadership, and risk monitoring system; an effective management team must be able to cope with an everchanging financial system.

There must be effective internal and external auditing of job descriptions, reward policies, etc.

**Table 6: Return on Net Worth** 

| Bank      | SBI   | HDFC  |
|-----------|-------|-------|
| 2013-2014 | 10.49 | 20.9  |
| 2014-2015 | 11.17 | 20.36 |
| 2015-2016 | 7.74  | 17.97 |
| 2016-2017 | 7.25  | 18.04 |
| 2017-2018 | -3.78 | 18.22 |
| 2018-2019 | 0.48  | 15.2  |
| 2019-2020 | 7.74  | 16.4  |
| 2020-2021 | 8.89  | 17.5  |
| 2021-2022 | 12.53 | 18.06 |
| Mean      | 6.94  | 18.07 |
| Rank      | 2     | 1     |



# **Interpretation:**

It is the profitability of how profitable the firm. The Return on Net Worth of HDFC Bank is significantly 18.07%, which is a significant increase compared to the Return on Net Worth of SBI, which is around 6.94%. As a result, this suggests that HDFC Bank is more effective than SBI in generating higher returns on the owners' equity.

#### D. Earnings Capacity

Earnings are the most important component of CAMEL in determining a financial institution's efficiency and safety. When reviewing the performance of banks, it is helpful to raise and maintain total revenue via earnings from operations. This aids in determining the profitability of a bank as well as its long-term viability and growth. The analysis of the bank's financial performance and potential for future development includes its earnings and profitability as the fourth essential factor. Profitability is a crucial element of a bank's ongoing existence and survival. It is a quantitative indicator of management's ability to utilize assets wisely, make profits for shareholders, and preserve capital soundness. Because earnings may be used to measure return on assets, operational profits, and net profits, they are useful in assessing a company's financial performance. The risk of operational costs and the degree to which earnings are susceptible to market risks, such as interest rate risk, foreign currency risk, and market price risk, may be analyzed by analyzing them.

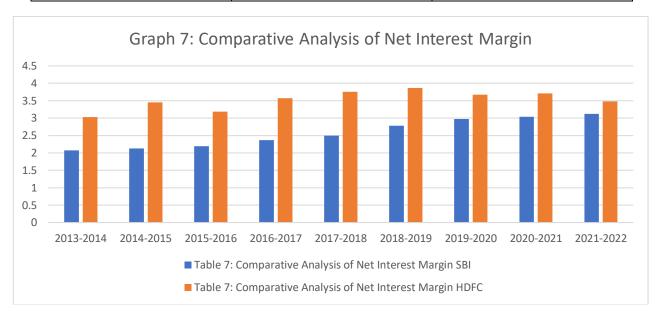
The following elements are taken into account by the supervisory and regulatory agencies when establishing the overall quality of assets:

- To analyze the undistributed profits and reserves, retained earnings, and profits, as well as their verification, to determine whether or not an acceptable amount of capital is created via this channel.
- ➤ Budgeting policies and Management Information Systems should be used to identify high-quality sources of earnings and incomes (MIS).

**Table 7: Net Interest Margin** 

| Table 7. Net interest war gin |      |      |
|-------------------------------|------|------|
| Bank                          | SBI  | HDFC |
| 2013-2014                     | 2.07 | 3.03 |
| 2014-2015                     | 2.13 | 3.45 |
| 2015-2016                     | 2.19 | 3.19 |

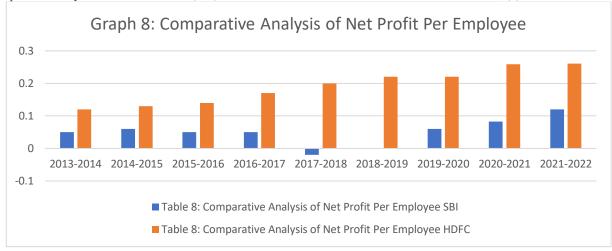
| 2016-2017 | 2.37 | 3.57 |
|-----------|------|------|
| 2017-2018 | 2.50 | 3.76 |
| 2018-2019 | 2.78 | 3.87 |
| 2019-2020 | 2.97 | 3.67 |
| 2020-2021 | 3.04 | 3.71 |
| 2021-2022 | 3.12 | 3.48 |
| Mean      | 2.57 | 3.52 |
| Rank      | 2    | 1    |



It is the profitability of how profitable the firm. The net interest margin of HDFC Bank is around 3.52, whereas the net interest margin of SBI is approximately 2.57. The difference between the two banks is significant. As a result, it can be deduced from this that HDFC Bank has a greater effective net interest margin in comparison to SBI.

Table 8: Comparative Analysis of Net Profit Per Employee

| Table 6. Comparative finalysis of feet Front Fee Employee |       |       |
|---|-------|-------|
| Bank  | SBI   | HDFC  |
| 2013-2014   | 0.05  | 0.12  |
| 2014-2015   | 0.06  | 0.13  |
| 2015-2016   | 0.05  | 0.14  |
| 2016-2017   | 0.05  | 0.17  |
| 2017-2018   | -0.02 | 0.2   |
| 2018-2019   | 0     | 0.22  |
| 2019-2020   | 0.06  | 0.22  |
| 2020-2021   | 0.083 | 0.259 |
| 2021-2022   | 0.12  | 0.261 |
| Mean  | 0.05  | 0.19  |
| Rank  | 2     | 1     |

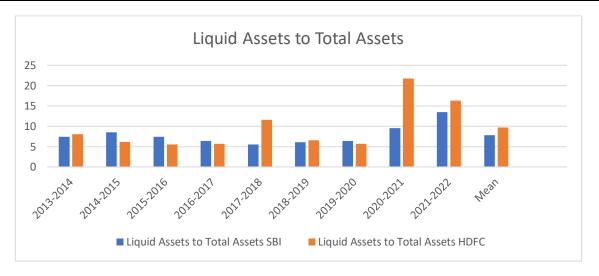


It mainly shows how profitable the firm is. The net interest margin of HDFC Bank is around 3.52, whereas the net interest margin of SBI is approximately 2.57. The difference between the two banks is significant. As a result, it can be deduced from this that HDFC Bank has a greater effective net interest margin in comparison to SBI.

E) Liquidity As is well known, the liquidity ratio identifies the threshold or upper bound at which a bank may meet its different obligations. It is a fact that we all are aware of. The level of earnings determines liquidity. Liquidity is the sixth element in the CAMEL Framework and is crucial for wealthy and underperforming banks. All banks are very concerned about their liquidity risk, which is the issue that arises when a bank is unable to meet its current financial obligations (for example, its obligations to depositors) because there are not enough current assets, such as cash and marketable securities that can be quickly converted into cash. It is very risky for banks to mismatch their lending interest rate since they generate money by enticing consumers to place their short-term savings into deposits at a lower interest rate and then lend these funds in long-term loans at a higher interest rate.

**Table 9: Liquid Assets to Total Assets** 

| Table 7. Elquid Assets to Total Assets |      |       |
|--|------|-------|
| Bank                                   | SBI  | HDFC  |
| 2013-2014                              | 7.4  | 8.05  |
| 2014-2015                              | 8.54 | 6.15  |
| 2015-2016                              | 7.41 | 5.49  |
| 2016-2017                              | 6.35 | 5.67  |
| 2017-2018                              | 5.55 | 11.55 |
| 2018-2019                              | 6.04 | 6.54  |
| 2019-2020                              | 6.35 | 5.66  |
| 2020-2021                              | 9.5  | 21.72 |
| 2021-2022                              | 13.5 | 16.29 |
| Mean                                   | 7.84 | 9.68  |
| Rank                                   | 2    | 1     |



How to cite: Deepak Saroha and Meenu Gupta. Performance Evaluation of Selected Indian Banks using the CAMEL Model: A Comparative Study of State Bank of India (SBI) and HDFC Bank. *Advances in Consumer Research*. 2025;2(5):475–486. HDFC Bank's liquid assets to total assets ratio is 9.68%, which is higher than SBI's liquid assets to total assets ratio of 7.84%, showing that HDFC Bank has a superior liquidity position than SBI. This means that HDFC Bank outperforms

SBI in terms of liquid assets to total assets ratio.

#### FINDINGS AND CONCLUSION

The two largest banks in India's public and private sectors are the "State Bank of India (SBI) and HDFC Bank". The total financial performance of the two banks has been compared using a variety of parameters that gauge their profitability, solvency, and managerial effectiveness. Both banks are effectively satisfying the necessary standards and making a profit, according to the analysis' conclusions. The results of this study show that HDFC outperformed SBI in terms of profitability and managerial performance during the course of the study period. The ability of academics and researchers to do more research on the topic will be improved as a result of this study.

In the process of examining SBI's and The results of our research led us to the conclusion that HDFC banks and other banks have used CAMEL ratios to varying degrees of effectiveness. Additionally, we came to the conclusion based on the study's findings that HDFC Bank is rated #1, followed by SBI, in terms of "capital adequacy, asset quality, management quality, earnings quality, and liquidity." However, the assets and other characteristics of these banks differ considerably, making it impossible to evaluate them just on the basis of the absolute values of the CAMEL ratios. Looking at the general pattern, we may infer that the number of private banks is rising faster than the number of public sector banks.

#### **Suggestions and Recommendations**

The following Suggestions and Recommendations have been made for the different banks under consideration:

- Both SBI and HDFC have relatively low levels of return on assets, and as a result, assets must be used more efficiently to improve the return on assets.
- SBI has a very high debt equity ratio when compared to HDFC, therefore it is recommended that SBI implement an effective approach to manage overall indebtedness.
- SBI's credit deposit ratio is somewhat lower than HDFC's, and as a result, SBI must take actions to develop a bigger proportion of lending assets from total deposits received.

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