

Analysis of Financial and Operational Performance of Banking Sector Consolidations: Indian Case Study with Mergers and Acquisition

Gurbaksh Singh*

Abstract

The present paper analyses the impact of M&As on productivity and profitability of consolidation in the Indian Banking sector. It examines the performance of the two banks based on the financial ratios in the pre and post-merger period. The collection of data covers financial performance of selected banks from 2004-05 to 2014-15. The statistical tools are arithmetic mean, standard deviation, t-test, and p-value etc. to analyse the various financial ratios before and after the mergers. 14 ratios are used to compare pre and post-merger financial performance evaluation of consolidated banks. The analysis of ICICI Bank concluded that Net Profit Margin, Operating Profit Margin, Return on Capital Employed, Return on Net Worth, Interest Coverage, Deposit per Employee, and Credit Deposit Ratio have shown an improvement after the merger but in case of other parameters there is no significant improvement in the performance. The analysis of State Bank of India reveals there is no significant improvement after the merger. The study indicates that the banks have been positively affected when distinguished between pre-mergers and post-merger period.

Keyword: Profitability, Efficiency, Merger and Acquisitions, Financial Ratios

Introduction

Mergers and Acquisitions have been the principal aspects of corporate restructuring in India after the implementation of economic reforms since 1991. In the

fast changing business environment banking concerns are facing increased competition not only from within the country but also from international business giants due to globalisation, liberalisation, technological changes, and other factors. The objectives of M&As is wealth maximisation in terms of synergy, strategic imperatives, capital market expectation, economies of scale, diversification, reduced earnings volatility, increased in domestic market, and customer awareness. Consolidation of business entities, through mergers & acquisitions, is a world-wide phenomenon. The measure of consolidation of scheduled commercial banks appears as one of the most profitable strategy. Consolidation in the banking sector is very important in terms of mergers and acquisitions for the growing Indian banking industry. This paper examines the performance of one public sector bank and one private sector bank on the basis of financial data for the period 2004-05 to 2014-15. The study analyses both productivity and profitability of the sampled banks.

In post-liberalisation, the banking industry in India has grown at a fast pace. Increased economic activity coupled with de-regulation has further strengthened the position of Indian banks. By the end of March 2013, the total deposits held by the scheduled commercial banks stood at INR 1,20,344 crores, a growth of 21.8 percent over 2013-14 and a compound annual growth rate (CAGR) of 14.9 percent since 2001-02. The total loans and advances offered by commercial banks grew by 41.3 percent between March 2013-14, recording a CAGR of 23.6 percent since 2001-02.

Consolidation of business entities, through mergers and acquisitions, is a world-wide phenomenon. The private sector banks are subject to the provisions of the Banking Regulation Act, 1949, the public sector banks

* Phd Scholar, HPU University, Himachal Pradesh, India. Email: gur_bakshsingh@yahoo.co.in

are governed by their respective founding statutes and by those provisions of the Banking Regulation Act which have been made specifically applicable to them. The

urban co-operative banks, on the other hand, are governed by the provisions of the Cooperative Societies Act of the respective State or by the Multi-State Cooperative Societies Act, as also by the provisions of the Banking Regulation Act which are specifically applicable to them. The Development Financial Institutions (DFIs), which were founded by a statute, attract the provisions of those statutes while the DFIs structured as limited companies, were subject to the provisions of the Companies Act, 1956, but both the types of the DFIs are regulated and supervised by the RBI under the provisions of the RBI Act, 1934. The Regional Rural Banks (RRBs) were created under the RRBs Act, 1976 and are regulated by the RBI but supervised by the NABARD, while the non-banking financial companies are subject to the provisions of the Companies Act, 1956 and are regulated and supervised by the RBI under the provisions of the RBI Act.

History of Consolidation in the Indian Banking Sector

The consolidation in the Indian banking sector, it may be recalled that the Report of the Committee on Banking Sector Reforms (the Second Narasimham Committee, 1998) had suggested, inter alia, mergers among strong banks, both in the public and private sectors and even with financial institutions and NBFCs. The consolidation efforts in the Indian banking sector can be broadly placed, as per the nature of the entities involved and of the mergers, into several categories viz.:

- (a) voluntary amalgamation between private sector banks.
- (b) compulsory amalgamation of a private sector bank.
- (c) merger between public sector banks.
- (d) merger of a non-banking financial company (NBFC) with a private sector bank.
- (e) merger of a housing finance subsidiary with the parent public sector bank.

A new recent trend is the increase in the interest of foreign expats to work in India. Both these communities seek banking products in remittances and other cross border retail products.

Mergers and Acquisitions of banking sector have gathered solidity in the market driven in the post-liberalisation period.

Review of Literature

Cornett and Tehranian (1992) examined the post-acquisition performance of large bank merger between 1982 and 1987. The results of their study indicate better performance for merged banks due to the improvements in ability to attract loans and deposits, in employee productivity and in profitable asset growth. Further, the study finds a significant correlation between announcements period abnormal return and the various performance measures indicate that the market participants were able to identify in advance the improved performance associated with bank acquisition.

Atma (1996) covered the growth and progress of commercial banking in India. The trends in deposits of State Bank of Hyderabad over a period of time were analysed and ratios were calculated to know the bank's financial performance. It was concluded that the progress of banking in India has been impressive and the present structure was the outcome of the processes of expansion, reorganisation and consolidation.

Chanda (2005) concluded that profitability of the public sector banks has not been affected by deregulation in India. The Indian banking industry was second to none in the world from the viewpoint of its profitability. The stock prices of the public sector banks were impressive. In addition, it could be said that bank mergers might not always be a blessings for the customers. It might increase the opportunities for monopolistic pricing. As a result, the customer would earn a lower rate of interest on deposit in a more concentrated banking market. Even then in the age of globalisation, foreign banks were securing entry to the borderless economy of India on the strength of their giant size and diversified banking activities.

Dash (2005) studied the recent changes in the Indian economic scenario, mergers and acquisitions examine the economic consequences of mergers with the view to resolving the conflict. He found that the modern mergers were primarily motivated by the firms with above industry average performance and this trend continues to persist overtime. However, there was no support of influence of mergers on operating profitability, whatever the strategy may be, finally, he concluded that the popular belief of

merger as a means of corporate plus and declares it to be a myth.

Mohan (2006) lamented that the Indian market was over banked, but under serviced. As a result, Indian Banks clearly lack global scale. From the point of view of financial system, consolidation of banks was imperative. The objective would be strengthening of banks, economies of scale, global competitiveness, and cheaper financial series and retaining of employees for merging skill sets. However, mergers and acquisitions in the domestic banking sector should be driven by market-related parameters such as size and scale, geographic and distribution synergies and skills and capacity.

Mantravadi and Reddy (2007) studied the impact of mergers on the operating performance of acquiring public limited companies in India by examining few pre and post-merger financial ratios during the period 1991-2003. It was observed that the mergers between the same groups of companies, there has been deterioration in performance and Return on Investment, implying that such mergers were only motivated by a potential for increasing the asset base through consolidation of different businesses rather than driving efficiency improvements.

Seetharaman, Lee and Raju (2007) studied that effect on the role and consequences of the bank mergers, post - merger performance of the local banks, and the foreign banks. The consolidate financial and corporate sector were objectives as relieving institution of their non-performing loans, strengthening and recapitalising banking institutions, facilitating corporate debt restructuring, and enhancing efficiency within the system. In general, this studied was aimed to investigate the impact of the merger to banking industry as well as the impact of the liberalisation of the financial market in the Malaysia. To determine impact of mergers on bank profitability ratio such as Return on Assets, Return on Equity, Return on Capital Employed, and pre-tax margin had been used in their research study papers which improved the productivity and profitability of banking system. To be concluded, the liberalisation of foreign bank entry was aimed at increased competition, improved efficiency in the domestic sector. The bottom line considered banking efficiency, profitability was good relation with customer, satisfaction, quality and price winning their loyalty and trust.

Singh and Mogla (2010) in their research paper examined the profitability of acquiring firms in the pre - and - post

merger periods. The sample consists of 153 listed merged companies. Five alternative measures of profitability were employed to study the impact of merged on the profitability of acquiring firms. The results reveals that profitability declined in 55 % of companies and only 29% of companies could improve their profitability. DuPont Analysis reveals that profitability declined due to poor asset utilisation. It suggests that managers should give due attention to proper utilisation of newly acquired assets. An acquisition of neither healthy nor loss-incurring units continued to the profitability of acquires.

Khan (2011) explained that the purpose of the paper was to explore various motivations of mergers and acquisitions in the Indian banking sector. It helped to get the benefits of greater market share and cost efficiency. The studied investigate the detail of merger and acquisitions (M&As) with greater focus on the Indian banking sector in post – liberalisation period. It also compares pre and post-merger financial performance of merged banks with use of financial parameters such as Gross Profit Margin, Net Profit Margin, Operating Profit Margin, Return on Capital Employed, Return on Equity, and Debt-Equity Ratio through literature review. It comes to know that most of the work done highly lightened the impact of Mergers and Acquisitions on different aspects of the companies. The study evaluates research based upon one public and one private sector banks and objectives analysis based upon testing the significance hypothesis pre and post-merger banks. The results of the study indicates that mergers and acquisitions (M&As) have positively affected the performance of banks. To conclude, merger banks can obtain efficiency and gain through merger and acquisitions and pass the benefits to the equity share holders in the form of dividend and generate higher net profits margins in the banks.

Anurag and Nirmala (2013) proposed to compare the performance of the acquirer and target companies before and after the period of mergers by using ratio analysis and t-test during the study period of three years. The objectives of the study are to evaluate the pre-merger and post- merger financial performance of the acquirer and target companies and to offer the findings, suggestions and conclusion. The study concluded that the shareholders of the acquirer companies increased their financial performance after the merger event.

Sai and Sultana (2013) explained that banking sector is one of the most important instruments of the national

development and occupies a unique place in a nation's economy. Economic development of the country is evident through the soundness of the banking system. Deregulation in the financial market, market liberalisation, economic reforms have witnessed astounding changes in banking industry leading to incredible competitiveness and technological sophistication leading to a new era of in banking. The current paper evaluates the performance of the selected two banks based on the financial ratios from the perspective of pre and post - merger. To analyse the impact of merger paired t-test was applied to the various financial ratios for before and after merger data. Based on the analysis of Indian Overseas Bank, it can be concluded that Net Profit Margin, Operating Profit Margin, Return on Capital Employed, Return on Equity and Debt- Equity Ratio, there was significant difference in pre and post merger period but no significant difference with respect to Gross profit margin. Based on the analysis of HDFC bank data it can be concluded that there was no significant difference in the ratios of Net profit margin, Operating profit margin, Return on capital employed, Return on equity, and Debt- Equity ratio before and after merger whereas there was significant difference with respect to Gross profit margin.

Soni and Jain (2013) depicts the compares pre and post-merger of banks, with use of financial ratios, Gross Profit Margin, Net Profit Margin, Operating Profit Margin, Return on Capital Employed, Return on Equity, and Debt Equity Ratio. This study shows the changes present in the acquired firms are based on financial parameters. The tools used were t-test for testing the statistical significance and effect of Merger and Acquisitions on the performance of banks. To conclude, the banks have been positively affected by the event of Merger and Acquisitions.

Monika (2014) in her paper reviewed that mergers and acquisitions expressed value mixed motives and used behavioural theories to evaluate the rationalism behind decisions. Since mergers and acquisitions have emerged as a natural process of business restructuring throughout the world, financial restructuring through mergers and acquisitions evokes a great deal of public interest and perhaps represents the most dynamic facet of corporate strategy.

The above discussed literature suggests that mergers in case of banking companies have been studied by various researchers. The existing studies have focused upon the

profitability and operating performance analysis of the sampled concerns. The productivity aspect is equally relevant to be examined while evaluating the cause of mergers. The literature does not examine the productivity aspect fully. Very few studies have focused upon this aspect. The present paper attempts to examine both productivity and profitability of the merged banks.

Sample, Data Sources and Period of the Study

The current study has chosen one bank from public sector and one from private sector to assess the impact of mergers and acquisitions. The financial data have been compiled for the financial year 2004-05 to 2014-15 on an annual basis. The study is based on secondary data which are collected from the website of Reserve Bank of India, Annual Reports of Banks, Report on trends and progress of Bulletin Banking in India, statistical tables relating to banks, RBI Bulletin, journal, articles, Centre for Monitoring Indian Economy (CMIE) and Money Control etc. for the study.

In this study two cases of mergers are selected for the analysis - first, the merger of the ICICI Bank (Transferee) and Bank of Rajasthan (Transferor) as on 13th August, 2010 and another merger of the State Bank of India (Transferee) and State Bank of Saurashtra (Transferor) as on 31st July, 2008. ICICI Bank is taken from private sector and State Bank of India is taken from public sector.

Objectives of the Study

1. To study the impact on the productivity and profitability of the sampled banks in India.
2. To examine the strengths and weaknesses of the merged banks in India and find out the improvements faced by the beneficiaries.

Hypothesis

Mergers and acquisitions improve the financial performance of the banks and hypothesis formulated for the study:

1. H_0 = There is no significance difference between the pre-merger and post- merger performance of ICICI Bank and State Bank of India.

2. H_1 = There is significance difference between the pre-merger and post- merger performance of ICICI Bank and State Bank of India.

Methodology

The present study is an attempt to examine the performance of mergers and acquisitions of banking sector in India. The performance of the banks before and after the mergers and acquisitions has been compared. The statistical tools and techniques such as ratios and percentages are used for the analysis of data. To test the hypothesis, t-test, standard deviation, and mean are used.

Productivity

Productivity is generally defined in terms of efficiency improvement and technical change with which output is produced by a given level of input. Productivity generally measure by ratio of output to input. An increase in the ratio indicates increase in productivity conversely an adverse in the out/input indicates decline in the productivity.

Business per Employee

This measures the efficiency of all the employees of bank in generating business for the bank. It is calculated by dividing the total business by the total number of employees. Business means the sum of total deposits and total advances of the banks in an annual year.

Branch Productivity Ratios

- Deposit per Branch
- Credit per Branch
- Business per Branch.

Ratios

The profitability, leverage and liquidity ratios are listed as follows:

- Gross Profit Margin = $\text{Gross Profit/Sales} \times 100$
- Net Profit Margin = $\text{Net Profit/Sales} \times 100$
- Operating Profit Margin = $\text{Operating Profit/Sales} \times 100$

- Return on Capital Employed (ROCE) = $\text{Net Profit/Total Assets} \times 100$
- Return on Equity (ROE) = $\text{Net Profit/Equity Share Holder's Funds} \times 100$
- Debt Equity Ratio = $\text{Total Debt/Share Holder Equity}$
- Return on Net Worth = $\text{Profit after Tax/Net Worth}$
- Interest Coverage Ratio = $\text{Profit before Interest and Taxes/Total Interest Expenses}$
- Current Ratio = $\text{Current Assets/Current Liabilities}$
- Quick Ratio = $\text{Quick Assets/Quick Liabilities}$
- Credit per Employee = $\text{Total Advances/Total Number of Employee}$
- Deposit per Employee = $\text{Total Deposits/Total Number of Employee}$
- Business per Branch = $\text{Total Business Branch/Total Number of Branches}$
- Earnings Per Share = $\text{Profit After Tax-Preference Dividend/Number of Equity Shares}$

The financial analyses of the data, above ratios are calculated with including the year of merger in selected bank.

Analysis

To analyse the financial performance of the banks before and after merger, the ratios of productivity and profitability were used and Gross Profit Margin, Net Profit Margin, Operating Profit Margin, Return on Capital Employed, Return on Equity, Debt Equity Ratio, Return on Net Worth, Interest Coverage Ratio, Current Ratio, Quick Ratio, Credit per Employee, Deposit per Employee, Business per Branch, and Earnings Per Share have been calculated. Table 1 and 3 for ICICI Bank and Table 2 and 4 for State Bank of India are presented respectively.

Testing the Significant Difference Between pre and Post-Merger Financial Ratios of Icici Bank

Table 1 reveals the average values of mean of pre and post-merger of Gross Profit Margin (91.64659 percent and 93.15626 percent), mean value of Net Profit Margin (11.80400 percent and 17.28500 percent), mean value of Operating Profit Margin (56.90580 percent and 75.84905

Table 1: Financial Parameters of ICICI Bank Pre and Post – Merger

Ratios	Group	N	Mean	Std. Deviation	t-value	p-value
Gross Profit Margin	Pre	5	91.64659	1.458743	-.704	.504ns
	Post	4	93.15626	4.583891		
Net Profit Margin	Pre	5	11.80400	2.395032	-4.185	.004**
	Post	4	17.28500	1.115482		
Operating Profit Margin	Pre	5	56.90580	4.609662	-2.541	.039*
	Post	4	75.84905	16.118295		
Return on Capital Employed	Pre	5	1.06177	.137452	-4.808	.002**
	Post	4	1.56308	.176574		
Return on Net Worth	Pre	5	9.36600	2.254203	-2.532	.039*
	Post	4	12.75750	1.590354		
Debt-Equity Ratio	Pre	5	7.11953	2.433926	.420	.687ns
	Post	4	6.60052	.049815		
Interest Coverage Ratio	Pre	5	13.28504	.530813	-5.259	.002**
	Post	3	15.47728	.643356		
Return on Equity	Pre	5	9.44800	1.689488	-2.830	.030*
	Post	3	13.17000	2.005916		

Source: Compiled for the Financial Statements retrieved from Banks, CMIE PROWESS Data, <http://www.moneycontrol.com/stockmarketindia>, 1* and 5** level of significance

percent), mean value of Return on Capital Employed (1.06177 percent and 1.56308 percent), mean value of Return on Net Worth (9.36600 and 12.75750), mean value of Interest Coverage Ratio (13.28504 and 15.47728), and mean value of Return on Equity (9.44800 percent and 13.17000 percent). This performs that the financial parameters increased in the post-merger period. The post-merger performance is more correlated than before merger. The mean ratio of Debt-Equity Ratio of post-merger is 6.60052 percent declined as compared to pre-merger ratio 7.11953 of ICICI Bank. Since the p-values of Gross Profit Margin is .504 with t-ratio -.704, and Debt-Equity ratio is .687 with t-ratio .420 which is more than 5 percent level of significance, hypothesis is accepted and it can be concluded that there is non-significant difference in these ratios before and after merger of ICICI bank. Meanwhile, p-values of net profit margin of ICICI bank is .004 with t-ratio -4.185, Operating Profit Margin is .039 with t-ratio -2.541, Return on Capital Employed is .002 with t-ratio -4.808, Return on Net Worth is .039 with t-ratio -2.532, Interests Coverage Ratio is .002 with t-ratio -5.259, and Return on Equity is 0.30 with t-ratio -2.830 which is less than 5 percent level of significance, hypothesis is rejected and can be concluded that there is significant difference in these ratios before after merger of ICICI bank.

Testing the Significant Difference Between Pre and Post-Merger Financial Ratios of State Bank of India

Table 2 reveals the average values of mean of pre and post-merger of Gross Profit Margin (84.03835 percent and 85.95999 percent), and mean value of Operating Profit Margin (52.08567 percent and 52.08567 percent). It was found that there is increase in the post-merger performance. Meanwhile, mean value of Net Profit Margin (11.31400 percent and 9.04400 percent), mean value of Return on Capital Employed (.90164 percent and .77145 percent), mean value of Return on Net Worth (15.86600 and 12.52600), mean value of Debt-Equity Ratio (14.36650 and 14.22435), mean value of Interest Coverage Ratio (15.11675 and 14.68668), are mean value of Return on Equity ratio (16.53600 percent and 13.85600 percent) are declined in the post-merger period respectively. This performs that the financial parameters decreased in the post-merger. The impact of post-merger was to be more correlated than before merger. Since the p-values of Gross Profit Margin is .212 with t-ratio -1.394, Operating Profit Margin is .108 with t-ratio -1.808, Return on Capital Employed is .113 with t-ratio 1.779, Debt-Equity ratio is .873 with t-ratio .165, and Interest Coverage ratio is .460 with t-ratio .784 which is more than 5 percent

Table 2: Financial Parameters of State Bank of India Bank Pre and Post - Merger

Ratios	Group	N	Mean	Std. Deviation	t-value	p-value
Gross Profit Margin	Pre	5	84.03835	2.715647	-1.394	.212ns
	Post	5	85.95999	1.460481		
Net Profit Margin	Pre	5	11.31400	.728444	2.840	.022*
	Post	5	9.04400	1.632002		
Operating Profit Margin	Pre	5	52.08567	5.304309	-1.808	.108ns
	Post	5	52.08567	5.472130		
Return on Capital Employed	Pre	5	.90164	.059567	1.779	.113ns
	Post	5	.77145	.152397		
Return on Net Worth	Pre	5	15.86600	2.190589	2.406	.043*
	Post	5	12.52600	2.198609		
Debt-Equity Ratio	Pre	5	14.36650	1.553604	.165	.873ns
	Post	5	14.22435	1.135362		
Interest Coverage Ratio	Pre	5	15.11675	1.046719	.784	.460ns
	Post	5	14.68668	.638119		
Return on Equity	Pre	5	16.53600	1.640649	2.189	.060ns
	Post	5	13.85600	2.191194		

Source: Compiled for the Financial Statements retrieved from Banks, CMIE PROWESS Data, <http://www.moneycontrol.com/stockmarketindia>, 1* and 5** level of significance

level of significance, the hypothesis is accepted and it can be concluded that there is non-significant difference in these ratios before and after merger of State Bank of India. Meanwhile, p-values of net profit margin .022 with t-ratio 2.840, and Return on Net Worth is .043 with t-ratio

2.406 which is less than 5 percent level of significance, the hypothesis is rejected and it can be concluded that there is significant difference in these ratios before and after merger of State Bank of India.

Table 3: Liquidity and Productivity of ICICI Bank Pre and Post - Merger

Ratios	Group	N	Mean	Std. Deviation	t-value	p-value
Current Ratio	Pre	5	.10800	.028636	.996	.352ns
	Post	4	.09000	.024495		
Quick Ratio	Pre	5	9.79200	5.029783	-.600	.573ns
	Post	4	11.25500	1.880594		
Earnings Per Share	Pre	5	37.31000	4.373928	-1.449	.240ns
	Post	4	58.12250	28.460018		
Deposit Per Employee	Pre	5	6.08239	1.278938	2.393	.048*
	Post	4	4.52075	.162541		
Credit Per Employee	Pre	5	5.60020	1.071473	1.813	.113ns
	Post	4	4.60590	.168368		
Business Per Branch	Pre	5	322.25842	158.391639	1.949	.123ns
	Post	4	184.17668	3.926609		

Source: Compiled for the Financial Statements retrieved from Banks, CMIE PROWESS Data, <http://www.moneycontrol.com/stockmarketindia>

Testing the Significant Difference Between Pre and Post-Merger Financial Ratio of Icici Bank

Table 3 reveals the average values of mean of pre and post-merger of Quick Ratio (9.79200 and 11.25500), mean value of Earnings per Share (37.31000 and 58.12250) which was increased in the post-merger period respectively. Though, the mean value of Current ratio (.10800 and .09000), mean value of Deposit per Employee (6.08239 and 4.5207), mean value of Credit per Employee (5.60020 and 4.60590), and Business per Employee (322.25842 and 184.17668) ratios are not affected in the post-merger period respectively. The impact of post-merger is to be more correlated than before merger. Since the p-values of Current Ratio is .352 with t-ratio .996, Quick Ratio is .573 with t-ratio -.600, Earning per Share is .240 with t-ratio -1.449, Credit per Employee is .113 with t-ratio 1.813, and Business per Branch is .123 with t-ratio 1.949 which is more than 5 percent level of significance, the hypothesis is accepted and it can be concluded that there is non-significant difference in these ratios before and after merger of ICICI bank. There about, p-values of Deposit per Employee is .048 with t-ratio 2.393 which is less than 5 percent level of significance, the hypothesis is rejected and it can be concluded that there is significant difference in ratio before and after merger of ICICI Bank.

Testing the Significant Difference Between Pre and Post-Merger Financial Ratio of State Bank of India

Table 4 reveals the average values of mean of pre and post-merger of Quick Ratio (5.74000 and 11.13000), mean value Earnings per Share (100.40800 and 157.39600), mean value of Deposit per Employee (2.53000 and 4.91800), mean value of Credit per Employee (1.81600 and 4.12000), mean value of Business per Employee (83.75743 and 136.60435) ratios are increased. This performs that the financial parameters increased in the post- merger. The post-merger was raise to be more compared before merger. The mean value of Current Ratio of post-merger was declined to .04000 as compared to pre-merger ratio .05000 of State Bank of India. Since the p-values of current ratio is .153 with t-ratio 1.581 which is more than 5 percent level of significance, hence the hypothesis is accepted and it can be concluded that there is non-significant difference in ratios before and after merger of State Bank of India. While, p -values of Quick ratio is .005 with t-ratio -5.099, Earning per Share of State Bank of India is .018 with t-ratio -2.959, Deposit per Employee is .002 with t-ratio -4.485, Credit per Employee is .002 with t-ratio -4.461, and Business per Branch is .003 with t-ratio -4.277 which is less than 5 percent level of significance, the hypothesis is rejected and it can be concluded that there is significant difference in these ratios before and after merger of State Bank of India.

Table 4: Liquidity and Productivity of State Bank of India Pre and Post-Merger

Ratios	Group	N	Mean	Std. Deviation	t-value	p-value
Current Ratio	Pre	5	.05000	.012247	1.581	.153ns
	Post	5	.04000	.007071		
Quick Ratio	Pre	5	5.74000	.658901	-5.099	.005**
	Post	5	11.13000	2.269901		
Earnings Per Share	Pre	5	100.40800	26.141687	-2.959	.018*
	Post	5	157.39600	34.216749		
Deposit Per Employee	Pre	5	2.53000	.763250	-4.485	.002**
	Post	5	4.91800	.913712		
Credit Per Employee	Pre	5	1.81600	.684054	-4.461	.002**
	Post	5	4.12000	.930376		
Business Per Branch	Pre	5	83.75743	19.462686	-4.277	.003**
	Post	5	136.60435	19.610104		

Source: Compiled for the Financial Statements retrieved from Banks, CMIE PROWESS Data, <http://www.moneycontrol.com/stockmarketindia>

The above analysis concluded that some ratios affect negative relations but most of the ratios affected positive relations increase in financial performance of pre and post-merger selected banks are significant.

Findings

The financial performance analysis of ICICI Bank reveals that profitability has increased significantly in the post-merger period (Table 1). All profitability ratios except gross profit margin ratio support this finding. This positive outcome of merger has been reflected through enhanced EPS as well (Table 3). The productivity of the same bank could not show any improvement after the merger. The productivity parameters (Table 3) do not show any significant difference in the pre and post-merger period.

The financial performance analysis of State Bank of India reveals that there is an insignificant decline in the profitability after the merger. The synergies of merger in case of State Bank of India are available in terms of liquidity (Table 4). Liquidity has improved quite significantly. Productivity has shown significant improvements in State Bank of India.

Conclusion

The above study has undertaken the financial and productivity analysis of ICICI Bank and State Bank of India. Both banks have shown improvements in their performance after the merger. Significant differences are found in the pre and post-mergers performance. However, results are not uniform in both the sampled banks. Profitability has improved quite significantly in ICICI Bank whereas productivity has improved significantly in case of State Bank of India. Overall, the study supports the case of mergers in the Indian banking. It supports the existing literature stating the synergies from the mergers and acquisitions.

References

- Anurag, G., & Nirmala, S. (2013). Financial performance of mergers and acquisitions of select bank in India. *International Research Journal of Business and Management*, 1, 90-102.
- Atma, P. (1996). Performance of Public Sector Commercial Banks - A Case Study of State Bank of Hyderabad", PhD Thesis, Osmania University, Hyderabad, pp.no. 1-308.
- Bhatnagar, B. A., & Sinha, N. (2012), "Strategic Move of ICICI Bank: A Case of ICICI Bank & Bank of Rajasthan. *International Journal of Multidisciplinary Research*, 2(5), 9-15.
- Chanda, K. D. (2005). Bank mergers in India: A critical analysis. *IASSI Quarterly*, 23(4), 107-123.
- Cornett, M. M., & Tehranian, H. (1992). Changes in corporate performance associated with bank acquisition. *Journal of Financial Economics*, 31, 211-234.
- Dash, A. (2005). The post-merger performance Puzzle: An evaluation of long-term profitability of Indian firms. *The ICAI Journal of Accounting Research*, 6-22.
- Khan, A. A. (2011). Merger and Acquisitions (M & As) in the Indian banking sector in post liberalization regime. *International Journal of Contemporary Business Studies*, 2(11), 31-45.
- Kumar, A., & Kishore, D. (2003). An assessment of banking sector reforms in India. *Indian Journal of Public Enterprise*, 87-101.
- Mantravadi, P., & Reddy, A. V. (2007). Mergers and operating performance: Indian experience. *The ICAI Journal of Mergers and Acquisitions*, 4(4), 52-66.
- Mohan, K. (2006). Mergers and acquisitions for consolidation in Indian banking industry: The success mantra. *Management Trends*, 3(1), 30-40.
- Monika (2014). Mergers and acquisitions in Indian banking sector- A comparative study on pre-post-merger. *International Journal of Economic and Management Strategy*, 4(1), 1-14.
- Sai, V. R. N., & Sultana, S. T. (2013). Financial performance analysis in banking sector – A pre and post-merger perspective, Abhinav. *International Monthly Refereed Journal of Research in Management and Technology*, 2, 56-66.
- Seetharaman, A., Lee, N. G. S., & Raju, S. (2007). The impact of the merger of Malaysian Bank. *Finance India Indian Institute of Finance*, 22(4), 1309-36.
- Singh, F., & Mogla, M. (2010). Profitability Analysis of acquiring companies. *The IUP Journal Of Applied Finance*, 16(5), 72-83.
- Uppal, R. K. (2008). Information technology – Changing performance of banking industry – Emerging Challenges and New Potentials. *Gyan Management*, 2(1), 76-99
- Vashisht, A. K. (1987), Performance Appraisal of Commercial Banks in India, A Ph.D. Thesis submitted to the Department of Commerce and Business Management, Himachal Pradesh University, Shimla.

Annexure

List of Merger and Acquisitions in Indian Banking Sector of Scheduled Commercial Banks

Sr. No.	Name of The Transferor bank	Name of the Transferee Bank	Date & Year of Amalgamation
1	Bank of Bihar Ltd.	State Bank of India	November 8, 1969
2.	National Bank of Lahore Ltd.	State Bank of India	February 20, 1970
3.	Eastern Bank Ltd.	Chartered Bank	1971
4.	Krishna Ram Baldeo Bank Ltd.	State Bank of India	1974
5.	Belgaum Bank Ltd.	Union bank of India	1975
6.	Lakshmi Commercial Bank Ltd.	Canara Bank	24.08.1985
7.	Bank of Chochin Ltd.	State Bank of India	26.08.1985
8.	Miraz State Bank ltd.	Union Bank of India	29.7.1985
9.	Hindustan Commercial Bank Ltd.	Punjab National Bank	19.12.1986
10.	Traders Bank Ltd.	Bank of Baroda	13.5.1988
11.	United Industrial Bank Ltd.	Allahabad Bank	31.10.1989
12.	Bank of Tamilnadu Ltd.	Indian Overseas Bank	20.02.1990
13.	Bank of Thanjavur Ltd.	Indian Bank	20.02.1990
14.	Parur Central Bank Ltd.	Bank of India	20.02.1990
15.	Purbanchal Bank Ltd.	Central Bank of India	29.08.1990
16.	BCCI (Mumbai)	State Bank of India	1993
16.	New Bank of India	Punjab National Bank	04.09.1993
17.	Bank of Karad	Bank of India	1995
18.	Kashi Nath Seth Bank Ltd.	State Bank of India	01.01.1996
19.	Bari Doab Bank Ltd.	Oriental Bank of Commerce	08.04.1997
20.	Punjab Co-operative Bank Ltd.	Oriental Bank of Commerce	08.04.1997
21.	20th Century Finance	Centurion Bank Ltd.	01.01.1998
22.	Bareilly Corporation Bank Ltd.	Bank of Baroda	03.06.1999
23.	Sikkim Bank Ltd.	Union Bank of India	22.12.1999
24.	Times Bank Ltd.	HDFC Bank Ltd.	26.02.2000
25.	Bank of Madura Ltd.	ICICI Bank Ltd.	10.03.2001
26.	Sakura Bank	Sumitomo Bank	01.04.2001
27.	Morgan Gurantee Trust	Chase Manhallan Bank	10.11.2001
28.	Rajasthan Bank Ltd.	Vijay Bank	2001
29.	ICICI Ltd.	ICICI Bank	03.05.2002
30.	Benaras State Bank Ltd.	Bank of Baroda	20.06.2002
31.	Nedungadi Bank Ltd.	Punjab National Bank	01.02.2003
32.	South Gujarat Local Area Bank Ltd.	Bank of Baroda	25.06.2004
33.	Global Trust Bank Ltd.	Oriental Bank of Commerce	14.08.2004
34.	IDBI Bank Ltd.	IDBI Ltd.	02.04.2005
35.	Bank of Punjab Ltd.	Centurion Bank	01.10.2005
36.	The Ganesh Bank of Kurunwad Ltd.	The Federal Bank Ltd.	02.09.2006
37.	United Western Bank Ltd.	IDBI Ltd.	03.10.2006
38.	Bharat Overseas Bank	Indian Overseas Bank	31.03.2007

<i>Sr. No.</i>	<i>Name of The Transferor bank</i>	<i>Name of the Transferee Bank</i>	<i>Date & Year of Amalgamation</i>
39.	The Sangli Bank Ltd.	ICICI Bank Ltd.(Voluntary)	19.04.2007
40.	Lord Krishna Bank Ltd.	CBOP Ltd. (Voluntary)	29.08.2007
41.	Centurion Bank of Punjab Ltd(Voluntary)	HDFC Bank	23.05.2008
42.	State Bank of Saurashtra	State Bank of India	31-07-2008
43.	The Bank of Rajasthan	ICICI Bank Ltd.	13.08.2010
44.	State Bank of Indore	State Bank of India	26.08.2010
45.	Ing Vysya Bank	Kotak Mahindra Bank	21.09.2014

Source: RBI Bulletin