Pre & Post Merger Analysis of SBI bank through CAMEL Model

Dr. Mansi Mathur

Professor, Poornima University, Jaipur

Abstract: *Banking sector plays a vital role in the economic development but with rapid changing world, analysis of banks performance is the need of the hour. State Bank of India is the largest public sector bank in India & also the biggest player in the country. So it becomes imperative to evaluate the performance of SBI bank through CAMEL Model. The present study attempts to evaluate pre & post merger performance of SBI bank through the CAMEL Model from 2014-15 to 2018-19. It can be concluded from the study that Management efficiency, Earning quality & Liquidity of SBI have improved post merger. However, the bank needs to focus on improving its Capital adequacy ratio & Asset quality.*

Keywords: *Liquidity, Capital Adequacy, Pre-merger, Post-merger*

Introduction

The Indian Banking Sector has been a spectacular of phenomenal growth over the last five decades, especially after the nationalization of the Indian Banks in 1969. Evaluation of financial performance of the banking sector is an efficient measure and indicator to judge the soundness of economic activities of an economy. A sound banking system acts as fuel injection which stimulates economic efficiency by mobilizing savings and allocating them to high return investment. Public sector banks have taken a lead in channelizing the resources from remote rural areas to providing door step banking services". (Dudhe, 2018)

"One of such measures to evaluate the performance of banking sector is the CAMEL rating model , which was first put into effect in the U.S. in 1979, and it has been proved to be a very useful and efficient tool in response to the financial crisis for the US government in 2008". (Dang,2011).

In the 1980s, CAMEL rating system was first introduced by U.S. supervisory authorities as a system of rating for on-site examinations of banking institutions. Under this system, banking system was evaluated on five (now six) critical dimensions relating to its operations and performance, which are referred to as the component factors. **CAMEL Model** is an international bank rating system wherein the bank regulators or supervisory authorities assess an overall performance of the banks .CAMEL stands for C—Capital Adequacy, A-Asset Quality, M-Management Quality, E-Earning Quality and L-Liquidity

The five component reflects the financial performance, financial condition, operating soundness and regulatory compliance of the banking institution. A sixth component relating to sensitivity to market risk has been added to the CAMEL rating to make the rating system more risk-focused. Each of the component factors is rated on a scale of 1 (best) to 5 (worst).

The current study evaluates pre and post merger performance of SBI bank through CAMEL Method. State Bank of India (SBI) is the largest public sector bank in India. It was the first bank to be established in India as Bank of Calcutta in 1806 with headquarters in Mumbai. SBI offers a variety of products and services from savings account to gold loan and many more. SBI first merged with State Bank of Saurashtra in 2008. Two years later, State Bank of Indore was merged with it. Later with effect from 1st April,2017 five of its associate banks namely The State Bank of Bikaner & Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala and State Bank of Travancore were merged with State Bank of India. The merger of Bharatiya Mahila Bank with SBI became effective from October 1, 2017. After the merger the bank has over 24,000 branches, 59,000 plus ATMs and 195 foreign offices across 36 countries.

Reviews of Literature

The current study evaluates pre and post merger performance of SBI through CAMEL Model. The review of literature pertaining to the CAMEL Model is given below-

Gupta and Kaur (2008) conducted the study with the objective to assess the performance of Indian Private Sector Banks on the basis of CAMEL Model and gave ratings to top five and bottom five banks of India .They ranked 20 old and 10 new private sector banks on the basis of CAMEL model. They considered the financial data for the period of five years i.e., from 2003-07.

Dangwal and Kapoor (2010) conducted a study on financial performance of commercial banks in India . They compared financial performances of 19 commercial banks with respect to eight parameters and classified the banks in excellent, good, fair and poor categories.

Gowda, Anand and Kumar(2013) categorized 59 Indian banks into Public sector, Private sector, and Foreign banks. Ranking of banks was done on all the 5 parameters of CAMEL analysis for a period of 5 years from 2006-2011. Best ratios in each parameter of CAMEL model were identified and tested for the significance between Public sector, Private sector, and Foreign banks. For the purpose of this study descriptive research had been adopted.

Gupta (2014) evaluated the performance of 26 public sector banks in India using CAMEL model for a period of five years from 2009-13 using secondary data. The banks were ranked on the basis of five parameters of CAMEL model. It was concluded from the study that there is significant difference between the CAMEL ratios of all the Public Sector Banks in India, hence their level of performance was also different.

Meghani, Karri & Mishra (2015) analyzed and compared the financial position and performance of two Public sector Banks namely Bank of Baroda & Punjab National bank by applying CAMEL Model. Both the banks have succeeded in maintaining a higher Capital Adequacy Ratio than the prescribed level. Out of the 14 ratios of CAMEL model used in the study, Bank of Baroda is the best bank for (6 ratios) followed by Punjab National Bank for(5 ratios) for the time period 2010-14. It was concluded that Bank of Baroda is the best bank in the selected public sector banks.

Srinivasan & Saminathan (2016) analyzed a sample of 25 Public Sector, 18 Private Sector, and 8 foreign banks through CAMEL model. The research concluded that in the category of public sector banks, Andhra Bank, Bank of Baroda, Allahabad Bank have been ranked at the top three positions in their financial performance, whereas Tamilnad Mercantile Bank, Kotak Mahindra Bank & HDFC Bank shared the top three positions in private sector banks .In foreign banks, Bank of Bahrain & Kuwait, HSBC & The Royal Bank of Scotland held the top three positions. It was observed that there is a statistically significant difference between the CAMEL ratios of the selected Public Sector Banks, Private Sector Banks and Foreign Banks in India.

Kaur and Kaur (2016) analyzed ten years data (2004-05 to 2013-14) of ten public sector banks of India. The public sector banks were selected on the basis of their market capitalization BSE. The study concluded that Bank of Baroda and PNB are considered the most stable banks, Indian Bank and IDBI bank, Canara Bank & SBI are considered average, and the Union Bank , Bank of India, Syndicate Bank & Central Bank of India are considered below average, and should be closely monitored to ensure their viability.

Veena K & S.N. Patti (2017) in their the research paper highlighted the concept of CAMEL model and overview of ICICI Bank Ltd. It examined the pre and post merger performance of capital adequacy ratios , asset quality, earning quality, liquidity ratios and management efficiency ratios of ICICI Bank Ltd. The data had been collected from secondary sources**.** It was concluded that there has been progress in the capital adequacy and asset quality of ICICI bank post merger, but the bank failed on its management efficiency, earnings & liquidity positions .Thereby it was suggested by researchers that the bank should improve post merger on these parameters.

Dudhe (2018) in his study evaluated the performance & financial soundness of selected Private Sector Banks like ICICI,HDFC & Yes bank using CAMEL approach from 2013 to 2017 .The researcher used one way ANOVA method. It is observed that on an average ICICI held the top position & Yes Bank was at the bottom most position in the selected CAMEL ratios.

Research objectives

1. To examine SBI performance on its pre and post merger period Capital Adequacy ratios.
2. To study the SBI performance on its pre and post merger asset quality and management efficiency.
3. To assess the SBI performance on its pre and post merger earning quality and liquidity ratios.
4. To provide observations and suggestions in the light of the study

Research Method

To fulfill the objectives of the present study secondary data is the main source of information. The data were collected from the Annual Reports of SBI from 2014-15 to 2018-19. Also various national and international journals, periodic publications, working papers, books, articles etc on pre and post financial performance of Indian banking sector have been referred for the study. For the pre merger a time period of 3 years from 2014-17 & post time period of 2 years is considered for the present study. The reason for consideration of different time periods for pre & post merger analysis is unavailability of annual reports of SBI for the year 2019-20.

Data Analysis of Components of CAMEL Framework:

1) Pre & Post merger analysis of Capital Adequacy ratios of SBI .

Table 1: Capital Adequacy Ratios

Years	Capital Adequacy Ratio (%)	Debt Equity Ratio (X)	Total Advances to Total Assets (%)
Pre- Merger			
2014-15	12	14.2	0.64
2015-16	13.12	14.5	0.62
2016-17	12.85	13.5	0.58
Post- Merger			
2017-18	12.60	13.4	0.56
2018-19	12.72	14.3	0.59

Source: Annual Reports of SBI.

Table 1 depicts the Capital Adequacy Ratios. For the present study three Capital Adequacy ratios namely Capital Adequacy Ratio (CAR), Debt Equity Ratio & Total Advances to Total Assets ratio are analyzed for pre merger & post merger period.

"The Capital Adequacy Ratio, popularly known as Capital To Risk-Weighted Assets Ratio, measures a bank's financial strength by using its capital and assets. It is used to protect depositors and promote the stability and efficiency of financial systems around the world". (Investopedia)

The pre merger performance of CAR shows an increase in the ratio from 12% to 13.12% & a further decline to 12.85% from 2014-15 to 2016-17, whereas the post merger performance depicts slight improvement in the ratio from 12.60% to 12.72% from 2017-18 to 2018-19. Overall the ratio increased from 12% to 12.72%, the post merger performance was better than the pre merger performance of SBI bank ltd which is indicative of bank's better financial strength.

"The debt-to-equity ratio shows the proportion of equity and debt a company is using to finance its assets and signals the extent to which shareholder's equity can fulfill obligations to creditors, in the event of a business decline". (Investopedia). The ratio declined in pre merger time period from 14.2% to 13.5%. A low debt-to-equity ratio is indicative of less dependency on debt as compared to equity in financing its assets, thereby reducing the potential risk. The ratio shows an increasing trend from 13.4% to 14.3% from 2017-18 to 2018-19, indicating increased reliance on debt for financing. The pre merger performance for the ratio is better than its post merger performance. Overall the ratio has remained almost the same increasing from 14.2% to 14.3%, thereby indicating bank's increased reliance on debt to finance its assets.

Total Advances to Total Assets ratio indicates a bank's aggressiveness in lending which results in better profitability. Higher ratio is preferred to a lower ratio in banking sector. The pre merger performance shows a declining trend from 0.64% to 0.58% (2014-15 to 2016-17) which indicates bank being less aggressive in lending, however post merger performance improved from 0.56 % to 0.59 %(2017-18- 2018-19) ,hence the post merger performance is better than pre merger performance for this ratio. Overall the ratio declined from 0.64% to 0.59

Table 2: Asset Quality Ratios

Years	Net NPA ratio (%)	Gross NPA ratio (%)	Slippage Ratio (%)
Pre merger			
2014-15	2.12	4.25	2.36
2015-16	3.81	6.50	4.81
2016-17	5.19	9.11	5.78
Post- Merger			
2017-18	5.73	10.91	4.85
2018-19	3.01	7.53	1.60

Source: Annual Reports of SBI Bank.

Table 2 depicts the Asset Quality ratios of SBI bank. The Asset Quality ratio's are categorized into 3 ratios namely Net NPA ratio, Gross NPA ratio & Slippage ratio.

An NPA are the assets for which interest is overdue for more than 90 days. Net non-

1) Pre & Post merger analysis of Asset Quality ratios of SBI

performing assets have significant impact on profitability and liquidity of a bank. Low liquidity signifies that the bank does not have enough cash to meet its obligations when they fall due. Also one of the reasons of increasing NPA can be due to low provisions of unpaid debt. The Net

NPA ratio is used for analyzing the overall quality of the bank's loan.

The Table shows an overall fluctuating trend in the net NPA ratio of SBI. The premerger performance is not good as there is continuous increase in the ratio from 2.12% to 5.19% (2014-15 to 2016-17) indicating increasing bad quality of loans. The post merger performance is better than pre merger performance as the ratio declined from 5.73% to 3.01% (2017-18 to 2018-19), suggesting better credit appraisal and post-sanction monitoring by the bank. Overall the ratio has increased from 2.12% to 3.01% (2014-15 to 2018-19).

Gross non-performing assets are the total amount of the debts that the bank has failed to collect which involves both the principal and interest amount of the loan. Reasons for Gross NPA can be poor government policies, industrial sickness, natural calamities, willful defaults and ineffective recovery tribunal etc. The premerger performance is not good as there is continuous increase in the ratio from 4.25% to 9.11% (2014-15 to 2016-17) indicating banks inability to recover the loans from its customers**.** It also has bad effect on the goodwill of the bank and its equity value Bad equity value makes it difficult for the banks in attracting investors due to low return on investment and share value, however the post merger performance is better than pre merger performance as the ratio declined from 10.91% to 7.53% (2017-18 to 2018-19), suggesting better recovery management by the banks. However the overall the ratio has increased from 4.25% to 7.53% (2014-15 to 2018-19).

The slippage ratio is the rate at which good loans are turning bad. Banking regulators use this ratio for rating of the bank. Fresh accretion of NPAs during the year is a slippage. The premerger performance is showing a sharp rise in slippage ratio from 2.36% to 5.78% (2014-15 to 2016-17) .There is a slippage of 3.42 % in the pre merger time due to fresh accumulation of bad loans. It has a bad impact on provisioning for NPA's and net profit of the bank. The post merger performance has tremendously improved from 4.85% to 1.60%.A Lower slippage ratio indicates that asset qualities are better managed by the bank which brings in more liquidity, greater risk capacity and a lower cost of funds. Overall the slippage ratio has declined from 2.36% to 1.60%.

3) Pre & Post Merger Analysis of Management Efficiency Ratio's of SBI

Table 3: Management Efficiency Ratios

Years	Profit Per Employee (Rs in 000)	Credit Deposit Ratio (%)	Return On equity (%)
Pre- Merger			
2014-15	602	82.4	11.17
2015-16	470	83	7.74
2016-17	511	73	7.25
Post-Merger			
2017-18	-243	72	-3.78
2018-19	33	75.7	0.48

Source: Annual Reports of SBI

Under Management efficiency parameter of CAMEL model**,** table 3 depicts three ratios namely Profit per Employee, Credit Deposit Ratio & Return on equity ratio

Profit per employee indicates not only the profitability/performance of banks, but also shows the efficiency of its employees. Profit per employee is measured in Rs.(000) .The pre merger performance for the ratio is bad as it declined from Rs 602 to Rs 511 (2015-17), however there has been improvement from Rs. 470 (2015-16) to Rs 511 (2016-17), the decline indicates low efficiency of banks employee in generating profits for the bank. The situation has worsened in post merger with profit per employee being Rs-243 in 2017-18, with a huge dip in profitability/ performance of the bank; however the bank recovered from this situation in 2018-19 & registered a positive profit per employee of Rs33. It also indicates how efficiently the management is able to utilize their employee potential in workings of bank & earn profit.

The overall performance of was better in post merger time period in comparison to pre merger time period**.**

Credit Deposit Ratio indicates the efficiency of management in utilizing its deposits for lending purposes. Generally a Credit Deposit Ratio of 60% is considered as an ideal ratio. The ratio has continuously declined from 82.4% to 73% from 2014-15 to 2016-17, with a marginal improvement from 82.4% to 83% (2014-15 to 2015-16). The pre merger performance indicates declining trend in banks utilization of deposits for lending purposes. The ratio has further dipped to 72% in post merger time period in 2017-18, with an improvement to 75.7% in 2018-19. Overall the ratio has declined from 82.4% to 75.7% (2014-15 to 2018-19). The post merger performance is better than pre merger performance.

Return on Equity measures how effectively a bank can utilize the contributions of equity investors to generate additional profits and return the profits to investors at an attractive level . The premerger performance is a dismissal as the ratio has continuously declined from 11.17% to 7.25% (2014-15 to 2016-17). Indicating lower profitability & efficiency of Banks, Generally investors prefer to invest in the banks with higher ROEs. The post merger performance has worsened with negative ratio of -3.78 %, with a improvement to 0.48% in 2018-19. The post merger performance was better than pre merger performance. There is an overall decline in the ratio from 11.17% to 0.48% which is indicative of very low efficiency of banks in utilizing the contributions of investors for generating additional profits and return the profits to investors at an attractive level**.**

4) Pre & Post Merger Analysis of Earning Quality Ratios of SBI

Table 4: Earning Quality Ratios

Years	Return On Assets (%)	Earnings per share (Rs)	Operating Profit to Total Assets (%)
Pre- Merger			
2014-15	0.63	17.55	-0.46
2015-16	0.42	12.98	-0.75
2016-17	0.38	13.43	-0.92
Post-Merger			
2017-18	-0.18	-7.67	-1.48
2018-19	0.02	0.97	-0.93

Source: Annual Reports of SBI

The table 4 depicts Earning Quality Ratio's of bank for the pre merger as well as post merger time period**.**

Return on Assets (ROA) is one of the most important performance indicators for measuring the performance of the banks. The pre merger performance of SBI is a dismissal, as the ratio has continuously declined from 0.63 % to 0.38% (2014-15 to 2016-17). The low ratio is an indication that bank is not efficiently able to use its assets for generating earnings. Generally an ROA of 1% or more is considered as good. The performance has worsened in the post merger period & the ratio became negative, however it has improved from -0.18% to 0.02% (2017-18 to 2018-19). Overall the ROA of the bank has declined**.**

Earnings per share or EPS is a financial measure, which indicates the profitability of a bank. The term holds great importance to investors and people who trade in the stock market. A higher, earnings per share of a bank, indicates better profitability of banks & vice versa**.** EPS has declined from Rs.17.55 to Rs 13.43 during the pre merger, which indicates decline in banks profitability. There was further dip in EPS to -7.67 in the post merger period of 2017-18 but improved to Rs 0.97 in 2018-19. Overall the EPS has declined from 17.55% to 0.97%.

Operating profit to Total assets shows the bank's operating income that is generated per rupee invested in its assets. The ratio is negative in both pre & post merger time period. The negative ratio indicates bank's ineffectiveness in its business operations and the profitability of assets used. The pre merger performance is worse with ratio declining from -0.46% to -0.92% (2014-17), the ratio remained negative in post merger time but improved from -0.46% to -0.93%(2017-19). Overall the ratio has worsened from -0.43% to -0.93%.

5) Pre & Post Merger Analysis of Liquidity Ratio's of SBI

Table 5: Liquidity Ratios

Years	Current Ratio (%)	Quick ratio (%)	Cash deposit ratio (%)
Pre Merger			
2014-15	0.74	11.02	6.76
2015-16	0.88	10.89	7.42
2016-17	0.99	11.94	6.82
Post- Merger			
2017-18	1.36	13.83	5.86
2018-19	1.83	18.06	5.83

Source: Annual Reports of SBI

Liquidity ratios are of great importance to banks as they tell that whether a bank would be able to fulfill its short-term obligations or not .Table 5 depicts the liquidity ratio's under the liquidity component of CAMEL model.

The Current Ratio is indicative of whether the bank has sufficient cash and cash-equivalents to cover its short-term obligations or not. The current ratio performance has improved in pre merger (2014-15 to 2016-17) from 0.74 to 0.99. The improvement in the ratio continued from 1.36 to 1.83 in post merger indicating better liquidity position of bank in comparison to pre merger time period .Also the ratio is above 1 indicating bank's ability in fulfilling its short-term liabilities. The post merger performance has been better than post merger. Overall the current ratio has improved from 0.74to 1.83.

Quick ratio / Acid-test ratio, measures bank's ability to repay its outstanding liabilities only with those assets which can be quickly converted into cash. Such assets can be cash, cash equivalents, marketable securities, short-term investments, and current account receivables.

SBI bank Quick ratio is more than 1 in both pre & post merger time period. It is a healthy sign for banks liquidity position as it will not be required to sell its long term current assets to pay off its current liabilities. It also indicates that bank has adequate liquid assets to pay off its current liabilities and vice versa. Pre merger performance shows slight improvement in the ratio from 11.02% to 11.94 %(2014-15 to 2016-17), with a dip to 10.89% in 2015-16. The post merger performance is better than pre merger performance, the ratio significantly increased from 13.83% to 18.06%

(2017-18 to 2018-19). Overall the quick ratio has increased from 11.02% to 18.06%, indicating a good liquidity position of bank, but a very high ratio also implies that cash has accumulated but is not reinvested to any productive use.

Cash Deposit ratio (CDR) measures how much a bank lends out of the deposits it has mobilized. The ratio has increased from 6.76% to 6.82% (2014-17) during pre merger , however the ratio has declined from 7.42% to 6.82% , which is a positive sign thereby indicating better management of cash in terms of physical handling of cash at branches mainly due to improved telecommunication system and facilities provided by RBI. The ratio has further performed well in post merger by declining from 5.86% to 5.83% (2017-19). Over the years payment and settlement system has improved thereby strengthening functioning of financial markets. The Reserve Bank has eased the flow of credit through NEFT, RTGS etc thereby the cost of funds and borrowings can be reduced.

Findings of the Study

1) Capital Adequacy Component

The pre merger performance of Capital Adequacy ratio shows variations in ratio with increase in ratio from 12% to 13.12 % & decline to 12.85% %(2014-17) .Whereas the post merger shows slight improvement in the ratio from 12.60% to 12.72% (2017-19). The post merger performance is better than pre merger.

The pre merger performance showed declining trend for the debt equity ratio from 14.5% to 13.5% (2014-17). Post merger performance registers an increasing trend from 13.4% to 14.3% (2017-19). The pre merger performance is better than post merger.

Total Advances to Total Assets ratio , pre merger performance shows a declining trend from 0.64% to 0.58% (2014-17) which indicates bank being less aggressive in lending, however post merger performance improved from 0.56 % to 0.59 %(2017-18- 2018-19) ,hence the post merger performance is better than pre merger performance for this ratio. Overall the ratio declined from 0.64% to 0.59%.

2) Asset Quality Component

The premerger performance of Gross NPA ratio is not satisfactory as there is continuous increase in the ratio from 4.25% to 9.11% (2014-17) . The post merger performance is better than pre merger as the ratio declined from 10.91% to 7.53% (2017-19),the post merger performance is better than pre merger, the overall the ratio has increased from 4.25% to 7.53% (2014-15 to 2018-19).

The Net NPA ratio premerger performance is not good as there is continuous increase in the ratio from 2.12% to 5.19% (2014-15 to 2016-17) . The post merger performance is better than pre merger performance as the ratio declined from 5.73% to 3.01% (2017-18 to 2018-19), Overall the ratio has increased from 2.12% to 3.01% (2014-15 to 2018-19).

The pre merger performance depicts a sharp rise in slippage ratio from 2.36% to 5.78% (2014-17) .There is a slippage of 3.42 % in the pre merger time due to fresh accumulation of bad loans , however post merger performance has tremendously improved from 4.85% to 1.60%.(2017 to 19)

3) Management Efficiency Component

The overall pre merger performance for the Profit per employee is bad as it declined from Rs 602 to Rs 511 (2015-17), however there has been improvement from Rs. 470 (2015-16) to Rs 511 (2016-17), The situation has worsened in post merger with profit per employee being Rs-243 in 2017-18 however the bank recovered from this situation in 2018-19 & registered a positive profit per employee of Rs33. The overall performance of post merger is better than pre merger as there has been drastic improvement in Profit per employee.

The Credit deposit ratio has continuously declined from 82.4% to 73% (2014-15 to 2016-17), with a marginal improvement from 82.4% to 83% (2014-15 to 2015-16). The ratio has further dipped to 72% in post merger in 2017-18, with an improvement to 75.7% in 2018-19. Overall the ratio has declined from 82.4% to 75.7% (2014to19). The post merger performance is better than pre merger.

The premerger performance is a dismissal as the Return on Equity ratio has continuously declined from 11.17% to 7.25% (2014-17), the post merger performance is even worse with negative ratio of -3.78 %, with improvement to 0.48% in 2018-19. The post merger performance is better than pre merger due to improvement on the ratio.

4) Earning Quality Component

The pre merger performance of SBI for the Return on Assets ratio is a dismissal, as the ratio has continuously declined from 0.63 % to 0.38% (2014-17). The performance has worsened in the post merger period & the ratio became negative, however it has improved from -0.18% to 0.02% (2017-18 to 2018-19). Overall the ROA of the bank has declined.

EPS has declined from Rs.17.55 to Rs 13.43 during the pre merger, which indicates decline in banks profitability. There was further dip in EPS to Rs -7.67 in the post merger period of 2017-18 but improved to Rs 0.97 in 2018-19.

Operating profit to total assets ratio has been negative in both pre & post merger time periods. The pre merger performance is worse with ratio declining from -0.46% to -0.92% (2014-17), the ratio remained negative in post merger time but improved from -1.48% to -0.93%(2017-19). Overall the ratio has worsened from -0.43% to -0.93%.

5) Liquidity Component

The current ratio performance has improved in pre merger time (2014-17) from 0.74 to 0.99. The improvement in the ratio continued from 1.36 to 1.83 in post merger. The post merger performance has been better than pre merger.

SBI bank quick ratio is more than 1 in both pre & post merger time period. Pre merger performance shows slight improvement in the ratio from 11.02% to 11.94 %(2014-15 to 2016-17) , with a dip to 10.89% in 2015-16. The post merger performance is better than pre merger performance, the ratio significantly increased from 13.83% to 18.06% (2017-19). Overall the quick ratio has increased from 11.02% to 18.06% from 2014-15 to 2018-19.

Cash Deposit ratio (CDR) shows increasing trend from 6.76% to 6.82% from 2014-15 to 2016-17, however in between ratio has declined from 7.42% to 6.82%. The cash deposit ratio has further performed well in post merger time by declining from 5.86% to 5.83% (2017-19).the post merger performance is better than pre merger.

Suggestions

The SBI needs focus on increasing its capital adequacy ratio, to boost confidence in the investors & maintain its financial stability**.** Post merger the Debt equity ratio of bank shows increasing trend , which needs to be reduced . Total Advances to Total Assets ratio has improved during post merger period, but bank should focus on becoming more aggressive in lending.

With increasing Gross NPA, Net NPA & Slippage ratio during pre merger the performance of the bank had been bad. However there had been marked improvement in post merger performance, however the bank need give due importance to the management of its assets since, quality of assets is an important parameter to measure the degree of its financial strength.

In terms of efficiency ratios the banks is required to improve upon its profit per employee ratio, by increasing the efficiency of its employees. The bank should try to improve the quality of its core banking activities i.e., from lending activities in order to increase income. This would help the bank to increase its Credit Deposit ratio. Also Investors expects good return from the bank, the ratio has been negative at one point of time, and efforts should be made to improve the Return on Equity, to instill greater confidence in its investors.

The bank's ROA has been continuously declining & at one point of time it has been negative. The bank should make efforts to reduce the asset costs & increase its revenue. EPS has been depicting a declining trend; the bank should focus on improving it, as a better ratio instills confidence in the investors. Operating profit to total assets ratio has been negative in both pre & post merger time periods. To improve the ratio bank should assess how effectively it is utilizing its assets to generate profits. A low or negative ratio indicates that the bank has overinvested in assets which are not contributing to profit, thereby making the bank less appealing to its lenders and shareholders.

The bank has performed well on liquidity parameter, be it Current ratio, Quick ratio or Cash Deposit ratio. This would help the bank to meet its cash and collateral obligations without incurring considerable losses. Also a better liquidity management by the bank will help reduce liquidity risk exposure.

Conclusion

Indian banks are untouched with growing trend of economic liberalization and globalization , over the years Indian government have introduced various banking sector reforms to improve the operational efficiency and financial health of banks . But today Indian banking sector has become more complex. To assess the Pre & Post merger performance of SBI bank we have chosen CAMEL Model. From the analysis in the study, it can be concluded that Capital Adequacy ratios have improved post merger except Debt Equity ratio & the asset quality of bank has deteriorated post merger except for the improvement in slippage ratio, however the Management efficiency, Earning quality & Liquidity component have improved post merger.

References

K.P, Veena , and S.N. Patti. "Pre and Post Merger Performance through CAMEL Rating Approach: A Case Study of ICICI Bank Ltd."*International Journal of Engineering and Management Research* 7(2017): 84 -92. Print.

Kaur, Jagjeet, and Harsh Vineet Kaur. "Camel analysis of selected public sector banks." *Gian Jyoti E-Journal* 6(2016):1-25.Online.

Dudhe, C. "A Selective Study: Camels Analysis of Indian Private Sector Banks." *International Journal of Engineering and Management Sciences* 3(2018) : 277-283.Print

Saminathan , Yuva Priya, and Srinivasan. "A Camel Model Analysis of Public, Private and Foreign Sector Banks in India." *Pacific Business Review International* 8(2016): 45-57.Print

Gowda B, Channaveere, M, Anand and Arun Kumar**.** "Bank Performance In India: A Study Based On Camel Framework." *International Journal of Banking, Risk and Insurance* 1(2013): 24-35.Online

Gupta , Ruchi. "An Analysis of Indian Public Sector Banks Using Camel Approach" *IOSR Journal of Business and Management* 16(2014):94-102.Online and Print

Kumar, Vinod and Bhawna Malhotra. "A Camel Model Analysis Of Private Banks In India" *EPRA International Journal of Economic and Business Review* 5 (2017):87-98. Online and Print

Rahman, . Zahidur and Shohidul Islam. "Use of CAMEL Rating Framework: A Comparative Performance Evaluation of Selected Bangladeshi Private Commercial Banks" *International Journal of Economics and Finance* 10(2018): 120-128.Online