

Available online at <http://www.ijims.com>

ISSN - (Print): 2519 – 7908 ; ISSN - (Electronic): 2348 – 0343

IF:4.335; Index Copernicus (IC) Value: 60.59; UGC Recognized -UGC Journal No.: 47192. 1<sup>st</sup> July

### **A Study on Pre and Post Merger Performance of HDFC Bank Ltd. and Centurion Bank of Punjab Ltd.**

Veena K.P. and Suheel

\* Associate Professor, Dept. of Master of Business Administration (MBA), Visvesvaraya Technological University, Post Graduation Studies, Mysore Regional Centre, Mysore, Karnataka.

\*\* Faculty, Department of Commerce and Business Management, Bishop Norman CARR Sargant College of Commerce and Business Management, Mysuru, Karnataka, India.

Corresponding author: Veena K.P.

#### **Abstract**

The purpose of the present paper is to explore various motives of merger in Indian banking industry. This includes various aspects of bank mergers. It also compared pre and post merger financial performance merged bank with the help of financial parameter like 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 known that most of the work done highlighted the impact of merger and acquisition on different companies. The data of merger and acquisition since economic liberalization are collected for a set of various financial parameters. Independent T-test used for testing the statistical significance and this test is applied not only for ratio analysis but also effect of merger on the performance of the banks. This performance being tested on the basis of two grounds that is pre and post merger. Finally the study concluded that the banks have been positively affected by the event of merger.

**Keywords:** Merger and Acquisition, Banking, Financial Parameter, Profitability, Indian Banks.

#### **Introduction**

Globally mergers and acquisitions have become a major way of corporate restructuring and the financial services industry has also experienced merger waves leading to the emergence of very large banks and financial institutions. The key driving force for merger activity is severe competition among firms of the same industry which puts focus on economies of scale, cost efficiency and profitability. The other factor behind bank mergers is the “too big to fail” principle followed by the authorities. In some countries like Germany, weak banks were forcefully merged to avoid the problem of financial distress arising out of bad loans and erosion of capital funds. Several academic studies (Berger et.al. 1999) examined merger related gains in banking and these studies have adopted one of the two following competing approaches. The first approach relates to evaluation of the long term performance resulting from mergers by analyzing the accounting information such as return on assets, operating costs and efficiency ratios. A merger is expected to generate improved performance if the change in accounting-based performance is superior to the changes in the performance of comparable banks that were not involved in merger activity. An alternative approach is to analyze the merger gains in stock price performance of the bidder and the target firms around the announcement event. Here a merger is assumed to create value if the combined value of the bidder and target banks increases on the announcement of the merger and the consequent stock prices reflect potential net present value of acquiring banks.

Our objective here is to present a panoramic view of merger trends in India, to ascertain the perceptions of two important stake-holders viz. shareholders and managers and to discuss dilemmas and other issues on this contemporary topic of Indian banking. We believe that the currently available merger cases do not form a sufficient data set to analyze the performance of mergers based on corporate finance theory because almost all the mergers are through regulatory interventions and market driven mergers are very few. In this paper, the

perception of shareholders is ascertained through an event study for analysis that documents the impact of bank mergers on market value of equity of both bidder and target banks. The perception of bank managers is ascertained through a questionnaire based survey that brings out several critical issues on bank mergers with insights and directions for the future. Finally, we present arguments on why Indian banks should go for mergers. These arguments are also applicable to other Asian countries which have bank consolidation on their agenda. To the best of our knowledge, this paper is perhaps the first attempt at analyzing a plethora of issues on bank mergers in one place, thus providing useful inputs for researchers as well as policy makers.

This paper is organized as follows. The next section presents a brief review of empirical studies on bank mergers. Section II presents some cross country experience on bank consolidation and also discusses consolidation trends in Indian banking. Adopting standard event study methodology, the impact of both forced and voluntary mergers on shareholder's wealth is analyzed in section IV. Section V analyzes some critical issues in mergers based on the perception of banks by reviewing results from a questionnaire based survey. In section VI, we present arguments in favour of large banks and need for banking consolidation in India and other Asian economies. Finally, section VII concludes the paper.

### **The Indian Banking System**

At the top of the Indian banking system is the Central bank of India known as Reserve Bank of India. The Reserve Bank of India is responsible for the Indian banking system since 1935, the commercial banks in India are segregated into Public Sector Banks, Private Sector Banks and Foreign Banks. All these banks fall under Reserve Bank of India classification of scheduled commercial banks (SCBs), Public Sector Banks, Private Sectors Banks and Foreign Banks as they are include in the second scheduled of the reserve bank of India Act 1934. The Public sector was wholly owned by the Government of India before the reforms. The PSBs are the biggest player in the Indian banking system and they account for 70.00 per cent of the assets of scheduled commercial banks in India

### **Merger of Banks in India**

Merger can be defined as a mean of unification of two players into single entity. Merger is a process of combining two business entities under common ownership. Bank merger is an event of when previously distinct banks are consolidated into one institution. A merger occurs when an independent bank loses its charter and becomes a part of an existing bank with one headquarter and unified branch network. Merger occurs by adding the active (bidder) bank Assets and Liabilities to the target(Passive) banks balance sheet and acquiring the bidder's bank name through a series of legal and Administrative measures. Merger and Acquisition in Indian banking sectors have been initiated through the recommendations of Narasimham committee II. The committee recommended that "merger between strong bank / financial institutions would make for greater economic and commercial sense and would be case where the whole is greater than the sum of its parts and have "force multiplier effect"

### **Review of Literature**

Revathy (2011) conducted study on "Mergers And Acquisitions in the Indian Banking Sector – Financial Implications". Like all business entities, banks want to safeguard against risks, as well as exploit available opportunities indicated by existing and expected trends. Merger and Acquisitions (M&As) in the banking sector have been on the rise in the recent past, both globally and in India. In this backdrop of emerging

global and Indian trends in the banking sector, this article illuminates the key issues surrounding M&As in this sector with the focus on India. It seeks to explain the motives behind some M&As that have occurred in India post-2000, analyze the benefits and costs to both parties involved and the consequences for the merged entity. A look at the future of the Indian banking sector, and some key recommendations for banks, follow from this analysis.

Devarajappa (2012) conducted study on “Mergers in Indian banks”. The purpose of the study is to explore various motives of merger in Indian banking industry. This includes various aspects of bank mergers. It also compares pre and post merger financial performance of merged banks with the help of financial parameters like, Gross Profit Margin, Net Profit Margin, Operating Profit Margin, Return on Capital Employed, Return on Equity, and Debt Equity Ratio.

Gupta (2013) conducted a study on “Mergers and Acquisitions in the Indian Banking Sector: A study of selected banks” In the present era of global economy, Mergers and Acquisitions have become the most widely used business strategy of corporate restructuring and strengthening to achieve greater market share, long term profitability, entering new markets, capitalising on economies of scale etc. The present paper evaluates the effects of merger and acquisitions on the financial performance of the selected banks in India. Pre and post merger comparison is conducted on selected variables to analyse the effectiveness of mergers and acquisitions on the banks. Two cases of merger and acquisitions have been taken randomly as sample for the study, first the merger of ICICI bank and The Bank of Rajasthan, and second the merger of HDFC bank and Centurion Bank of Punjab. The results of the study indicate that there is a positive impact of mergers and acquisitions on the financial performance of the selected banks.

Meena (2014) this study is conducted on “Mergers and Acquisitions Prospects: Indian banks study”. This research paper looks at Mergers and Acquisitions (M&A’s) that have happened in Indian banking sector to understand the resulting synergies and the long term implications of the merger. The paper also analyses emerging future trends and recommends steps that banks should consider for future. The paper reviews the trends in M&A’s in Indian banking and then impact of M&A’s has been studied in three leading banks of India. The study covers the area of performance evaluation of M&A’s in Indian banking sector during the period from 2000 to 2013. The paper compares pre and post merger financial performance of merged banks with the help of financial parameters like, Net Profit Margin, Operating Profit Margin, Return on Capital Employed, Return on Equity, Earnings Per Share, Capital Adequacy Ratio, Dividend Per Share etc. The findings suggest that to some extent M&A’s has been successful in Indian banking sector. The Government and Policy makers should not promote merger between strong and distressed banks as a way to promote the interest of the depositors of distressed banks, as it will have adverse effect upon the asset quality of the stronger banks.

Yusuf (2015) conducted a study on “Mergers and Acquisitions in the Banking Sector and Implications for Return on Equity (ROE)”. This study examines whether or not banks in Nigeria have experienced improvement in their Return on Equity ratio (ROE) following the wave of mergers and acquisitions that swept through the banking sector in 2004-05. Basically, the study engaged in matched sample comparisons of the mean ROE ratios of the merged banks with the stand-alone banks before and after consolidation. Study data were obtained from the annual reports of the banks to compute mean ROEs of the banks across the period under study. Chow Structural Break tests, Paired Sample t-statistics and Independent Sample t-statistics were performed on the mean ROEs of the banks before mergers and the ROEs of consolidated banks. The study suggested that the mergers and acquisitions (M & as) in the banking sector do not improve the Return on Equity ratios of the banks

involved. This study thus, concluded that there is insignificant or no improvement in bank's financial performance due to merger.

Pahuja (2016) conducted the study on "Impact of Mergers and Acquisition on India's economy" Growth is the substance for which everyone runs behind either an entrepreneur or someone's ordinary life. For achieving this substance the existing organization go for the restructuring by exploiting the advantages and overcoming the disadvantages. In today's corporate world Merger and Acquisition is spreading all over the industries which have totally restructured the whole market place. Mergers and Acquisitions are normal way of life within the business world. In today's Global competitive environment, M&A's are the only key for long time survival. They are a big part of corporate finance world. On an average last 4 years company's earning in India have been increasing by 20-25% because of company's effective strategy of M&A's. This paper presents the impact on GDP, Profitability, Employment and overall growth of the economy. What are the various types M&A's present in Indian Economy companies can choose for their restructuring? This paper also shows the recent M&A's cases and the reasons why the companies choose this option.

### **Need for the study**

It is seen that, most of the works have been done on trends, policies & their framework, human aspect which is needed to be investigated, whereas profitability and financial analysis of the mergers have not given due importance. The present study would go to investigate the detail of Merger and Acquisitions (M&As) with greater focus on the Indian banking sector. The study will also discuss the pre and the post merger performance of banks. An attempt is made to predict the future of the ongoing Merger and Acquisitions (M&As) on the basis of financial performance of Indian banking sector.

### **Research methodology**

#### **Data collection**

For the purpose of evaluation of investigation data is collected from merger and Acquisition (M&As) of Indian Banking Industry. The financial and accounting data of banks is collected from banks annual reports to examine the impact of merger on financial performance of the banks.

#### **Methodology**

To test the prediction, methodology of comparing the pre and post performance of the banks after the merger has been adopted by using following financial parameters such as Gross Profit Margin, Net Profit Margin, Return on Capital Employed, Return on Equity and Debt Equity Ratio. Research has taken one case of merger as Sample merger of HDFC Bank Ltd. & Centurion Bank of Punjab. The pre merger (three years prior) and post merger of the financial ratios being compared.

#### **Ratios**

Gross Profit Margin Ratio	: Gross Profit / Sales X 100
Net Profit Margin Ratio	: Net Profit / Sales X 100
Operating Profit Margin Ratio	: Operating Profit / Sales X 100
Return on Capital Employed	: Net Profit / Total Assets X 100
Return on Equity	: Net Profit / Equity Capital X 100

Debt Equity Ratio : Total Debt / Total Equity X 100

**Table No. 1**  
**Pre Merger Performance of the Banks**

RATIOS	HDFC Bank Ltd (Bidder Bank)			Centurion Bank of Punjab (Target Bank)		
	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07
Gross Profit Margin	35.1719	32.1233	29.9408	20.8583	21.4151	19.5703
Net Profit Margin	21.5119	19.4573	16.5691	8.7116	15.2490	9.5683
Operating Profit Margin	53.1167	46.0083	47.9309	37.2331	22.4315	37.6088
Return on Capital Employed	1.2941	1.1846	1.2511	0.6538	1.0810	0.6567
Return on Equity	214.7799	278.0801	357.3844	29.7572	86.9701	77.4651
Debt Equity Ratio	134.3883	192.7486	222.6536	35.2757	67.1107	100.8016

Source: Annual Reports of the Banks.

**Table No.1**  
**Independent Sample T Test**

Ratios		Mean	Std. Deviation	t-value	Sig.
Gross Profit Margin	Pre	32.412	2.106	2.299	0.070
	Post	15.405	5.156		
Net Profit Margin	Pre	19.179	1.987	1.056	0.000
	Post	19.234	1.087		
Operating Profit Margin	Pre	49.018	3.018	2.056	0.010
	Post	16.610	2.337		
Return on Capital Employed	Pre	1.243	0.07	0.643	0.015
	Post	1.108	0.105		
Return on Equity	Pre	283.414	57.712	2.611	0.048
	Post	183.596	130.131		
Debt Equity Ratio	Pre	183.263	34.104	1.509	0.014
	Post	231.925	4.865		

Table No. 1 represents the independent sample t test of the of the banks. In the context of gross profit margin the highest mean found in pre merger and it was 32.412, the post merger ratio was found to be 15.405. The calculated t value is 2.299 and the level of significance is 0.070 which is greater than 0.05 which indicates that the null hypothesis rejected and alternative hypothesis accepted. From the view point Net profit margin the standard deviation of pre and post merger shows 1.987 and 1.087. The significance level is 0.00 which is indicates that the less than Alpha values null hypothesis accepted. From the view point of operating profit margin the highest mean was found pre merger and it was the 49.018 and post merger mean stood at 16.610. The calculated t value is 2.056 and the level of significance is 0.010 which is lesser than 0.05 which indicates that the less than Alpha values null hypothesis accepted. From the view point of Return on capital employed the highest

mean found in pre merger and it was the 1.243 are it compare to mean stood of 1.108 and level of significance is 0.015 which is lesser than 0.05 which indicated that less than Alpha values null hypothesis accepted. From the view point Return on equity the highest mean is found in pre merger and it was the 283.414 compared to mean stood of 183.596. The calculated t value is 2.611 and level of significance is 0.048 which is lesser than 0.05 which indicates that less than Alpha values null hypothesis is accepted and alternative hypothesis is rejected. From the view point of Debt Equity ratio the highest mean found in post merger 231.925 are it compare to mean stood of 183.263. The calculated t value is 1.509 and the level of significance is 0.014 which is lesser than 0.05 which indicates that the less than Alpha values null hypothesis accepted and alternative hypothesis is rejected.

**Table No. 2**  
**Post Merger Performance of the Banks**

Ratios	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Gross Profit Margin	15.825	15.328	14.852	13.582	13.042	15.652	17.341	17.620
Net Profit Margin	17.184	17.687	18.128	18.932	19.897	20.615	21.018	20.413
Operating profit margin	14.987	15.983	16.651	15.572	14.905	17.289	18.701	18.795
Return on Capital Employed	1.258	0.983	1.183	1.052	1.136	1.100	1.062	1.092
Return on equity	169.42	159.62	143.62	127.52	152.50	181.23	247.39	287.47
Debt Equity ratio	228.26	230.68	221.37	231.91	235.41	234.74	235.98	237.05

**Table No.2**  
**Independent Sample t- Test**

Ratio	Mean	Std. Deviation	t-value	Sig.
Gross Profit Margin	76.84	26.34	1.857	0.122
Net Profit Margin	37.42	28.71	1.707	0.011
Operating Profit Margin	94.21	48.72	1.952	0.002
Return on Capital Employed	91.50	37.14	1.241	0.033
Return on Equity	87.15	21.78	1.914	0.028
Debt Equity Ratio	108.21	54.21	0.981	0.001

Table No. 2 represents the independent sample 't' test of the bank so in the context of gross profit margin the mean was 76.84. The calculated 't' value is 1.857 and the level of significance is 0.122 which is greater than 0.05 which indicates that the null hypothesis rejected and alternative hypothesis is accepted. From the view point of Net profit margin the mean is 37.42. The calculated t value is 1.707 and the significance level is 0.011 which is less than Alpha values and hence null hypothesis accepted. From the view point of operating profit margin the mean found 94.24. The calculated t value is 1.952 and the level of significance is 0.002 which is lesser than 0.05 which is less than Alpha values and hence null hypothesis is accepted. From the view point of Return on capital employed the mean was found 91.50 and the calculated 't' value is 1.241 level of significance is 0.033 which is lesser than 0.05 and hence null hypothesis is accepted. From the view point of Return on

Equity mean was found 87.15. The calculated t value is 1.914 and level of significance is 0.028 which lesser than 0.05 which indicates that less than Alpha values null hypothesis is accepted. From the view point of Debt Equity ratio the mean found 108.21. The calculated t value is 0.981 and the level of significance is 0.001 which is lesser than 0.05 which indicates that the less than Alpha values null hypothesis accepted.

### **Findings of the Study**

- In the context of gross profit margin the highest mean found in pre merger and it was 32.412, the post merger ratio was found to be 15.405.
- From the view point Net profit margin the standard deviation of pre and post merger shows 1.987 and 1.087.
- From the view point of Return on capital employed the highest mean was found in pre merger and it was 1.243 whereas the mean value of post merger stood at 1.108.
- From the view point of Return on equity the highest mean was found in pre merger and it was 283.414 compared to mean stood of 183.596.
- From the view point of Debt Equity ratio the highest mean found in post merger 231.925.
- From the view point of Return on capital employed the mean was found 91.50.
- From the view point of Debt Equity ratio the mean found 108.21.

### **Conclusion**

Merger is the useful tool for the growth and expansion in Indian Banking Sector. It is helpful for survival of weak banks by merging into large bank. This study shows that impact of merger on financial performance of Indian banking sector. For this a comparison between pre and post merger performance examined in terms of Gross profit margin, Net Profit margin, Operating Profit margin, Return on Capital employed, Return on Equity and Debt equity ratio. In the present case study, the return on equity, debt equity shows improvement after the merger and for the purpose and objective of the study, investigator have applied t-test for analysing the pre and post merger performance of the banks and result suggested that after the merger the financial performance of the banks have increased. The most important is that to generate net higher profit after the merger in order to justify the decision of merger undertaken by the management to the shareholders.

### **References**

- Revathy, S., (2011). "Mergers And Acquisitions in the Indian Banking Sector – Financial Implications" Namex International Journal of Management Research, 62 Vol. 1, Issue No. 1.
- Devarajappa, S., (2012). "Mergers in Indian banks" International Journal of Marketing, Financial Services & Management Research, Vol.1 Issue 9, September 2012, ISSN 2277 3622.
- Komal, Gupta., (2013). "Mergers and Acquisitions in the Indian banking sector: A study of selected banks" International Journal of Advanced Research in ISSN: 2278-6236 Management and Social Sciences.
- Smita,Meena., (2014). "Mergers and Acquisitions Prospects: Indian Banks Study, Vol. 1, Issue 3, pp.10-17.
- Hassan, Yusuf., (2015).Mergers and Acquisitions in the Banking Sector and Implications for Return on Equity (ROE)" Vol. 6, No. 9; September 2015
- Heena, Pahuja., (2016). "Impact of Mergers and Acquisition on India's economy", Vol..5, Issue 01, ISSN 2394-1537.