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MERGER AND ACQUISITIONS (M&AS) IN THE INDIAN BANKING SECTOR IN POST LIBERALIZATION REGIME

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ABSTRACT

The purpose of this paper is to explore various motivations of Merger and Acquisitions in the Indian banking sector. This includes the various aspects of banking Industry's Merger and Acquisitions. 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 (ROCE), Return on Equity (ROE) and Debt-Equity Ratio. Through literature review it comes to know that most of the work done high lightened the impact of Merger and Acquisitions on different aspects of the companies. The data of Merger and Acquisitions since economic liberalization are collected for a set of various financial parameters. This study also examines the changes occurring in the acquiring firms on the basis of financial ground and also the overall impact of Merger and acquisitions (M&As) on acquiring banks. The Researcher used independent t-test for testing the statistical significance and this test is applied not only for the ratio analysis but also to test the effect of Merger and Acquisitions on the performance of banks. This performance is being tested on the basis of two grounds i.e. Pre merger and Post merger. The result of the study indicates that the banks have been positively affected by the event of Merger and acquisitions (M&As). These results suggest that merged banks can obtain efficiency and gains through Merger and Acquisitions (M&As) and passes the benefits to the equity share holders' in the form of dividend.

KEYWORDS: Merger & Acquisitions, Banking, Financial parameters, Profitability, Indian Banks.

1. INTRODUCTION

In the globalized economy, Merger and Acquisitions (M&As) acts as an important tool for the growth and expansion of the economy. The main motive behind the Merger and acquisitions (M&As) is to create synergy, that is one plus one is more than two and this rationale beguiles the companies for merger at the tough times. Merger and Acquisitions (M&As) help the companies in getting the benefits of greater market share and cost efficiency. Companies are confronted with the facts that the only big players can survive as there is a cut throat competition in the market and the success of the merger depends on how well the two companies integrate themselves in carrying out day to day operations.

One size does not fit for all, therefore many companies finds the best way to go ahead like to expand ownership precincts through Merger and acquisitions (M&As). Merger creates synergy and economies of scale. For expanding the operations and cutting costs, Business entrepreneur and Banking Sector are using Merger and Acquisitions world wide as a strategy for achieving larger size, increased market share, faster growth, and synergy for becoming more competitive through economies of scale. A merger is a combination of two or more companies into one company or it may be in the form of one or more companies being merged into existing companies or a new company may be formed to merge two or more existing companies. On the other hand, when one company takes over another company and clearly well-known itself as the new owner, this is called Acquisition. The companies must follow legal procedure of Merger and Acquisitions (M&As) which has given by RBI, SEBI, Companies' Act 1956 and Banking Regulation Act 1949.

Growth is always the priority of all companies and confers serious concern to expand the business activities. Companies go for Merger and Acquisitions (M&As) for achieving higher profit and expanding market share. Merger and Acquisitions (M&As) is the need of business enterprises for achieving the economies of scale, growth, diversification, synergy, financial planning, Globalization of economy, and monopolistic approach also creates interest amongst companies for Merger and Acquisitions (M&As) in order to increase the market power. Merger and Acquisitions is not a single day process, it takes time and decisions are to be taken after examining all the aspects. Indian companies were having stringent control before economic liberalization; therefore they led to the messy growth of the Indian corporate sector during that period. The government initiated the reform after 1991 and which resulted in the adaptation of different growth and expansion strategies by the companies.

The Banking system of India was started in 1770 and the first Bank was the Indian Bank known as the Bank of Hindustan. Later on some more banks like the Bank of Bombay-1840, the Bank of Madras-1843 and the Bank of Calcutta-1840 were established under the charter of British East India Company. These Banks were merged in 1921 and took the form of a new bank known as the Imperial Bank of India. For the development of banking facilities in the rural areas the Imperial Bank of India partially nationalized on 1 July 1955, and named as the State Bank of India along with its 8 associate banks (at present 7). Later on, the State Bank of Bikaner and the State Bank of Jaipur merged and formed the State Bank of Bikaner and Jaipur.

The Indian banking sector can be divided into two eras, the pre liberalization era and the post liberalization era. In pre liberalization era government of India nationalized 14 Banks on 19 July 1969 and later on 6 more commercial Banks were nationalized on 15 April 1980. In the year 1993 government merged The New Bank of India and The Punjab National Bank and this was the only merger between nationalized Banks, after that the numbers of nationalized Banks reduced from 20 to 19. In post liberalization regime, government had initiated the policy of liberalization and licenses were issued to the private banks which lead to the growth of Indian Banking sector.

The Indian Banking Industry shows a sign of improvement in performance and efficiency after the global crisis in 2008-09. The Indian Banking Industry is having far better position than it was at the time of crisis. Government has taken various initiatives to strengthen the financial system. The economic recovery gained strength on the back of a variety of monetary policy initiatives taken by the Reserve Bank of India.

Recently, on 13th August 2010, the process of M&As in the Indian banking sector passes through the Bank of Rajasthan and the ICICI Bank. Moreover, the HDFC Bank acquired the Centurion Bank of Punjab on 23 May 2008. The Reserve Bank of India sanctions the scheme of mergers of the ICICI Bank and the Bank of Rajasthan. After the merger the ICICI Bank replaced many banks to occupy the second position after the State Bank of India (SBI) in terms of assets in the Indian Banking Sector. In the last ten years, the ICICI Bank, the HDFC bank in the private sector, the Bank of Baroda (BOB) and the Oriental Bank of Commerce (OBC) in the public sector involved themselves as a bidder Banks in the Merger and Acquisitions (M&As) in the Indian Banking Sector. Table 1 gives a detailed account of all Merger and Acquisitions took place in the Indian banking sector.

Table 1 : List of Merger and Acquisitions (M&As) in Indian Banking Industry since post Liberalization regime

S. No.	Name of the Transferor Bank	Name of the Transferee Bank	Date of Merger/ 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	Miraj State Bank Ltd.	Union Bank of India	July 29, 1985
4	Lakshmi Commercial Bank Ltd.	Canara Bank	August 24, 1985
5	Bank of Cochin Ltd.	State Bank of India	August 26, 1985
6	Hindustan Commercial Bank Ltd.	Punjab National Bank	December 19, 1986
7	Traders Bank Ltd.	Bank of Baroda	May 13, 1988
8	United Industrial Bank Ltd.	Allahabad Bank	October 31, 1989
9	Bank of Tamilnadu Ltd.	Indian Overseas Bank	February 20, 1990
10	Bank of Thanjavur Ltd.	Indian Bank	February 20, 1990
11	Parur Central Bank Ltd.	Bank of India	February 20, 1990
12	Purbanchal Bank Ltd.	Central Bank of India	August 29, 1990
13	New Bank of India	Punjab National Bank	September 4, 1993
14	Bank of karad Ltd	Bank of India	1993-1994
15	Kashi Nath Seth Bank Ltd.	State Bank of India	January 1, 1996
16	Bari Doab Bank Ltd	Oriental Bank of Commerce	April 8, 1997
17	Punjab Co-operative Bank Ltd.	Oriental Bank of Commerce	April 8, 1997
18	Bareilly Corporation Bank Ltd	Bank of Baroda	June 3, 1999
19	Sikkim Bank Ltd	Union Bank of India	December 22, 1999
20	Times Bank Ltd.	HDFC Bank Ltd	February 26, 2000

21	Bank of Madura Ltd.	ICICI Bank Ltd.	March 10, 2001
22	ICICI Ltd	ICICI Bank Ltd	May 3, 2002
23	Benares State Bank Ltd	Bank of Baroda	June 20, 2002
24	Nedungadi Bank Ltd.	Punjab National Bank	February 1, 2003
25	South Gujarat Local Area Bank Ltd.	Bank of Baroda	June 25, 2004
26	Global Trust Bank Ltd.	Oriental Bank of Commerce	August 14, 2004
27	IDBI Bank Ltd.	IDBI Ltd	April 2, 2005
28	Bank of Punjab Ltd.	Centurion Bank Ltd	October 1, 2005
29	Ganesh Bank of Kurundwad Ltd	Federal Bank Ltd	September 2, 2006
30	United Western Bank Ltd.	IDBI Ltd.	October 3, 2006
31	Bharat Overseas Bank Ltd.	Indian Overseas Bank	March 31, 2007
32	Sangli Bank Ltd.	ICICI Bank Ltd.	April 19, 2007
33	Lord Krishna Bank Ltd.	Centurion Bank of Punjab Ltd.	August 29, 2007
34	Centurion Bank of Punjab Ltd.	HDFC Bank Ltd.	May 23, 2008
35	The Bank of Rajasthan	ICICI Bank Ltd	August 13, 2010

***Source:** Report on Trend and Progress, RBI, Various Issues, VIII competition and consolidation**,** 04 Sep 2008.*

2. LITERATURE REVIEW AND GAP

Under this study the researcher reviewed research papers for the purpose of providing an insight into the work related to Merger and Acquisitions (M&As). After going through the available relevant literature on M&As and it comes to know that most of the work done high lightened the impact of M&As on different aspects of the companies. A firm can achieve growth both internally and externally. Internal growth may be achieved by expanding its operation or by establishing new units, and external growth may be in the form of Merger and Acquisitions (M&As), Takeover, Joint venture, Amalgamation etc. Many studies have investigated the various reasons for Merger and Acquisitions (M&As) to take place, Just to look the effects of Merger and Acquisitions on Indian financial services sector.

Sinha Pankaj & Gupta Sushant (2011) studied a pre and post analysis of firms and concluded that it had positive effect as their profitability, in most of the cases deteriorated liquidity. After the period of few years of Merger and Acquisitions(M&As) it came to the point that companies may have been able to leverage the synergies arising out of the merger and Acquisition that have not been able to manage their liquidity. Study showed the comparison of pre and post analysis of the firms. It also indicated the positive effects on the basis of some financial parameter like Earnings before Interest and Tax (EBIT), Return on share holder funds, Profit margin, Interest Coverage, Current Ratio and Cost Efficiency etc.

Goyal K.A. & Joshi Vijay (2011) in their paper, gave an overview on Indian banking industry and highlighted the changes occurred in the banking sector after post liberalization and defined the Merger and Acquisitions as per AS-14. The need of Merger and Acquisition in India has been examined under this study. It also gave the idea of changes that occurred after M&As in the banking sector in terms of financial, human resource & legal aspects. It also described the benefits come out through M&As and examined that M&As is a strategic tools for expanding their horizon and companies like the ICICI Bank has used merger as their expansion strategy in rural market to improve customers base and market share. The sample of 17 Merger of post liberalization and discussed about communication in M&As, the study lightened the role of media in M&As. Kuriakose Sony & Gireesh Kumar G. S (2010) in their paper, they assessed the strategic and financial similarities of merged Banks, and relevant financial variables of respective Banks were considered to assess their relatedness. The result of the study found that only private sector banks are in favor of the voluntary merger wave in the Indian Banking Sector and public sector Bank are reluctant toward their type of restructuring. Target Banks are more leverage (dissimilarity) than bidder Banks, so the merger lead to attain optimum capital Structure for the bidders and asset quality of target firms is very poor except the cases of the HDFC Vs the CBOP merger in 2007. The factor behind voluntary amalgamation are synergies, efficiency, cost saving, economies of scale. The merging partners strategically similarities and relatedness are very important in the synergy creation because the relatedness of the strategic variable have a significant impact on the Bank performance and the effect of merger on the stock market.

Aharon David Y et al., (2010), analyzed the stock market bubble effect on Merger and Acquisitions and followed by the reduction of pre bubble and subsequent, the bursting of bubble seems to have led to further consciousness by the investors and provide evidence which suggests that during the euphoric bubble period investor take more risk. Merger of banks through consolidation is the significant force of change took place in the Indian Banking sector.

Kuriakose Sony et al., (2009), focused on the valuation practices and adequacy of swap ratio fixed in voluntary amalgamation in the Indian Banking Sector and used swap ratio for valuation of banks, but in most of the cases the final swap ratio is not justified to their financials. Schiereck Dirk et al., (2009), explained the relationship between bank reputation after Merger and Acquisitions and its effects on shareholder’s wealth. This study considered 285 European merger and Acquisition transaction announced between 1997 and 2002 and finds that on average wealth not significantly effect by Merger and Acquisitions. It is found in the study of Bhaskar A Uday et al., (2009) that Banking sector witness of Merger activities in India when banks facing the problem of loosing old customer and failed to attract the new customers. It described that the acquiring firms mainly focuses on the economies of scale, efficiency gain and address the need of communication and employee concern, and described the integration process was handled by professional and joint integration committee. Road map is prepared and HR integration is done as per schedule and they took a case of the Bank of Punjab acquired the Lord Krishna Bank and later on the Centurion Bank of Punjab acquired by the HDFC Bank and gave the frame of integration. This study regulate the link between communication, HR integration, management action and consequent contribution of post merger success by conducted interview in a recent bank merger, in depth interviews work conducted in a recent mergers of a Indian Bank. It was inferred that proactive communication, changes in organizational structure, and appropriate human resource integration would smoothen the journey towards successful integration.

Anand Manoj & Singh Jagandeep (2008) studied the impact of merger announcements of five banks in the Indian Banking Sector on the share holder bank. These mergers were the Times Bank merged with the HDFC Bank, the Bank of Madurai with the ICICI Bank, the ICICI Ltd with the ICICI Bank, the Global Trust Bank merged with the Oriental Bank of commerce and the Bank of Punjab merged with the centurion Bank. The announcement of merger of Bank had positive and significant impact on share holder's wealth. The effect on both the acquiring and the target banks, the result showed that the agreement with the European and the US Banks Merger and Acquisitions except for the facts the value of share holder of bidder Banks have been destroyed in the US context, the market value of weighted Capital Adequacy Ratio of the combined Bank portfolio as a result of merger announcement is 4.29% in a three day period (-1, 1) window and 9.71 % in a Eleven days period (-5, 5) event window. The event study used for proving the positive impact of merger on the bidder Banks. Lehto Eero & Bockerman Petri (2008) evaluated the employment effects of Merger and Acquisitions on target by using match establishment level data from Finland over the period of 1989-2003. They focused cross border Merger and Acquisitions as well as domestic Merger and Acquisitions and analyzed the effect of employment of several different types of Merger and Acquisitions. They evaluated that the cross border Merger and Acquisitions lead to downsizing the manufacturing employment and the effects of cross border Merger and Acquisitions on employment in non- manufacturing are much weaker and change in ownership associated with domestic Merger and Acquisitions and internally restructuring also typically causes employment losses. To look the effects of cross border Merger and Acquisitions (M&As) Hijzen Alexander et al., (2008) studied the impact of cross border Merger and Acquisitions (M&As) and analyzed the role of trade cost, and explained the increased in the number of cross border Merger and Acquisitions (M&As) and used industry data of 23 countries over a period of 1990 -2001. The result suggested that aggregate trade cost affects cross border merger activity negatively, its impact differ importantly across horizontal and non-horizontal mergers. They also indicated that the less negative effects on horizontal merger, which is consistent with the tariff jumping agreement, put forward in literature on the determinant of horizontal FDI.

Mantravadi Pramod & Reddy A Vidyadhar (2007) evaluated that the impact of merger on the operating performance of acquiring firms in different industries by using pre and post financial ratio to examine the effect of merger on firms. They selected all mergers involved in public limited and traded companies in India between 1991 and 2003, result suggested that there were little variation in terms of impact as operating performance after mergers. In different industries in India particularly banking and finance industry had a slightly positive impact of profitability on pharmaceutical, textiles and electrical equipments sector and showed the marginal negative impact on operative performance. Some of the industries had a significant decline both in terms of profitability and return on investment and assets after merger.

Coming down on the various motives for Merger and Acquisitions, Mehta Jay & Kakani Ram Kumar (2006) stated that there were multiple reasons for Merger and Acquisitions in the Indian Banking Sector and still contains to capture the interest of a research and it simply because of after the strict control regulations had led to a wave of merger and Acquisitions in the Banking industry and states many reason for merger in the Indian Banking sector. While a fragmented Indian banking structure may be very well beneficial to the customer because of competition in banks, but at the same time not to the level of global Banking Industry, and concluded that merger and Acquisition is an imperative for the state to create few large Banks. Müslümov Alövsat (2002) examined that synergy is one of the main factor behind the merger and took 56 mergers from US industry, and the cash flows improvement in the productive usage of assets and increasing the sales and showed the surviving firm improvement in operating cash flows. The post merger create additional value and shows the improvement of bidder firm with price to book ratio, used non-parametric test as most suitable method of testing post merger performance.

R. Srivassan et al., (2009) gave the views on financial implications and problem occurring in Merger and Acquisitions (M&As) highlighted the cases for consolidation and discussed the synergy based merger which emphasized that merger is for making large size of the firm but no guarantee to maximize profitability on a sustained business and there is always the risk of improving performance after merger.

3. RESEARCH GAP

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 give 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 in post liberalization regime. 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 and focusing mainly of Indian banking sector.

4. SCOPE AND OBJECTIVES OF THE STUDY

- To evaluate the banks performance in terms of net profitability.
- To analyze the performance of banks after merger in terms of return on capital employed.
- To find out the impact of merger on company’s debt equity ratio.
- To examine the effects of merger on equity share holder’s.

5. HYPOTHESES

1. Testing the significance difference between Pre and Post merger Net Profit Margin.

   H_0 (Null Hypothesis) There is no significance difference between the pre and post merger Net Profit Margin.

H_1 (Alternative Hypothesis) There is significance difference between the pre and post merger Net Profit Margin.

2. Testing the significance difference between Pre and Post merger Return on Capital Employed.

   H_0 (Null Hypothesis) There is no significance difference between the pre and post merger Return on Capital Employed.

   H_1 (Alternative Hypothesis) There is significance difference between the pre and post merger Return on Capital Employed.

3. Testing the significance difference between Pre and Post merger Return on Equity.

   H_0 (Null Hypothesis) There is no significance difference between the pre and post merger Return on Equity.

   H_1 (Alternative Hypothesis) There is significance difference between the pre and post merger Return on Equity.

4. Testing the significance difference between Pre and Post merger Debt Equity Ratio.

   H_0 (Null hypothesis) There is no significance difference between the pre and post merger Debt Equity Ratio.

   H_1 (Alternative hypothesis) There is significance difference between the pre and post merger Debt Equity Ratio.

6. DATA AND METHODOLOGY

a) Data Collection

For the purpose of evaluation investigation data is collected from Merger and Acquisitions (M&As) of the Indian banking industry in post liberalization regime. The financial and accounting data of banks is collected from companies Annual Report to examine the impact of M&As on the performance of sample banks. Financial data has been collected from Bombay Stock Exchange (BSE), National Stock Exchange (NSE), Securities and Exchange Board of India (SEBI) & money control for the study.

b) Methodology

To test the research prediction, methodology of comparing the pre and post performances of banks after Merger and Acquisitions(M&As) has been adopted, by using following financial parameters such as Gross profit margin, Net profit margin, Operating profit margin, Return on capital employed, Return on equity, and Debt equity ratio. Researcher has taken two cases of Merger and Acquisitions (M&As) randomly as sample, one from public sector bank and the other from private sector bank in order to evaluate the impact of M&As. The pre merger (3years prior) and post merger (after 3 years) of the financial ratios are being compared. The observation of each case in the sample is considered as an independent variable. Before merger two different banks carried out operating business activities in the market and after the merger the bidder bank carrying business of both the banks. Keeping in view the purpose & objectives of the study independent t- test is being employed under this study. The year of merger was considered as a base year and denoted as 0 and it is excluded from the evaluation. For the pre (3 years before) merger the combined ratios of both banks are considered and for the post merger (after 3 years) the ratios of acquiring bank were used. The Student's t- distribution is

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s}\sqrt{\frac{n_1 n_2}{n_1 + n_2}}$$

$$\bar{x}_1 = \frac{\sum x_1}{n_1}, \quad \bar{x}_2 = \frac{\sum x_2}{n_2}$$

Where $\bar{x}_1$, is the mean of combined pre merger ratios of both banks $\bar{x}_2$ is the mean of acquiring bank post merger $n_1 \, and \, n_2$ are the number of observations of 1st and 2nd series respectively. S is the combined standard deviation.

$$s = \sqrt{\frac{\sum(x_1 - A_1)^2 + \sum(x_2 - A_2)^2 - n_1(\bar{x}_1 - A_1)^2 - n_2(\bar{x}_2 - A_2)^2}{n_1 + n_2 - 2}}$$

$(n_1 + n_2 - 2)$ Degree of freedom

Where A^1 and A^2 are the assumed means of 1st and 2nd series

Ratios

Gross Profit Margin = Gross Profit/Sales × 100

Net Profit Margin = Net Profit/Sales × 100

Operating Profit Margin = Operating Profit/Sales × 100

Return on Capital Employed (ROCE) =Net Profit/Total Assets × 100

Return on Equity (ROE) =Net Profit/Equity Share Holder's Funds × 100

Debt Equity Ratio (Pure Ratio) = Total Debt/ Share Holder Equity

7. ANALYSIS AND INTERPRETATIONS

In Table 2, researcher selected two cases for study, first the merger of the PNB and the Nedungadi bank on 1 Feb, 2003 second the merger of the CBOP and the HDFC bank Ltd. on 23 May, 2008 and analyzed both the cases as considered one public and other from private sector bank. In order to analyze the financial performance of banks after Merger and Acquisitions (M&As). The financial and accounting ratio like Gross profit margin, Net profit margin, Operating profit margin, Return on capital employed, Return on equity, and Debt equity ratio have been calculated. In the first case, Table 3 indicated the profile of both banks before merger. Table 4, shows the post performance of bidder bank after merger.

Table 5, shows the combined performance of both banks prior to merger. Similarly, in second case, Table 6 depicts the profile of both the banks before merger, Table 7 indicates the performance of acquiring bank after merger and Table 8 shows combined financial performance of both the banks before merger. In both the cases all financial and accounting ratios have computed by the researcher's.

In first case, the merger of the Nedungadi Bank with the Punjab National Bank is shown and then the financial performance between the Pre & Post merger has been compared on the basis of key ratios. It is found that there is no difference in the mean of gross profit margin (76.2193 percent Vs 74.6209 percent) and t-value 1.125. It is seen that the mean value of gross profit margin has decline so it is considered that it does not effect by merger, so it is not shows significant, however the net profit margin statistically confirmed highly significance with mean value (7.5965 percent Vs 15.3128 percent) and t-value -8.683. The mean of net profit margin increased after the merger so the performance of the bank has improved in post merger, similarly the mean value of operating profit margin shows significant decline in the mean (61.8458 percent Vs 55.7335 percent) and t-value 2.737 which indicates that it has no effect after merger and statically it is not significant, result also shows the mean difference on return on capital employed (0.7062 percent Vs 1.0637 percent) and t-value -5.671 which is conformed significant statically, this shows the return on capital employed has increase after the merger and bank has shows positive impact of merger on investment, the mean value of return on equity of bank has been increased after merger and indicated that bank give more return on equity after merger to the equity share holders and the mean value of return on equity (2.0714 percent Vs 4.4054 percent) and t-value -8.934 and shows significance, while lastly debt equity ratio shows significance with mean value (2.6119 percent Vs 3.5762 percent) and t-value -3.196. Therefore this indicates that the debt equity ratio also improved after merger so it directly increased the performance of the banks, and majority of financial parameter indicate that bank performance has improved after merger.

Table 2 : Merger Dates

Sl.No.	**Bidder Bank**	**Target Bank**	**Date of Announcement**
Case 1	Punjab National Bank	Nedungadi Bank Ltd	February 1, 2003
Case 2	HDFC Bank Ltd	Centurion Bank of Punjab Ltd.	May 23, 2008

Source: Researcher's compilation from table 1

Table 3 : Profile of Nedungadi Bank and Punjab National Bank for the last three financial years ending before the merger announcement

Financial Ratios *(in Percentage)*

	Nedungadi Bank (Target Bank)			**Punjab National Bank(Bidder Bank)**		
	As on 31 Mar'2000	As on 31 Mar'2001	As on 31 Mar'2002	As on 31 Mar'2000	As on 31 Mar'2001	As on 31 Mar'2002
Gross Profit Margin	89.67408	52.9425	94.39294	76.56032	75.0357	76.91365
Net profit Margin	9.01361	-38.25537	0.81756	7.91805	7.90724	8.4597
Operating Profit Margin	67.79003	36.60779	49.30475	62.44347	61.75684	62.20639
Return on Capital Employed	0.84123	-3.56673	0.08052	0.75401	0.73008	0.77129
Return on Equity	143.43137	-664.70588	12.45098	192.30116	218.45081	264.97832
Debt-Equity Ratio	157.82352	172.53823	141.59607	226.84536	267.64196	304.05225

Source: Researcher's compilation from financial statement of Banks retrieved from http://www.moneycontrol.com/stocksmarketsindia/

Table 4 : Profile of Punjab National Bank (Bidder Bank) for the next three financial years was ending after the merger announcement

Financial Ratios *(in Percentage)*

	Punjab National Bank (Bidder Bank)		
	As on 31 Mar'2004	As on 31 Mar'2005	As on 31 Mar'2006
Gross Profit Margin	76.16037	75.1635	72.53872
Net profit Margin	14.25245	16.66838	15.0176
Operating Profit Margin	52.15157	55.35606	59.69293
Return on Capital Employed	1.08342	1.117	0.9908
Return on Equity	417.90049	447.2312	456.48905
Debt-Equity Ratio	336.24372	335.82359	400.79955

Source: Researcher's compilation from financial statement of Banks retrieved from http://www.moneycontrol.com/stocksmarketsindia/

Table 5 : Combined profile of Nedungadi Bank and Punjab National Bank for the last three financial years ending before the merger announcement

Financial Ratios *(in Percentage)*

Nedungadi Bank and Punjab National Bank			
	As on 31 Mar'2000	**As on 31 Mar'2001**	**As on 31 Mar'2002**
Gross Profit Margin	76.96064	74.38446	77.31276
Net profit Margin	7.95149	6.55287	8.2852
Operating Profit Margin	62.60668	61.01898	61.9118
Return on Capital Employed	0.75673	0.6052	0.75667
Return on Equity	190.06024	177.9536	253.39866
Debt-Equity Ratio	223.68036	263.28097	296.60281

Source: Researcher's compilation from financial statement of Banks retrieved from http://www.moneycontrol.com/stocksmarketsindia/

Table 6: Profile of Centurion Bank of Punjab and HDFC Bank for the last three financial years is ending before the merger announcement

Financial Ratios *(in Percentage)*

	Centurion Bank of Punjab (Target Bank)			**HDFC Bank (Bidder Bank)**		
	As on 31 Mar'2005	**As on 31 Mar'2006**	**As on 31 Mar'2007**	**As on 31 Mar'2005**	**As on 31 Mar'2006**	**As on 31 Mar'2007**
Gross Profit Margin	55.8583	53.41508	69.57029	74.17189	71.12331	69.94028
Net profit Margin	8.7116	15.249	9.56855	21.51485	19.45729	16.56912
Operating Profit Margin	37.23308	22.43152	37.60888	53.1167	46.00834	47.93091
Return on Capital Employed	0.65377	1.081	0.65671	1.29413	1.18463	1.2511
Return on Equity	29.7572	86.9701	77.46505	214.77991	278.08009	357.38438
Debt-Equity Ratio	35.275661	67.110771	100.80164	134.38834	192.74861	222.65358

Source: Researcher's compilation from financial statement of Banks retrieved from http://www.moneycontrol.com/stocksmarketsindia/

Table 7 : Profile of HDFC Bank (Bidder Bank) for the next three financial years was ending after the merger announcement

Financial Ratios *(in Percentage)*

	HDFC Bank (Bidder Bank)		
	As on 31 Mar'2009	**As on 31 Mar'2010**	**As on 31 Mar'2011**
Gross Profit Margin	74.76217	74.66454	76.2925
Net profit Margin	13.74548	18.23227	19.70267
Operating Profit Margin	54.61426	51.12141	54.53866
Return on Capital Employed (ROCE)	1.22493	1.3255	1.41566
Return on Equity (ROE)	527.75165	644.18447	843.96749
Debt-Equity Ratio	342.04104	393.9357	479.29082

Source: Researcher's compilation from financial statement of Banks retrieved from http://www.moneycontrol.com/stocksmarketsindia/

Table 8: Combined Profile of Centurion Bank of Punjab and HDFC Bank for the last three financial years was ending before the merger announcement

Financial Ratios *(in Percentage)*

Centurion Bank of Punjab and HDFC Bank			
	As on 31 Mar'2005	**As on 31 Mar'2006**	**As on 31 Mar'2007**
Gross Profit Margin	72.32917	68.42877	69.88274
Net profit Margin	20.22659	18.81694	15.4805
Operating Profit Margin	51.51849	42.42082	46.32579
Return on Capital Employed	1.24143	1.17079	1.15097
Return on Equity	169.19017	218.79419	265.25583
Debt-Equity Ratio	109.9669	153.77339	182.54902

Source: Researcher's compilation from financial statement of Banks retrieved from http://www.moneycontrol.com/stocksmarketsindia/

In second case, the merger of the Centurion Bank of Punjab and the HDFC Bank, the comparison between pre and post merger performance we seen that the mean value of gross profit margin (70.2136 percent Vs 75.2397 percent) has increased with t-value -4.008 which shows significance improvement in the gross profit margin after merger but in net profit margin and operating profit margin you can see the decline in the mean of both parameters that indicates that there is no change in the performance of banks net profit margin and operating profit margin after merger and result shows that there is no significance with mean (18.8413 percent Vs 17.2268 percent) and t-value 0.610 and (46.7550 percent Vs 53.4248 percent) and t-value -2.319 and the mean return on capital employed (1.1877 percent Vs 1.3220 percent) and t-value -2.182 which is also not significant statically and shows that no change has been seen in term of investment after the merger. The mean of return on equity and debt equity ratio shows improvement, and statically conformed significant to mean value (2.1775 percent Vs 6.7197 percent) and t-value -4.711 and (1.4876 percent Vs 4.0509 percent) and t-value -5.667. The mean value of equity in post merger has been increased so it increased the shareholder return so it also shows the improved performance of bank after merger. Similarly the debt equity ratio also improved after the merger the mean value shows the change in debt equity ratio after merger. So we conclude that some ratios indicate no effect but most of ratios shows the positive effect and increased the performance of banks after the merger.

Table 9 : Mean and Standard Deviation of Pre-merger and Post-merger Ratios of combined Banks (Nedungadi Bank & Punjab National Bank) and Acquiring Bank (PNB)

		Mean	Std. Deviation	t-value	Sig.
Gross Profit Margin	Pre	76.2193	1.59873	1.125	.324
	Post	74.6209	1.87081		
Net profit Margin	Pre	7.5965	0.91910	-8.683	.001
	Post	15.3128	1.23472		
Operating Profit Margin	Pre	61.8458	0.79590	2.737	.052
	Post	55.7335	3.78482		
Return on Capital Employed	Pre	0.7062	0.08747	-5.671	.005
	Post	1.0637	0.06536		
Return on Equity	Pre	2.0714	40.51807	-8.934	.001
	Post	4.4054	20.14562		
Debt-Equity Ratio	Pre	2.6119	36.50625	-3.196	.033
	Post	3.5762	37.39320		

Source: Researcher's compilation based on tables 3&5, 5% level of significance

Table 10 : Mean and Standard Deviation of Pre-merger and Post-merger Ratios of combined (CBOP &HDFC Banks) and Acquiring Bank (HDFC Bank)

		Mean	Std. Deviation	t-value	Sig.
Gross Profit Margin	Pre	70.2136	1.97113	-4.008	.016
	Post	75.2397	0.91303		
Net profit Margin	Pre	18.8413	3.37311	0.610	.575
	Post	17.2268	3.10326		
Operating Profit Margin	Pre	46.7550	4.56400	-2.319	.081
	Post	53.4248	1.99513		
Return on Capital Employed	Pre	1.1877	0.04755	-2.182	.095
	Post	1.3220	0.09541		
Return on Equity	Pre	2.1775	48.04140	-4.711	.009
	Post	6.7197	159.92827		
Debt-Equity Ratio	Pre	1.4876	36.54953	-5.667	.005
	Post	4.0509	69.30134		

Source: Researcher's compilation based on tables 6&8, 5% level of significance

8. RESULTS AND DISCUSSIONS

a) Results

The result suggest that the performance of the PNB after acquired the Nedungadi Bank has been improved in terms of Net Profit Margin with t-value -8.683 which leads to the conclusion that the difference is statistically significant therefore, the **H_1 (Alternative Hypothesis) is accepted** which say that there is significance difference between the pre and post merger net profit margin. The performance of the Punjab National Bank in terms of Return on Capital Employed has been improved after the merger with t-value -5.671 which is significant therefore , the **H_1 (Alternative Hypothesis) is accepted**. The bank performance is improved after merger in relation to the Return on Equity with t- value -8.934 which leads to the conclusion that the difference is statistically significant therefore the **H_1 (Alternative Hypothesis) is accepted**. In the Debt Equity Ratio, the performance of bank after the merger seems improvement with t-value -3.196 which shows significant statistically therefore **H_1 (Alternative Hypothesis) is accepted**, which leads to the conclusion that there is a significance difference between pre and post merger Debt Equity Ratio. All the Alternative Hypothesis is accepted in case of the Punjab National Bank and the Nedungadi Bank, so the conclusion suggest that the merger of banks has been beneficial to the Equity share holders and increases the overall bank performance in terms of profitability.

Similarly in the case of the Centurion Bank of Punjab and the HDFC Bank, the Net Profit Margin does not shows any change after the merger with t-value 0.610 which is statistically insignificant therefore **H_0 (Null Hypothesis) is accepted** which leads to the conclusion that there is no difference between pre and post merger net profitability. The Return on Capital Employed also shows no change after the merger with t- value -2.182 which is statistically insignificant therefore **H_0 (Null Hypothesis) is accepted** which also leads to the conclusion that there is no significance difference between pre and post merger Return on Capital Employed. The Return on Equity shows improvement after the merger with t-value -4.711 which is statistically significant therefore **H_1(Alternative Hypothesis) is accepted ,** which leads to the conclusion that there is significance difference between pre and post merger Return on Equity. The performance of bank also improved in terms of Debt Equity Ratio with t-value -5.667 which is statistically significant therefore **H_1(Alternative Hypothesis) is accepted ,** which leads to the conclusion that there is significance difference between pre and post merger Debt Equity Ratio. The results suggest that the performance of banks has been improved in terms of Return on Equity and Debt Equity Ratio, but no change have been seen in Net Profit Margin and Return on Capital Employed. It may be possible the performance of bank in terms of net profitability will increase in longer run.

b) Discussions

After the merger we will see that in various financial parameter of the bank performance have improved in both cases and some parameter have shown no change but it may be possible that improved performance of merged Bank will show in later years the profit are not visible because we compared only three years financial ratios, it may be possible that profit will be seen in future. There are various motives, which attract the bank for merger but it is not necessary to achieved all objectives after merger, the size of the bank will increase but no guarantee to increase net profitability after merger.

The success of merger is dependent upon synergy gains created after the merger and overall performance of bank, the financial performance of the Punjab National Bank have been improved after the merger and was affected positively, the reaction comes out in terms of Net Profit Margin ,Return on Capital Employed, Return on Equity and Debt Equity Ratio. But in the case of the Centurion Bank of Punjab with the HDFC Bank, the financial ratios were not positively affected by merger and show no relation between pre and post merger performance and may required due time for showing profitability. Finally the Indian Banking Sector has used Merger and Acquisitions (M&As) as a tool to expand and global recognition. Sick bank survived after merger, enhanced branch network, rural reach, increase market share and improve infrastructure all achieved through Merger and Acquisitions (M&As). For the level of high competition this strategy is also appearing as a mode of survival in the present market.

9. CONCLUSIONS AND FUTURE DIMENSIONS

Merger and Acquisition is the useful tool for growth and expansion in the Indian banking sector. It is helpful for survival of weak banks by merging into larger bank. This study shows the impact of M&As in the Indian banking sector and researcher took two cases for the study as sample and examine that merger led to a profitable situation or not. For this a comparison between pre and post merger performance in terms of gross profit margin, net profit margin, operating profit margin, return on capital employed, return on equity, and debt equity ratio. The combined performance of both bank (three years before) merger and the performance of acquiring bank (after three years) merger have compared. In case **I** the merger of the Nedungadi bank and the PNB, the financial ratio like, **Net Profit Margin, Return on Capital Employed, Return on Equity and Debt Equity Ratio** and in case **II** the financial ratios like, **Return on Equity, Debt Equity Ratio and Gross Profit Margin** has shows the improvement after the merger, and for the purpose and objective of the study investigator apply independent t-test for analyzing the pre and post merger performance of the banks. And results suggest that after the merger the efficiency and performance of banks have increased. The most important is that to generate higher net profits after the merger in order to justify the decision of merger undertaken by the management to the shareholders.

Researcher suggests, for future research in this area could be the study of impact of merger only on acquiring banks by comparing pre and post merger performance and take more banks to a larger sample concerning a longer time period for the study which would have given better result.

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