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Financial Ratio Analysis to Assess the Merger of State Bank of India and Associate Banks

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Abstract: ***In this study, the financial performance of State Bank of India (SBI) after the merger (2017) with its associate banks and Bhartiya Mahila Bank has been analyzed. The financial statements of SBI for five years (2015-19) were used to calculate 19 financial ratios and comment on the merger. The study also briefly discusses the issue of non-performing assets (NPAs) for the combined entity. Ratio analysis is frequently employed by stakeholders and potential investors in financial decision processes. The results of this study show that the performance of SBI in terms of profitability, liquidity and return on investments has been satisfactory before the merger came into effect, however, the condition has been unfavorable in the initial years following the merger.***

Keywords: Ratio analysis, State Bank of India, Merger, NPAs

1. Introduction

Several studies have been performed to analyze the heterogeneous effects of mergers on the bank's profitability post-merger. Rhoades (1993) researched on impact of the merger in the banking industry on efficiency and profitability considering both domestic and global mergers. This research analyzed the cost and profitability of 33 bank-to-bank mergers and showed that the domestic mergers favor cost efficiency whereas the global ones don't. However, improvement in profitability is considered by both. [1] Resti (1998) concluded that the efficiency of merged banks has increased in years post-merger and it is especially true when the deal occurred between two banks operating on the same local markets and when the size of the new entity was not too big. [2]

Healy, Palepu & Ruback (1992) cited a research paper on the impact of mergers and amalgamation on the performance of companies. Theoretically, it is assumed that mergers increase market power, synergy impact, and other quantitative and qualitative factors. After analyzing 40 Indian companies, this study shows that in India mergers failed to contribute positively to performance improvement. [3] Mantravadi & Reddy (2008) studied the impact of mergers on the operating performance of acquiring corporations in different industries in India. It showed a positive effect of the merger on the profitability of firms in the banking and finance industry. [4] Financial analysts and investors use the technique of ratio analyses to assess the financial position of the company. Kemal (2011) used the technique of ratio analysis to study the post-merger profitability of Royal Bank of Scotland in Pakistan. Despite limitations, accounting ratios are still considered as a reliable analytical tool. [5]

India's largest public sector bank, State Bank of India (SBI), merged with five associate banks, namely State Bank of Bikaner and Jaipur (SBBJ), State Bank of Hyderabad (SBH), State Bank of Mysore (SBM), State Bank of Patiala (SSBP), State Bank of Travancore (SBT), and Bhartiya Mahila Bank (BMB) in 2017. Two of the associate banks, SBT and SBM had posted losses for the quarter ending 31st December 2016, while others were profitable before the merger. [6]

The proposal of the merger in 2016 led to wide speculation as SBI and three of the associate banks to be merged were listed on stock exchanges. Shares of SBI and its listed associate banks (SBBJ, SBM, SBT) gained on the back of approval from the cabinet for their merger. The next day after approval, at opening SBI was up by 1.69% on BSE. SBBJ, SBM, SBT jumped 4.8%, 4.87%, 5.38% respectively. [7] These gains depict the belief of investors in the merger, despite the issue of bad loans in the Indian Banking sector.

The board of SBI had identified three sources of benefits from the merger: a) The reduction of cost-to-income ratio by one percentage point; b) Better performance by a combined treasury; c) Higher margins due to lower costs of deposits. [8] Analysts were cautious about the proposed merger, with some suggesting a negative impact initially. "The immediate negative impact will be from harmonization of accounting policies for NPA recognition," said Alpesh Mehta from Motilal Oswal Financial Services Ltd. [8] "Even if we build in the management's expected synergies in our estimates, the impact on the combined entity's RoA and RoE do not appear significant at this stage," wrote Ambit analysts. [8]

This study aims to analyze the financial ratios of the State Bank of India and comment on the merger.

2. Methodology

This study makes use of financial ratios to analyze the immediate impact of the merger on State Bank of India. The financial ratios are widely used by company stakeholders and potential investors to assess the health of the company and these are important parameters in most corporate decisions and future planning.

To calculate the financial ratios, audited balance sheets, and profit & loss accounts of SBI were obtained from the annual reports available publicly on SBI's website. Data of a total of 5 years were analyzed - starting from FY 2014-15 to the latest available data of FY 2018-19.

A total of 19 financial ratios were analyzed which can be primarily categorized into five categories; (a) Liquidity Ratios, (b) Solvency Ratios, (c) Profitability Ratios, (d) Return on Investment Ratios, and (e) Income to Asset Ratios. The cost-to-income ratio was also analyzed, which is an important tool, particularly for banks. The values of these ratios were calculated using the five years' data of the State Bank of India. For the purpose of comparison of the bank's health before and after-merger, the ratios have been averaged out. Although averaging financial ratios might give deceptive results, the fact that ratios followed similar trends before and after the merger can be used to justify averaging.

3. Results and Discussion

3.1 Ratio Analysis

The liquidity ratios (Table 1) didn't vary significantly due to the merger in 2017. Current ratio has slightly decreased whereas there was a minute increase in the Quick Ratio. This is mainly because assets and liabilities of the associate banks also held significant value.

Table 1: Liquidity Ratios of SBI (2014-19)

Ratio	2014-15	2015-16	2016-17	2017-18	2018-19	Pre-merger average	Post-merger Average
Current Ratio	1.062	1.06	1.058	1.055	1.053	1.06	1.054
Quick Ratio	0.134	0.139	0.129	0.129	0.141	0.134	0.135

Broadly, two solvency ratios (Table 2) have become better post-merger and two ratios were better pre-merger. The small improvement in Total Debt to Total Asset Ratio and Total Debt to Total Equity Ratio can be attributed to a larger combined treasury. However, the Interest Coverage ratio showed a significant change- From a positive value to negative, this can be attributed to high losses in the years following merger. Overall, the solvency ratios indicate that the bank was operating better pre-merger.

The profitability ratios (Table 3) show a clear trend of a better performance of SBI pre-merger. SBI was profitable pre-merger, however, losses were encountered in years following the merger. Two of the erstwhile associate banks, namely SBT and SBM, were already posting losses before the merger. The issue of NPAs was a major contributor. The operating profit of SBI was already negative pre-merger and the situation worsened post-merger. There has been improvement in 2018-19, however, the situation is still worse as compared to that pre-merger.

Table 2: Solvency Ratios of SBI (2014-19)

Ratio	2014-15	2015-16	2016-17	2017-18	2018-19	Pre-merger average	Post-merger Average
Interest Coverage Ratio	0.135	0.093	0.092	-0.089	-0.092	0.107	-0.091
Total Debt to Total Asset Ratio	0.1	0.137	0.117	0.105	0.109	0.118	0.107
Proprietary Ratio	0.063	0.061	0.07	0.063	0.06	0.065	0.062
Total Debt to Total Equity Ratio	1.597	2.241	1.687	1.653	1.824	1.842	1.739

Table 3: Profitability Ratios of SBI (2014-19)

Ratio	2014-15	2015-16	2016-17	2017-18	2018-19	Pre-merger average	Post-merger Average
Net Profit Margin (%)	8.59	6.06	5.97	-2.96	0.35	6.873	-1.305
Operating Profit Margin (%)	-6.21	-10.9	-14.23	-23.19	-14.14	-10.45	-18.665
Return on Assets (%)	0.63	0.42	0.38	-0.18	0.02	0.477	-0.08
Return on Equity (%)	10.2	6.89	6.69	-3.37	0.39	7.927	-1.49

Table 4: Return on Investment Ratios of SBI (2014-19)

Ratio	2014-15	2015-16	2016-17	2017-18	2018-19	Pre-merger average	Post-merger Average
Earnings per share (Rs.)	17.55	12.98	13.43	-7.67	0.97	14.653	-3.35
Dividend/ Share (Rs.)	3.5	2.6	2.6	0	0	2.9	0
Operating Revenue/ Share (Rs.)	204.13	211.16	220.13	247.07	272.13	211.807	259.6
Net profit /Share (Rs.)	17.55	12.82	13.15	-7.34	0.97	14.507	-3.185

Since the bank encountered losses post-merger, the earnings per share and net profit per share decreased by a large factor and moved into the negative spectrum, which is a red flag for potential investors. The operating revenue of the bank increased after merger as several branches were shut down due to duplication. Notably, no dividends were issued after 2017. Thus, from a return on investment point of view (Table 4), the bank was in a much better situation pre-merger.

The income to asset ratios (Table 5) is often calculated to assess the health of banks specifically. There is a clear indication of the bank being in a better situation before merger. The total assets of the erstwhile associate banks merged into the State Bank of India, but the impact didn't reflect into the income from interest and other sources.

Table 5: Income to Asset Ratios of SBI (2014-19)

Ratio	2014-15	2015-16	2016-17	2017-18	2018-19	Pre-merger average	Post-merger Average
Interest Income/ Total Assets (%)	7.44	6.95	6.48	6.38	6.59	6.957	6.485
Non-Interest Income/ Total Assets (%)	1.1	1.18	1.31	1.29	0.95	1.197	1.12
Operating Profit/ Total Assets (%)	-0.46	0.75	-0.92	-1.48	-0.93	-0.71	-1.205
Operating Expenses/ Total Assets (%)	1.85	1.77	1.71	1.73	1.89	1.777	1.81

The cost to income ratio (Table 6) is calculated by dividing the operating expenses by the operating income generated.This ratio gives a view of the efficiency by which the bank is being run. The higher the ratio, the lower is the efficiency and profitability. An increase in this indicates potential problems at the bank, i.e., the costs aren't generating income equivalently. The ratio increased after the merger and hence indicates that the profitability was higher before merger. The same has been verified by the profitability ratios.

Table 6: Cost to Income Ratio of SBI (2014-19)

Ratio	2014-15	2015-16	2016-17	2017-18	2018-19	Pre-merger average	Post-merger Average
Cost to Income Ratio (%)	36.85	39.14	41.15	47.52	44.68	39.047	46.1

3.2 The issue of NPAs

The merger took place at a time when the entire Indian banking sector was under stress due to high growth of Non-performing assets (NPAs), which are basically bad loans. The Gross NPAs of SBI were INR 177,866 cr in FY2017, out of which INR 65,523 cr came from the erstwhile associate banks. [9] As per RBI regulations, the banks need to set aside a portion of their profit as provisions for the bad loans. This directly impacts the profitability of banks and the overall performance. The issue of bad loans was raised by a number of researchers and analysts [10]- [13], however, SBI kept reassuring that it will take necessary actions to deal with this issue.

Internally, SBI formed a Stressed Assets Resolution Group (SARG), which works specifically for resolution of high value NPAs. SARG introduced mega e-Auction of many properties on Pan-India basis. Despite these efforts, the bank was able to recover only INR 7000 cr of bad loans in FY2018. [9] The NPAs have reduced slightly over the years, totaling to INR 1,72,750 cr in FY2019, however this remains a major issue for the entire banking sector. [14]

4. Conclusion

The financial ratio analysis indicates State Bank of India in better financial health before the merger. In the two years following the merger, losses have been reported by the bank and no dividends have been paid out to the shareholders. Moreover, the cost-to-income ratio has also increased, indicating a decline in profitability. Thus, it can be concluded that the merger hasn't shown any positive impact in the initial years, neither for the existing shareholders nor for the potential investors. The bank also needs to deal with the issue of bad loans, which hasn't improved lately. However, the large working capital employed by the bank and cash in hand available, reinforced by the increase in operating revenue and workforce, are indicators that the bank might perform well in the upcoming years after the initial negative impacts of the merger have faded away.

5. Future Scope and Limitations of Study

It should be noted that the merger came into effect just over three years ago and it might be too early to comment on the same. The initial negative impacts were predicted by some analysts, as discussed in the introduction, and a follow-on study should be done after two more years. When the merger was announced, the banks in India were already dealing with huge amounts of bad loans (NPAs). This reflects in the balance sheet of the banks. The impact of these NPAs might have overlapped with that of the merger, resulting in a distorted picture.

The technique of ratio analysis, despite certain limitations, is a reliable tool. Similar analyses can be conducted to comment on the mergers of other banks and organizations. The methodology described in this study is quite general and can be universally applied.

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