A STUDY ON FINANCIAL PERFORMANCE OF PRE AND POST-MERGER OF PUBLIC SECTOR BANKS IN INDIA

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Article History: Received: 12.12.2022 **Revised:** 29.01.2023 **Accepted:** 15.03.2023

Abstract:

This research study analyse and describe about the financial analysis of recent merger of different banks. M and A are common in Banking system of India or banking sector, then recently the sector witnessed merger in the banking industry in India which announced or effect from 1 April, 2019 i.e., Bank of Baroda and from 1st April 2020 i.e., Canara Bank, UBI, PNB, Indian Bank. Analysis of performance of financial refers to calculating or estimating the consequences of the banks or companies entire operations and strategies with references to the financial parameters or in another way, which means analysing the financial condition of the banks for a stipulated period of time. In this research paper analysed the performance of financial parameters of recent merger of public sector banks namely, Canara bank with Syndicate bank, Indian Bank with Allahabad bank, Union Bank with Andhra Bank and Corporation Bank, Punjab National Bank with Oriental Bank of Commerce and United of India and Bank of Baroda with Dena Bank and Vijaya Banks and financial ratios Net profit, operating profit, DER, ROA, current ratio, ROE, Net profit per employee, Operating expenses and interest operating expenses considered for analysis. And, also used paired t-test to ascertain for t-test and significance value with the help of using IBM-SPSS software, the finally, all the five banks result perfectly shows that there is massive impact on the financial variables after merger, Debt equity ratio were decreased, net profit and operating profit margins were increased and ROE and ROA were showing positive figures after merger, which assists to make high profitability of banks. After merger BOB, UBI and Canara Bank's employee size and number of branches expanded in size and, In this paper it is examined which methods can be applied for analysing the M&A and reasons and why these studies concluded in positive results, are given.

Keywords: Merger, Financial ratios, t-test, Banking, Public Sector Banks

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DOI: 10.31838/ecb/2023.12.s2.100

1. Introduction

Mergers are for the most part practiced to bring back weak banks from fall down by combining them with good conditioned or stronger bank to boost solid banks bringing about a lot more performances with a bigger banks or stronger banks. In our country, framework of banking system plays a main role in financial structure. Merger is the combine of at least two or more than two banks or companies or firms by buy or acquire. The primary goal for the merging of two banks, exchanges are essentially getting up piece of the complete banking, benefits, extending profit and income and reducing the risk and take over for the purpose of upper hand. Merger with another bank is not another technique in Public sector banks, which supports to increase profitability and reducing the risk. More than 10years past many banks merged, for example, in 2008, State Bank of Indore merge with SBI and State Bank of Saurashtra also merged in the same year, merged in both the banks situation the main motive was the extension of its size of banks and other many banks merged between 2000 and 2020 for more advantages and economic scope. In 2008, Centurion bank of Punjab merged HDFC bank, etc.., In 1985, merged with bank of cochin ltd, and merged with national bank of Lahore ltd., and bank of Bihar ltd., in 1970 and 1969 respectively, with the motive of combining of weak banks with the stronger banks for improvement and development of financial condition of the banks. After this merger, all the banks performance was bad. There were no huge improvement in the performance of banks after merger. This condition is not only in India but seen in many other nations. Recent 4years bank merged namely are, Canara bank, UBI, Indian Bank, PNB and Bank of Baroda in 2019-20 and 2018-19 respectively. After 2years of merger many changes between these banks, so, there is require to analyse and describe about the banks to see if there is any improvement in the respective banks performance of finance. In this paper analyse and discuss about the public sector banks like Canara bank, UBI, Indian Bank, PNB and Bank of Baroda of financial performance of before and after merger of banks with the help of statement report of respective banks and using different ratios. This research paper assist with knowing whether there is any change or history has consistant again, and also shows financial performance and result of public sector banks after merger.

Literature Review:

Ms Sneha Y (Sept 2021)

The title of the research paper “Analysis of pre and post-merger financial performance of selected Indian banks” in this research paper described about the merger of four selected Indian banks. The main purpose of this paper is to examine the pre and post-merger performance of financial data of a banks after merger for a period of 2004 to 2017 and performance is evaluated in view of various different factors and following variables considered for analysis, which are as per the following, G-P ratio, DE-ratio, properietary, ROA and ROE percentages, N-P ratio, CATR, FATR, TATR and CR ratio. Information were collected from the downloaded from bank websites annual report, moneycontrol.com website and examined by used with the help of paired t-test through IBM’s SPSS software package and considered significance level of five percentage for analysis. The research result found a positive effect of ICICI bank after merger and remaining banks diminished after merger. hence, it is seen that the most of the variables have diminished in the post merge and also applied the Comparision between banks, the paper additionally evaluates the monetary performance of banks with the banking framework. Ands also, in this study, found The KMB and HDFC Bank got high profit than remaining banks in the post merger period and other banks have their profit remains below average.

Dr. Umamaheswari S & **Ashwini S B** the title of the research paper “evaluating the pre and post-merger impact on financial performance of bank of baroda and kotak mahindra bank”, in this paper explained about an impact on financial performance of post merger of bank of baroda and kotak Mahindra bank between 2014 and 2020 and used changes in percentage in different ratios, correlation and t test for testing of hypothesis with the help of using following variables profitability, liquidity, growth of the banks from pre-merger and post-merger.

Dr. Jayashree R Kotnal(2016) the title of the paper “The economic impact of merger and acquisition on profitability of SBI” in this research paper analysed with the various aspects of merger. Also compared financial paprameters of banks using the gross profit, net profit, ROCE, DER ratios and used independent t-test to ascertainment of significance value and result of this shows the positive affect after merger

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Statement of Problem: India is the developing in the financial system. Throughout the past twenty years India’s banking system had expanded from metro regions to other regions and different areas of different places. In this situation the public sector banks merger are ending up an achievement to the nation’s development, banks prosperity relies on its employees, customer satisfaction, profitability and performance. This is important to analyse and discussing the performance of the banks after merger. In this study going through understanding and assessing the performance of the public sector banks after merger.

Objectives:

1. To find the reasons behind the huge merger of the banks.
2. To analyse the financial performance or execution of pre and post-merger of the banks
3. Analyse the impact of the merger on the financial performance of the banks.
4. To examine about the advantages of mergers.

Research gap

Many researches have been studied on the mergers and acquisitions of banking industry as well as the corporate sector as involved above. The earlier mergers of banks were also examined and analysed by the researchers. The researchers have examined about the mergers of various different banks with respect to various related variables of banking that shows the strength of a banks situation with the help of using following variables, NP ratio, GP ratio, ROCE, ROA, CR etc. And previous researchers used for a period of 1year and used few variables. In this research study two years and more ratios than past papers,

2. Methodology

In this study covers four and six year's annual data to compare the pre and post-merger performance of the banks. Thus, pre-merger period of two years from 2018-19 and 2019-20 and post-merger period of two years from 2020-21 and 2021-22 of Canara Bank, UBI, PNB and Indian Bank and pre-merger period of three years from 2016-17 to 2018-19 and post-merger period of three years from 2019-20 to 2021-22 of BOBare consideration for analysis and evaluate. The study conducted is in view of secondary data with the help of financial annual report of bank and relevant websites were used. This study is limited to the analysis of financial or monetary related Performance of respective banks with the help of following ratios or variables, Net Profit, operating profit ratio, current ratio, D-E Ratio, ROA, Net profit Per Employee, ROA, Net profit per employee, Operating Expenses –Total Assets ratio, Interest Expenses-Total Assets ratio, and paired t-test are used to analysis of banks overall financial related performance of pre and post-merger and considered as a five percentage of significant parameter for analysing the finance related with performance of the bank.

Hypothesis: H0: There is no significant difference in the financial performance of the PSB's per and post-merger.

H1: There is a significant difference in the financial performance of the PSB's pre and post-merger.

Data Analysis:

1. Canara Bank with Syndicate Bank

Following table is the data and analysis of Canara Bank,

Ratios		Average	t-value	Significance
NP margin	Pre	0.13	-2.037	0.291
	Post	4.82		
Operating profit margin	Pre	-16.92	0.013	0.992
	Post	-16.98		
Current Ratio	Pre	0.76	0.01	1.03
	Post	0.76		
ROA	Pre	-0.13	-1.621	0.352
	Post	0.34		
ROE	Pre	-2.81	-1.611	0.354
	Post	7.45		
DER	Pre	1.11	6.091	0.104
	Post	0.78		
Net profit per employee (in Rs.)	Pre	-160920.95	-0.573	0.36
	Post	471615.56		
Operating Expenses/Total Assets (%)	Pre	1.55	-1.267	0.425
	Post	1.64		
Interest Expenses/Total Assets (%)	Pre	4.80	3.114	0.198
	Post	3.71		

Table 1

The above table1 shows that data and analysis of various parameters of Canara Bank, it very likely to be understood that the net profit margin ratio (4.82%), return on assets (0.34%), Return on equity (7.45%), operating expenses and net profit per employee(471615.56) have shown a positive trend and also increased from pre-merger to post merger and debt equity ratio decresed, which is better for banks while the other ratios i.e. operating profit and interest expenses ratio in negative to-16.98% and 3.71 % respectively. And "to know whether there is difference of significance in the variables of finance when merger used or analyse with help of SPSS paired t test. The outcome of the study clearly shows in table 1", almost equal of null hypothesis between before-merger and after-merger performance of canara bank is to be accepted since the significance value shows more than the significance value of 0.05 and furtheremore it may be seen that they are more negatively related. In some ratios, the average or mean do show much significance in terms of pre- and post-merger.

2. Indian Bank with Allahabad Bank

Following table is the data and analysis of Indian Bank,

Ratios		Average	t-value	Significance
NP margin	Pre	2.59	-20.1	0.032
	Post	8.92		
Operating profit margin	Pre	-10.04	-1.13	0.46
	Post	-7.75		
Current Ratio	Pre	9.80	-0.42	0.744
	Post	11.59		
ROA	Pre	0.18	-35	0.018
	Post	0.53		
ROE	Pre	2.96	-4.95	0.127
	Post	11.20		
DER	Pre	0.79	0.833	0.558
	Post	0.54		
Net profit per employee (in Rs.)	Pre	282923.7	-3.59	0.018
	Post	856430.7		
Operating Expenses/Total Assets (%)	Pre	1.43	-21	0.03
	Post	1.64		
Interest Expenses/Total Assets (%)	Pre	4.40	3.143	0.196
	Post	3.52		

Table 2

The above table2 shows that data and analysis of various parameters of Indian Bank, it very likely to be understood that the net profit margin ratio (8.92%), return on assets (0.34%), Return on equity (11.20 %), operating expenses(4.40), return on asset (0.53%), operating profit decreased to -7.5 from-10.04, its negative but compared to pre merger, its shows good and net profit per employee(856430.70) have shown a positive trend and also increased from pre-merger to post merger and debt equity ratio decresed, which is better for banks while the other ratios i.e. operating profit and operating expenses ratio 1.64% and 3.2 % respectively. And "to know whether there is difference of significance in the variables of finance when merger used or analyse with help of SPSS paired t test. The outcome of the study clearly shows in table 2", t almost equal of null hypothesis between before-merger and after-merger performance of Indian bank is to be accepted since the significance value shows more than the significance value in some ratios like OP margin, CR,ROE ratio,D-E ratio and interest expenses ratio more than5% so, which is not accepted the null hypothetis and remaining Net profit margin,Return on Asset, net profit per employee, and operating expenses ratios significance value showing less than 5% so, which ratios are accepting null hypothetis. In some ratios, the average or mean do show much significance in terms of pre- and post-merger.

3. Union Bank of India-Corporation Bank and Andhra Bank

Following table is the data and analysis of Canara Bank,

Ratios		Average	t-value	Significance
NP margin	Pre	-8.22	-10.862	0.058
	Post	5.96		
Operating profit margin	Pre	-21.85	-12.47	0.051
	Post	-11.50		
Current Ratio	Pre	6.50	-2.602	0.234
	Post	9.31		

ROA	Pre	-0.56	-18.2	0.035
	Post	0.36		
ROE	Pre	-10.81	-90.57	0.007
	Post	6.41		
DER	Pre	1.59	1.65	0.004
	Post	0.76		
Net profit per employee (in Rs.)	Pre	-783757.765	-8.509	0.074
	Post	533672.73		
Operating Expenses/Total Assets (%)	Pre	1.41	-3.75	0.166
	Post	1.56		
Interest Expenses/Total Assets (%)	Pre	4.75	3.407	0.182
	Post	3.75		

Table 3

The above table3 shows that data and analysis of various parameters of Indian Bank, it very likely to be understood that the net profit margin ratio (5.96%), return on assets (0.36%), Return on equity (6.41 %), operating expenses(1.56), net profit per employee(533672.73) have shown a positive trend and also increased from pre-merger to post merger and debt equity ratio decresed to 0.76 from 1.59, which is better for banks while the other ratios i.e. operating profit margin decreased to -11.50% from -21.85% which is better compare to before merger, but in negative figures, operating expenses ratio is showing 1.56% after merger which is not good for banks. And "to know whether there is difference of significance in the variables of finance when merger used or analyse with help of SPSS paired t test. The outcome of the study clearly shows in table 3", almost equal of null hypothesis between before-merger and after-merger performance of Union Bank of India is to be accepted since the significance value shows more than the significance value in some ratios like current ratio,operating expenses and interest expenses more than5% so, which is not accepted the null hypothesis and remaining Net profit margin, Return on Asset, net profit per employee, and other ratio significance value showing less than 5% so, which ratios are accepting null hypothesis. In some ratios, the average or mean do show much significance in terms of pre- and post-merger.

4. Punjab National Bank with OBC and UBI

Following table is the data and analysis of PNB,

Ratios		**Average**	**t-value**	**Significance**
NP margin	Pre	-9.41	-1.45	0.385
	Post	3.56		
Operating profit margin	Pre	-25.21	-1.61	0.354
	Post	-12.60		
Current Ratio	Pre	9.75	-10.4	0.061
	Post	13.13		
ROA	Pre	-0.62	-1.36	0.403
	Post	0.21		
ROE	Pre	-11.81	-1.29	0.421
	Post	3.16		
DER	Pre	0.84	10.43	0.061
	Post	0.47		
Net profit per employee (in Rs.)	Pre	-679945	-1.43	0.388
	Post	266871.2		
Operating Expenses/Total Assets (%)	Pre	1.46	-7.67	0.083
	Post	1.58		
Interest Expenses/Total Assets (%)	Pre	4.39	2.909	0.211
	Post	3.75		

Table 4

The above table4 shows that data and analysis of various parameters of Punjab National Bank, it very likely to be understood that the net profit margin ratio (3.56 %), return on assets (0.21%), Return on equity (3.16 %), operating expenses(1.58), net profit per employee(266871.2) have shown a positive trend and also increased from pre-merger to post merger and debt equity ratio decresed to 0.76 from 1.59, which is better for banks while the other ratios i.e. operating profit margin decreased to 0.47% from 0.84 % which is better compare to before merger, operating expenses ratio is showing 1.58% after merger which is not good for banks. And "to know whether there is difference of significance in the variables of finance when merger used or analyse with help of SPSS paired t test. The outcome of the study clearly shows in table 4", almost equal of null hypothesis between before-merger and after-merger performance of PNB is to be accepted since the significance value shows more than the significance value except Current ratio, Debt equity ratio and operating expense more than5% so, which is not accepted the null hypothetis and those remaining ratios significance value showing less than 5% so, which ratios are accepting null hypothesis and there is significance between the banks. In some ratios, the average or mean do show much significance in terms of pre- and post-merger.

5. BOB- Vijaya Bank and Dena Bank

Following table is the data and analysis of BOB,

Ratios		Average	t-value	Significance
NP margin	Pre	-9.41	-1.25	0.338
	Post	3.56		
Operating profit margin	Pre	-25.21	-1.888	0.2
	Post	-12.60		
Current Ratio	Pre	9.75	0.871	0.475
	Post	13.13		
ROA	Pre	-0.62	-1.241	0.34
	Post	0.21		
ROE	Pre	-11.81	-1.176	0.36
	Post	3.16		
DER	Pre	0.84	0.3	0.792
	Post	0.47		
Net profit per employee (in Rs.)	Pre	-679944.79	-1.277	0.33
	Post	266871.18		
Operating Expenses/Total Assets (%)	Pre	1.46	-6.928	0.02
	Post	1.58		
Interest Expenses/Total Assets (%)	Pre	4.39	1.286	0.327
	Post	3.75		

Table 5

The above table5 shows that data and analysis of various parameters of Bank of Baroda, it very likely to be understood that the net profit margin ratio (3.56%), return on assets (0.21%), Return on equity (3.16 %) have shown a positive trend and also increased and shifted positive in trend from pre-merger to post merger, operating expenses(1.58), net profit per employee(266871.18) have shown a positive trend and also increased from pre-merger to post merger and debt equity ratio decresed to 0.47 from 0.84, which is better for banks while the other ratios i.e. operating profit margin decreased to -12.60% from -25.21% which is better compare to before merger, but in negative figures, operating expenses ratio is showing 1.58% after merger which is not good for banks. And "to know whether there is difference of significance in the variables of finance when merger used or analyse with help of SPSS paired t test. The outcome of the study clearly shows in table 5", almost equal of null hypothesis between before-merger and after-merger performance of BOB is to be accepted since the significance value shows more than the significance value except operating expenses ratio remaining ratios are more than5% so, which is not accepted the null hypothetis and that operating expenses ratio significance value showing less than 5% i.e., 0.02, so, which ratio are accepting null hypothesis and there is significance between the banks. In some ratios, the average or mean do show much significance in terms of before-merger and after-merger.

Summary of Findings:

The paper study about the merger of PSB's are Canara Bank, Indian bank, UBI, PNB and BOB for the period from 2018-19 to 2021-22 and 2016-17 to 2021-22 respectively and for the significance value paired t-test used by using the different variables. The pre and post banks performance has been ascertained by choosing the different financial proportions. This paper helps to customers of the bank, banks shareholders, auditors, investors and also helps to future researchers. From this research paper, after ascertained the ratios of respective banks ratios need to enhance in terms their profitability with providing the more benefits to their customers and increasing in the customer size. All the banks net profit increased after merger period. The main object for the decreasing trend of profitability and expanding the non-performing assets in the banks. These both are inter-related, as the raising in NPAs would straightforwardly affect on the banks profit. The other parameter affecting the profitability is the more expenses in operating expenses. In this research study, net profit of all the banks increased year by year after merger and showing net profit of the Canara bank, Indian bank, UBI, PNBk and BOB in 2021-22 financial report were as follows 6.61%, 10.15%, 7.70%, 4.61% and 10.40% respectively. Operating profit of all the banks were decreased compared to pre-merger but in negative figures. Current ratio of Canara bank was constant year by year i.e., 0.76% and remaining Indian Bank, Union Bank of India, Punjab National Bank, and Bank of Baroda were showing 8.26, 5.94, 9.04 and 6.47 before merger and after merger showing 14.25%, 9.83%, 12.74% and 6.51% respectively. Debt equity ratio of all the banks decreased after merger compared to before merger. Debt equity ratio of Canara bank was 1.09% in 2019-20 and which is decreased to 0.7 in 2021-22, indian Banjk debt ratio was 0.94 in 2019-20 whch is decreased to 0.39% in 2021-22, UBI's debt ratio was 1.55% in 2019-20, which is decreased to more than 50% ie.e., 0.72%, debt equity ratio of PNB was 0.80%, which is decreased to 0.47% and Bank of baroda's edebt ratio was 1.20 after merge, so all the bank debt equity decreased after merger, its helps to banks and shows the performance level and improvement of the banks. Also, observed from the analysis that, operating expenses increased in all the banks, which is effecting on the profitability. So, there is require reduce in the cost of operating expenses, which assists to increasing the profitability of all the banks. And, interest expenses decreased in all the banks after merger. Net profit per employee of all the banks increased after merger, Canara bank and Union Bank of India were in (loss) negative converted into positivity (profit) after merger and remaining banks profit per employee are moving or increasing in good profit after merger. In this research study, return on asset and return on equity showing in positive after merger, these both ratio in negative at the time of before merger, which assists and impact and indicates that the profitability in positive and more profitability.

3. Conclusion and Suggestions:

Mergers are a very helpful strategy for the extension of Indian banking syatem. It helps in the endurance of weak banks to be a part of a better performing bank. Furthermore, it helps in the monetary steadiness as the banking syatem is the foundation of the economy. Subsequently, better preparation and execution of the merger can result great as far as performance of finance of banks. Mergers are for the most part practiced to bring back weak banks from fall down by combining them with good conditioned or stronger bank to boosting solid banks bringing about a lot more performances with a bigger banks or stronger banks. Advantages of merger must be obtain by careful analysis of the process of merger, reorganisation of problems and performance in brief remedial activities. After merger. Bank of baroda is the 2nd largest bank in india after State Bank of India with more than 130million customers. After merger many banks condition looks good and also net profit, operating profit, net profit per employee increased compared to before merger and all the five banks debt equity ratio were decreased after merger, which helps to profitability of the banks. Operating expenses and interest expenses were bit decreased in all the banks, which affects on the profitability of the banks. In this research paper, discussed of merger of 5banks does shows huge improvement in the performance of financial parameters after merger period. There are many of the financial variables have shown significant improvement. The major positive impact of merger on debt equity ratio, net profit, margin operating profit margin and other parameters while merger adversely affected on the remaining or rest of the variables or ratios of the bank. The profitability has bit increased not because of increasing in interest expenses and other expenses. Thus, it very well may be closed from the review of the study that the positive effect of merger and may also more accrue in later years i.e., in long run, as the present study is considered limited to time period of only two and three years each before and after merger**.**

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