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Comparative study on performance of State Bank of India and Canara Bank: A CAMEL model analysis

Thippeswami H
Research Scholar, Department of Studies in Commerce, Vijayanagara Sri Krishnadevaraya University, Jnana Sagara, Ballari, Karnataka, India

Abstract

Major changes took place in Indian public sector banks (PSBs) after the mammoth merger of banks due to increased competition, new information technology, etc. The study aims to compare and examine the State Bank of India's (SBI) and Canara Bank's (CNB) performance in India from 2014–15 to 2018–19 using the CAMEL Approach. The study's major findings reveal that the Canara Bank is considered the best performer in capital adequacy and liquidity. Still, it must maintain a good quality of assets, management efficiency, and earnings. Along the same line, SBI has an excellent ranking in asset quality, management efficiency, and earnings; the paper also suggested that SBI has to improve its capital adequacy and liquidity. Finally, the study concludes that no significant difference in the performance of the SBI and Canara Bank as assessed by the CAMEL Model.

Keywords: Merger and acquisitions, performance, banking, CAMEL model

Introduction

The banking system has undergone many changes, becoming more diversified and reducing the risk of entering a new business. PSBs face tough competition from private sector banks regarding profitability, operating costs, lower levels of NPAs, etc. Survival of the fittest is aptly applicable to firms functioning in liberalized economies. Banks started embracing corporate restructuring strategies to achieve economies of scale and effectively meet the competition. Corporate restructuring is a broad phrase that refers to various actions such as mergers and acquisitions, refocusing, and otherwise restructuring assets and the ownership structure of banks to accomplish long-term strategic goals. Mergers and acquisitions are very effective tools for restructuring banks in India. It is beneficial when weak banks merge with large banks to grow and expand their business. In recent years, five erstwhile associate banks of SBI and Bharatiya Mahila Bank (BMB) merged with the SBI in April 2017. With this massive merger, the SBI has not only retained its position as India's largest public sector bank but has also risen to become one of the world's top 50 lenders. Once more, Syndicate Bank and Canara Bank were merged. With a total revenue of Rs. 15.20 lakh crore and a branch network of 10,342, Canara Bank has risen to become India's fourth-largest public sector bank.

Review of Literature

Priyanka Jha and Subbaraj Natarajan (2021) [1] Using the CAMEL model, the performance of banks in the public and private sectors was compared over seven years, from 2010–2011 to 2017–2018. They utilized a sample of SBI and PNB from the public sector and ICICI Bank and Axis Bank from the private sector for their research. The study concluded that ICICI Bank is better than other banks, with Punjab National Bank rating performing poorly. Seema Pandit and Jash Gandhi (2021) [2] SBI and HDFC banks' performance was evaluated using CAMEL for seven years, from 2012–13 to 2019–20. The One-Way ANOVA approach was used to analyze secondary data for the study. The State Bank of India better managed profits and liquidity, but capital adequacy, asset quality, and management effectiveness were handled better by the HDFC Bank. Finally, it was discovered that HDFC Bank outperformed the State Bank of India. A D Mahida and S K Bhatt (2020) [3] to evaluate the performance of private-sector banks, CAMEL was employed. The paper study lasted nine years, from 2011 to 2018. Their research covered private sector institutions such as HDFC Bank, Kotak Mahindra Bank, ICICI Bank, Axis Bank, and IndusInd Bank. One-way ANOVA was used to analyze the data. According to the survey, HDFC Bank outperformed other banks, while Axis Bank rated worst. Shelly and Parmod Kumar Singhal (2020) [4] performance of India's public sector banks from 2007–

2008 to 2018–19 was examined using the CAMEL model. Simple arithmetic means and ranking algorithms were employed for data analysis. The study's conclusions show that the Indian Bank, Syndicate Bank, Bank of Baroda, and SBI outperformed all other banks in every CAMEL Model parameter. Srinivasan and Yuva Priya (2018) [5] investigated the performance of public, private, and foreign banks during three years from 2011-12 to 2013-14. Fifty-one commercial banks were chosen as a sample for their study. The study used secondary data, and One-Way ANOVA was employed to analyze the data. According to the CAMEL composite ranks, the top five banks were The Bank of Bahrain & Kuwait, HSBC Bank, The Royal Bank of Scotland, Deutsche Bank, and CTBS banks. The study's final finding is that the CAMEL ratios of the chosen banks differ statistically significantly. Mukesh Kumar Jain (2017) [6] analyzed the performance of banks in the private sector over five years, from 2013 to 2017, using the Camel model. The sample consists of two banks: Axis Bank and HDFC Bank. The study found that HDFC Bank is more efficient than Axis Bank regarding capital adequacy and earnings. Regarding asset quality, both the banks performed well, and Axis Bank performed better in managerial efficiency and liquidity than HDFC Bank. In the concluding part, it was revealed that no significant difference in net profit margin and return on assets between the select banks. Still, the selected banks significantly differed in capital adequacy ratio and return on net worth.

Need and Objective of the Study

Public sector banks have undergone numerous changes in recent years. They now compete with private sector banks regarding profitability, operating costs, and lower levels of non-performing assets (NPAs), among other things. It is observed that several studies have been carried out to examine the performance of private and PSBs on different parameters. However, none of these studies specifically addressed SBI and Canara Bank's performance. In this context, researchers felt it was necessary to examine and compare the performance of the SBI and Canara Bank using the CAMEL model. It considers a five-year study period (from 2014–15 to 2018–19).

Hypothesis

Ho1: There is no discernible performance difference between the SBI and Canara Banks using the CAMEL Model.

Research Methodology

The current research article uses the CAMEL Model to examine the performance of the SBI and Canara Banks. The current work is both analytical and descriptive. The information was gathered from SBI and Canara Bank annual reports for five years, from 2014–15 to 2018–19. The performance of banks is being evaluated using fifteen financial ratios. The simple arithmetic mean was used to get the five-year average, and SPSS's paired t-test was used to examine the data for a trustworthy result.

Discussion

The CAMEL model is based on the following parameters, those are as follows.

Capital Adequacy

It indicates a strong bank's capability to maintain capital proportionate with the risks it is exposed to in a volatile economic environment. It also reflects the capability of the bank to meet the requirement for further capital. It focuses on bank leverage and is highly crucial as it helps to protect the confidence of the stakeholders, provide the depositors with proper knowledge about the risk perception of the bank, and prevent the bank from becoming insolvent. It also deals with the ability of a bank to deal with unexpected losses. For the analysis of the capital adequacy of the selected banks, Capital Adequacy Ratio, Total Advances to Total Assets Ratio, and Government Securities to Total Investments Ratio are used in this study. The higher the selected ratios under the Capital Adequacy parameter indicate better bank performance.

Table 1: Capital Adequacy Ratios of sample banks from 2014-15 to 2018-19.

Banks	Capital Adequacy Ratio		Govt. Securities to Total Investments		Total Advances to Total Assets		Group Rank	
	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank
SBI	12.71	1	79.66	2	59.68	2	1.67	2
CNB	11.91	2	89.26	1	59.90	1	1.33	1

***Source*:** Annual Reports of SBI and Canara Bank.

Table 1 reveals that the SBI is ranked first with an annual average CAR of 12.71%, and the Canara Bank has a lower CAR of 11.91%. In the government securities to total investment ratio, the Canara Bank obtained the first rank with an average of 89.26%, followed by SBI with an average of 89.26%. In the Total Advances to Total Assets ratio, the Canara Bank secured the first rank, with an average of 59.90%, and the SBI, with an average of 59.68 percent. Regarding composite group rank, Canara Bank got the first rank with a group average of 1.33, while SBI obtained a group average of 1.67. Canara Bank was relatively better than SBI in capital management banks.

Assets Quality

In the banking business, "asset quality" refers to the amount of credit risk depending on the sort and quality of the bank's loans, advances, investments, and off-balance sheet operations. The quality of its assets influences the bank's financial stability. Calculating the NPA component as a proportion of the bank's total assets is the primary criterion for evaluating asset quality. It is obvious what kind and quality of advances the bank has made and how those advances have affected its profitability because the losses are ultimately subtracted from capital. For the analysis of the asset quality of selected banks, GNPAs to Net

Advances, NNPAs to Net Advances, and NNPAs to Total Assets ratios are used in this study. The lower the selected ratios under the asset's quality parameter indicate better asset quality in the bank.

Table 2: Assets quality ratios of sample banks from 2014-15 to 2018-19.

Banks	GNPAs to Net Advances		NNPAs to Net Advances		NNPAs to Total Assets		Group Rank	
	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank
SBI	7.53	1	3.67	1	2.16	1	1.00	1
CNB	9.06	2	5.65	2	3.38	2	2.00	2

Source: Annual Reports of SBI and Canara Bank.

Table 2 shows that the ratio of GNPAs to net advances reveals that the SBI bank came in first with an average of 7.53%, while Canara Bank came second with an average of 9.06 percent. The SBI ranks best with the lower net NPAs to net advances ratio of 3.67 percent, while Canara Bank ranks last with a higher average of 5.65%. Regarding net NPAs to total assets ratio, SBI was first with a low average of 2.16%, and Canara Bank was last with a high average of 3.38%. In composite group rank, Canara Bank came in second with a group average of 2.00, while SBI came in first with a group average of 1.00. Canara Bank has a lower asset quality than SBI.

Management Efficiency: It indicates the management's ability to correctly identify, assess, and control the risk associated with ensuring that the better-managed banks are assigned premiums and discounts to the poor ones. It also considers determination and adherence to the standards, exhibiting sound leadership qualities, and the innovative attitude of the top management to generate more business and maximize the banks' profit. For the analysis of the management efficiency of selected banks, Total Advances to Total Deposits ratio, BPE, and PPE ratios are used in this study. The higher the chosen ratios under the management efficiency parameter indicate better management efficiency in the bank.

Table 3: Management efficiency ratios of sample banks from 2014-15 to 2018-19

Banks	Total Advances to Total Deposits		BPE		PPE		Group Rank	
	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank
SBI	77.71	1	15.63	1	0.036	1	1.00	1
CNB	69.75	2	15.02	2	-0.008	2	2.00	2

Source: Annual Reports of SBI and Canara Bank.

Table 3 shows that the SBI is at the top of the list with a better average of 77.71%, and the Canara Bank is at the bottom with a lower average of 69.75 percent in the Total Advances to Total Deposits ratio. SBI is in first position with a business per employee average of 15.63, while Canara Bank is in second place with a company per employee average of 15.02. The table shows that SBI has secured first position with an average of 0.036, while Canara Bank has negative profit per employee value, i.e., -0.008. Due to its poor performance concerning all ratios, Canara Bank obtained the higher composite group rank for managerial efficiency with an average of 2.00. In contrast, SBI received the lower blended group rank with an average of 1.00. Regarding management efficiency, the SBI outperformed Canara Bank.

Earning Quality: Earnings quality is another significant parameter as it indicates not only the earnings quality of the bank but also focuses on the sustainability and growth of the bank's future earnings. It is used to determine the profitability of the banks. This ratio reflects the ability of the bank to absorb losses, expand its business, pay regular dividends to its shareholders, and develop an adequate amount of equity capital. A bank's substantial earnings help to boost the confidence of various stakeholders, including depositors, investors, creditors, and the general public. For the analysis of the earnings quality of selected banks, ROA, interest income to total income, and other income to total income ratios are used in this study. The higher the ratios chosen under the earnings quality parameter indicate better earnings in the bank.

Table 4: Earning quality ratios of sample banks from 2014-15 to 2018-19.

Banks	Return on Assets		Interest Income to Total Income		Non- Income to Total Income		Group Rank	
	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank
SBI	0.352	1	85.15	2	14.83	1	1.33	1
CNB	-0.092	2	87.69	1	12.30	2	1.67	2

Source: Annual Reports of SBI and Canara Bank.

Table 4 reveals that Canara Bank has secured the lowest position with a negative ROA value, i.e., -0.092, and SBI is in first position with an average of 0.352. Canara Bank came in first with an average of 87.69% in the interest income to total income ratio, while SBI came in second with an average of 85.15 percent. State Bank of India came out on top with a non-interest income to total income ratio of 14.83 percent, while Canara Bank came in last with a ratio of 12.30%. In the composite group rank, due to its low performance in ROA and non-interest income to total income ratio, Canara Bank was ranked second with a group average of 1.67. In contrast, SBI was ranked first with a group average of 1.33. SBI outperformed Canara Bank in earnings quality.

Liquidity

Any business dealing with money must consider liquidity because it determines the banks' capacity to meet their financial obligations. Cash and investments are a bank's most mobile assets. Only when liquidity is strong can banks meet their current financial obligations. On the other hand, banks could employ their resources more wisely if liquidity is very high. Liquidity and profitability must be appropriately managed for banks to operate at a high profit while still providing liquidity to depositors. For the analysis of the liquidity of selected banks, Total Credit to Deposits Ratio, Government Securities to Total Assets Ratio, and Quick Ratio ratios are used in this study. The higher the selected ratios under the liquidity parameter indicate a better liquidity position in the bank.

Table 5: Liquidity ratios of sample banks from 2014-15 to 2018-19.

Banks	Total Credit to Total Deposit Ratio		Government Securities to Total Assets		Quick Ratio		Group Rank	
	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank	Average (%)	Rank
SBI	79.11	1	21.17	2	13.14	2	1.67	2
CNB	70.11	2	21.81	1	26.04	1	1.33	1

Source: Annual Reports of SBI and Canara Bank.

Table 5 shows that the SBI came in first with an average total credit-to-deposit ratio of 79.11%, followed by the Canara Bank with 70.11%. With an average government security to total assets ratio of 21.81 percent, Canara Bank was placed first, while SBI Bank was ranked last with 21.17 %. Canara Bank was the best in quick ratio, with an average of 26.04%, while SBI was the poorest, with an average of 13.14 percent. Due to its poor performance in the government securities to total assets ratio and quick ratio, SBI obtained the highest rank with a group average of 1.67. In contrast, Canara Bank got the lowest rank, with a group average of 1.33. The composite group rank demonstrates that Canara Bank outperformed the SBI.

Composite ranking of SBI and Canara Bank

Table 6: Overall Composite Ranking

Banks	C	A	M	E	L	Overall Mean Values of CAMEL	Rank
SBI	1.67	1.00	1.00	1.33	1.67	1.33	1
CNB	1.33	2.00	2.00	1.67	1.33	1.67	2

Table 6 proves that the SBI outperformed Canara Bank on asset quality, management efficiency, and earnings. Canara Bank outperformed SBI in terms of capital adequacy and liquidity. According to the analysis, the SBI ranked top with an overall composite average of 1.33. In contrast, Canara Bank was ranked bottom with an overall composite ranking average of 1.67.

Paired t-test Results (Based on Overall Composite Ranking)

A Paired t-test is used on the data in Table 6 to determine if there is a statistically significant difference between the mean values of the SBI and Canara banks using CAMEL ratios.

Table 7: Paired T-test Results

Banks	Mean	SD	t-value	Sig.	Hypothesis
SBI	1.334	0.335	-1.108	0.330	Accept null Hypothesis
CNB	1.666	0.335			

Source: Computed through SPSS at a 5% level of Significance.

According to the results, Canara Bank has a larger mean value than SBI, and its p-value of 0.330 is more significant than the threshold of 0.05. The null hypothesis is thus accepted. Therefore, it is evident that there was no discernible difference between SBI and Canara Bank's performance during the research period.

Findings and Conclusion

According to the results, the Canara Bank is the top performer regarding capital adequacy and liquidity. Still, it must maintain a high standard of assets, managerial effectiveness, and liquidity. Similarly, SBI has outstanding rankings for asset quality, management effectiveness, and earnings; nonetheless, the research indicated that SBI has to increase its capital adequacy and liquidity. Consequently, the study concludes that the CAMEL Model compares the SBI and Canara Bank's performance as equal.

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