Impact of Merger on Financial Performance of PSBs in India

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Abstract

Purpose:The banking sector is amongflourishingsector in India. It forms the backbone of contemporary business and commands a sizable portion of the money supply. Finance Minister of India has announced the merging of India's 10 banks from public sector into four separate entities in response to the country's economic downturn. The government's goal was to increase liquidity, address the problem of nonperforming assets, and diversify risk to boost the economy. In that line, present study attempts to assess the impact of the mega mergers specifically of Punjab National Bank, Union Bank, Canara Bank and Indian Bank on theirfinancial performance during the period from 2018 to 2023.

Methodology: To compare financial performance of pre and postperiod ofbank mergers by means ofdifferent financial ratios. Paired t-test was applied to check improvement in post-merger financial performance.

Findings: Post-merger analysis showsthe diverse outcomes. Punjab National Bank excels in key metrics; Union Bank of India faces liquidity and return on assets challenges; Canara Bank improves profitability and reduces debt; and Indian Bank experiencedincrease inprofitability but required to enhance liquidity and leverage. T-test results indicate no significant changes in majority of financial ratios post-merger.

Keywords: Mergers & Acquisitions, Financial Performance, Liquidity Ratios, Profitability Ratios, Leverage Ratios.

Introduction

Mergers and Acquisitions (M&A) are a well-known in addition successful strategy used by businesses to compete in the current dynamic and global marketplace. Research displays that M&A has been a substantial and essential tactic used by businesses to attain efficiency and growth through cost savings, asset acquisition, market expansion, and synergy creation (Marques-Ibanez &Altunbas, 2004; Martynova&Rennenborg, 2006).

Even though, "merger" and "acquisition" terms are occasionallyused interchangeably, they denote to two dissimilar approaches to expand a

firm's activities.Specifically, a merger is the amalgamationof minimum twoentities to form a holding company or another firm. The claim that companies can profit from "synergies"—anticipated cost savings, expansion prospects, and other monetary gains—when two enterprises work together for the enterprise's mutual benefit is one of the most common defenses (Ravenscraft& Scherer, 1987). On the other hand, an acquisition is the purchasing ofassets or interests in another firm to gain managerial influence, not essential by mutual consent (Chen & Findlay, 2003; Jagersma, 2005; Martynova&Rennenborg, 2006). Survival, profitability, and shareholders are an organization's three main deciding elements when deciding whether to merge with or buy another business. Toenhance performance of a firm and owner's wealth, these elements are connected to the convergence of resources, technology, and capabilities (Soludo, 2004).

About Banking Sector in India

Reserve Bank of India (RBI) emphasizes that banking sector is well regulated and capitalized, outperforming global counterparts in financial and economic conditions. Despite global challenges, Indian banks demonstrate resilience against credit, market, and liquidity risks. The country has introduced unconventional banking models, for instance payments banks and small finance banks, and has expanded the sector's scopeby introducing initiatives like Post payment banks and Pradhan Mantri Jan Dhan Yojana. Banking reforms, like non-banking financial companies (NBFCs), digital payments, the rise of fintech andneo-banking have significantly upgraded financial inclusion and fueled the credit cycle.The banking system in India is diverse, consisting of publicsector, private sector, foreign banks, along with various cooperative banks. Public sector banks hold most banking assets, and the digital lending market has grown at a CAGR of 39.5% over a decade. Deposits in scheduled banks have increased significantly, with credit growth projected at 18.1% in 2022-23.

On August 30, 2019, Public Sector Banks (PSBs) consolidation wasdeclared by Union Finance Minister, with the goal of strengthening the banking industry that is facing bad loans by merging 10 PSBs into four larger institutions. The purpose was to reinforce bank balance sheets and establish international financiers capable of supporting the economy's expected nearly $5 trillion growth by 2024. Aim to accomplish this for the robust financial system, having completed the first two rounds of bank consolidation previously. According to FM Sitharaman, efforts are underway to construct large, next-generation banks that can expand lending.

Table 1- Mega Bank Mergers of India in year 2020

Acquiring Bank	Acquired Bank	Merger Date
Punjab National Bank	Oriental Bank of Commerce, United Bank of India	1st April, 2020
Union Bank of India	Andhra Bank, Corporation Bank	1st April, 2020
Canara Bank	Syndicate Bank	1st April, 2020
Indian Bank	Allahabad Bank	1st April, 2020

Literature Review

Bansal and Kakkar (2018)examined a variety of strategic criteria to determine that the merger of SBI with its five related banks and Bhartiya Mahila Bank had favorable effects on their profitability. With an emphasis on the Indian banking industry, the study digs deeper into the specifics of mergers and acquisitions. Nevertheless, there had been a small number of mergers in banking industry of India, so the road to "international banks" was still long.

Sharma andSidana (2017) studied the implications of the SBI merger on SBI's financial situation are explained in this research paper. By expanding its network, the SBI will be able to lend money more easily and at a cheaper cost, as well as gain awareness on a universal basis. SBI NPAwill decline

post-merger with an associate. Bankis expected to runfurtherefficiently and successfully due to a single managing team.

Kotnal (2016)highlighted the many merger incentives in Indian banking industry and examines in detail the impact on profitability of merger and acquisition of SBI. With the support of financial metrics such operational profit, net profit, gross profit, debt equity ratio and return on equity, the pre- and post-merger financial performance of the merging banks was compared. Eventually, M&A have benefited the banks, they cannot report the institutions' development and financial complications.

Singh & Gupta's (2015)paper analyzed the performance of public banksas well as private sector banksfor five year. Arithmetic mean, standard deviation and t-test were used for evaluatingfinancial performance during pre- and post-merger period. Analysis showed that M&A have favorable impact on survived Bank.

Parveen Kumari (2014) looked at bank mergers and acquisitions as a tactical approach, elucidating that the objective of these deals is to increase credit creation and promote advancement. Based on the information gathered following the merger, she concluded that there were more branches and ATMs in addition to an increase in net profit, deposits, and net value.

Devarajappa (2012) discussed about determining the elements that contribute to M&A in India. Furthermore, ROCE and ROE, was used to analyze bank performance prior to and following mergers. Results shows that merger supports struggling smaller banks by combining into larger banks.

The mergers process has obtained substantial significance in present banking world. The booming competition in the market globally has urged the Indian public sectors banks to take up mergers as a chief strategic choice. As per the available literatures, very few studies focused on studying the effect of merger on financial performance of banks in long run. So, this study focuses on investigating the changes in the financial performance that have taken place after the mergers of banks in 2020. The current study attempts to evaluate the impact on financial performance on surviving banks (Punjab National Bank, Union Bank, Canara Bank and Indian Bank) after mergers up to three years in long run.

Objective of the Study

- To find out the key strength of merger in the banking industry.
- To compare the performance using financial ratiosof the survival banks during pre and post stages of merger.

Research Methodology

Research Design

This study focuses on evaluating how the merger has impacted the banks' financial performance using a descriptive study design.

Data Collection

Secondary data from the published annual reports and websites of the related banks, form the basis of this study.

Sampling Design

1. Punjab National Bank
2. Union Bank
3. Canara Bank
4. Indian Bank

Data Collection Period

The study covers a period of 6 years from 2018 to 2023, where 2018-2020 is considered under pre-merger period and 2021-2023 is considered under post-merger period.

Statistical Tools

The purpose of this study is to analyze the impactt on the financial performance (pre & post) using different ratios of the merged banks. A few financial ratios were calculated for theperiod (pre&post) of the surviving banks. The paired “t-test” (two tailed assuming equal variances) was used for evaluating statistical significant influence of bank mergers on the financial performance.

Hypothesis

H0: There is no significant difference in the financial ratio of pre and post period of merger for the respective bank.

H1: There is a significant difference in the financial ratio of pre and post period of merger for the respective bank.

Data Analysis and Interpretation

Punjab National Bank Merger

Financial ratios were employed togauge the effect of merger on pre and post financial reporting of PNBand reported in Table 2. 2018-20 was considered as premerger and 2021-23 as postmerger period for the study.

As observed in Table 2, Punjab National Bank is not able to meet the its standards in asset turnover ratio and return on assets during post merger period. The bank has met its standards for their liquidity ratios,operating profit per share, net profit margin, leverage ratio, market ratios, return on net worth (%) and non-performing assets. It means that the bank is able to meet its current liabilities and generate profitability while not able to show proper utilization of assets.

Table – 2 Paired t-test outcomes of financial ratios of Punjab National Bank

Ratio	Standard	Mean		Actual	P value (two tailed)	Significance
		Pre (2018-20)	Post (2021-23)			
Liquidity Ratios						
Current Ratio	Increase	0.05	0.057	Increase	0.1835	Insignificant
Quick Ratio	Increase	32.12	34.25	Increase	0.7841	Insignificant
Credit Deposit Ratio	Decrease	67.52	63.26	Decrease	0.0221	Significant
Investment Deposit Ratio	Increase	31.07	33.53	Increase	0.2350	Insignificant
Profitability Ratios						
Asset turnover ratio	Increase	0.07	0.06	Decrease	0.6667	Insignificant
Net Profit Margin	Increase	-14.80	3.35	Increase	0.1513	Insignificant
Operating ProfitPer Share (Rs.)	Increase	-53.62	-6.29	Increase	0.2073	Insignificant
Return on net worth (%)	Increase	-18.82	3.01	Increase	0.1619	Insignificant
Return on assets	Increase	103.47	81.08	Decrease	0.3114	Insignificant
Leverage Ratio						
Total Debt to Owners Fund	Decrease	16.41	13.92	Decrease	0.3429	Insignificant
Market Ratio						
Earnings Per Share	Increase	-85.39	-14.25	Increase	0.1985	Insignificant
Non-Performing Assets						
% of Net NPA	Decrease	7.86	4.42	Decrease	0.0885	Insignificant

(**Source:** Own calculations based on data available on moneycontrol.com)

From the results of paired t-test, p value observed more than 0.05 for liquidity ratios except investment deposit ratio, profitability ratio, leverage ratios, market ratio and NPA of the merged company. It represents that there is no statistical significant change in above mentioned financial ratios in pre- and post-merger duration. Only for credit deposit ratio p value is significant, it represents a statistical significant change in credit deposit ratio during postperiod of merger.

Union Bank of India Merger

Financial ratios were employed to evaluate the influence of merger on pre and post financial reporting of Union Bank of India and reported in Table 3. 2018-20 was considered as premerger and 2021-23 as postmerger period for the study.

Table – 3Paired t-test outcomes of financial ratios of Union Bank of India

Ratio	Standard	Mean		Actual	P value (two tailed)	Significance
		Pre (2018-20)	Post (2021-23)			
Liquidity Ratios						
Current Ratio	Increase	0.053	0.053	No Change	1	Insignificant
Quick Ratio	Increase	35.28	21.78	Decrease	0.0865	Insignificant
Credit Deposit Ratio	Decrease	71.58	65.36	Decrease	0.0199	Significant
Investment Deposit Ratio	Increase	30.80	33.98	Increase	0.1979	Insignificant
Profitability Ratios						
Asset turnover ratio	Increase	0.07	0.073	Increase	0.7418	Insignificant
Net Profit Margin	Increase	-10.81	7.45	Increase	0.0037	Significant
Operating Profit Per Share (Rs.)	Increase	-55.97	-6.60	Increase	0.1109	Insignificant
Return on net worth (%)	Increase	-14.17	8.16	Increase	0.0060	Significant
Return on assets	Increase	147.25	98.31	Decrease	0.3458	Insignificant
Leverage Ratio						
Total Debt to Owner's Fund	Decrease	17.82	16.30	Decrease	0.1329	Insignificant
Market Ratio						
Earnings Per Share	Increase	-98.32	-13.58	Increase	0.1123	Insignificant
Non-Performing Assets						
% of Net NPA	Decrease	6.92	59.43	Increase	0.4473	Insignificant

(**Source:** Own calculations based on data available on moneycontrol.com)

As per the analysis,Union Bank of India is not able to meet its standard in current ratio, quick ratio, return on assets and non-performing assets during post merger period. The bank has met its standards in credit deposit ratio, investment deposit ratio, profitability ratios, leverage ratio, return on net worth (%) and earnings per share. Results show that the bank should improve their liquidity performance in terms of current and quick ratio to meet their current liabilities better.Results also show that there is an increase in profitability as well decreases in total debt to owner's fund.

From the results of paired t-test, p value for credit deposit ratio, return on net worth (%) and net profit margin is significant.It represents that a statistically significant change in those ratios during postperiod of merger.

Canara Merger

Financial ratios were employed to identify the consequence of merger on pre and post financial reporting of Canara Bank, reported in Table 4. 2018-20 was considered as premerger and 2021-23 as postmerger period for the study.

Table – 4 Paired t-test outcomes of financial ratios of Canara Bank

Ratio	Standard	Mean		Actual	P value (two tailed)	Significance
		Pre (2018-20)	Post (2021-23)			
Liquidity Ratios						
Current Ratio	Increase	0.06	0.04	Decrease	0.1835	Insignificant
Quick Ratio	Increase	27.14	25.73	Increase	0.4659	Insignificant
Credit Deposit Ratio	Decrease	71.07	65.73	Decrease	0.0784	Insignificant
Investment Deposit Ratio	Increase	27.39	26.40	Decrease	0.2157	Insignificant

Ratio	Standard	Mean		Actual	P value (two tailed)	Significance
		Pre (2018-20)	Post (2021-23)			
Profitability Ratios						
Asset turnover ratio	Increase	0.07	0.07	No Change	1	Insignificant
Net Profit Margin	Increase	-4.68	8.14	Increase	0.0459	Significant
Operating Profit Per Share (Rs.)	Increase	-105.21	-40.73	Increase	0.0150	Significant
Return on net worth (%)	Increase	-6.71	10.31	Increase	0.0575	Insignificant
Return on assets	Increase	370.4	329.78	Decrease	0.4424	Insignificant
Leverage Ratio						
Total Debt to Owners Fund	Decrease	20.39	19.78	Decrease	0.6347	Insignificant
Market Ratio						
Earnings Per Share	Increase	-107.3	-48.74	Increase	0.4199	Insignificant
Non-Performing Assets						
% of Net NPA	Decrease	5.69	2.73	Decrease	0.0143	Significant

(**Source:** Own calculations based on data available on moneycontrol.com)

In reference to Table 4, Canara bank is not able to meet its standards forcurrent ratio, investment deposit ratio and return on assets during postmerger period. Results also shows that % of net NPA is decreased drastically during post merger period, which is positive impact of merger. Merger is also favorable for net profit and return on net worth as results of both metrics improved significantly.

From the results of paired t-test, p value of net profit margin, operating profit per share (Rs.) and % of net NPA is significant.It represents that there is a statistically significant change in those ratios during postperiod of merger.

Indian Bank Merger

Financial ratios were employed to identify the impact of merger on pre and post financial reporting of Indian Bank and reported in Table 5. 2018-20 was considered as premerger and 2021-23 as postmerger period for the study.

In reference to Table 5, Indian Bank is not able to meet its standards in the liquidity ratios excluding credit deposit ratio, leverage ratio, and return on assets during post merger period. The bank has met its standards in the profitability ratios, return on net worth (%), earnings per share, and non-performing assets. Results shows that the bank's profitability has increasedafter the merger along with their earnings per share. Post-merger data shows that there is a decrease in their non-performing assets. Post-merger data indicates that bank should improve its liquidity and leverage performance.

Table – 5Paired t-test results of financial ratios of Indian Bank

Ratio	Standard	Mean		Actual	P value (two tailed)	Significance
		Pre (2018-20)	Post (2021-23)			
Liquidity Ratios						
Current Ratio	Increase	0.04	0.03	Decrease	0.2254	Insignificant
Quick Ratio	Increase	31.27	22.97	Decrease	0.0213	Significant
Credit Deposit Ratio	Decrease	74.41	68.65	Decrease	0.0851	Insignificant
Investment Deposit Ratio	Increase	31.64	30.99	Decrease	0.6680	Insignificant

Ratio	Standard	Mean		Actual	P value (two tailed)	Significance
		Pre (2018-20)	Post (2021-23)			
Profitability Ratios						
Asset turnover ratio	Increase	0.07	0.073	Increase	0.7418	Insignificant
Net Profit Margin	Increase	4.17	9.86	Increase	0.1677	Insignificant
Operating Profit Per Share (Rs.)	Increase	-25.78	-17.70	Increase	0.3426	Insignificant
Return on net worth (%)	Increase	4.62	11.67	Increase	0.0456	Significant
Return on assets	Increase	327.51	287.04	Decrease	0.3879	Insignificant
Leverage Ratio						
Total Debt to Owners Fund	Decrease	14.90	17.98	Increase	0.3295	Insignificant
Market Ratio						
Earnings Per Share	Increase	-72.10	-42.00	Increase	0.1233	Insignificant
Non-Performing Assets						
% of Net NPA	Decrease	3.56	2.18	Decrease	0.1166	Insignificant

(**Source:** Own calculations based on data available on moneycontrol.com)

From the results of paired t-test, p value for quick ratio and return on net worth (%) is statistical significant. It represents a statistically significant change in those ratios during post period of merger.

Key Strengths of Bank Mergers:

- The Public Sector Banks will have more lending capacity because due to stronger balance sheets after merger.
- These big banks would be better equipped to compete globally and run more efficiently if their lending costs were reduced.
- To increase its GDP to $5 trillion, India would need to make significant investments. The faster the country's economy grew, the more capital banks needed to fund ambitious projects.
- Combining the two would enable better capital management for banks and enhance their risk management.
- Considering this, the integration of the 10 PSBs into the four primary banks is right step in the direction towards securing the nation's financial resources for investment.
- Enhances the efficiency ratio of banking and operational activities, which is advantageous for the economy.
- The geographically focused regionally present banks benefit from the merger by being able to extend their reach.

Conclusion

In summary, the post-merger financial analysis of Punjab National Bank indicates a mixed performance, with challenges in asset turnover and return on assets. PNB shows overall stability in liquidity, profitability, and other key ratios. Union Bank of India faces issues in liquidity metrics and return on assets post-merger, suggesting a need for improvement in managing current liabilities and enhancing utilization of assets. Canara Bank, after the merger, demonstrates increased profitability and a decrease in debt and non-performing assets. At the same time, Canara Bank has to enhance liquidity for a stronger financial position. Indian Bank, post-merger, shows improved profitability, earnings per share, and a reduction in non-performing assets, yet highlights a need to address liquidity and leverage concerns. The paired t-test results suggest no statistically significant overall changes in financial ratios for the merged banks, except for specific ratios like credit deposit ratio, return on net worth andnet profit margin.

References

- CMA Jai Bansal and Dr. GuruduttKakkar (2018), “A research on the analysis of merger of SBI with its 5 associated banks and BharathiyaMahila bank”.
- Chen, C., & Findlay, C. (2003). A Review of Cross-border Mergers and Acquisitions in APEC. Asian-Pacific Economic Literature, 17(2), 14-38.
- Devarajappa S (2012), 'Mergers in Indian banks: a study on mergers of HDFC bank ltd and centurion bank of Punjab ltd', International Journal of Marketing, Financial Services & Management Research, ISSN 2277 3622.
- Gurbaksh Singh and Sunil Gupta (2015), an impact of merger and acquisition on productivity and profitability of consolidation banking sector in India, Abhinav international monthly referred journal in merger and technology, Vol-4,
- Jagersma, P. K. (2005). Cross-border acquisitions of European multinationals. Journal of General Management, 30(3), 13-34.
- Kotnal Jaya Shree (2016), “The economic impact of Merger and Acquisitions on profitability of SBI”.
- Marques-Ibanez, D., &Altunbas, Y. (2004). Mergers and acquisitions and bank performance in Europe: The role of strategic similarities. Available at SSRN 587265.
- Martynova, M., &Rennenborg, L. (2006). Mergers and acquisitions in Europe. Advances in corporate finance and asset pricing, 13-75.
- Parveen Kumari (2014) “Mergers and Acquisitions in Indian Banking Sector- A Strategic Approach”, Global Journal of Finance and Management, Vol. 6, No. 3, pp-217-222
- Ravenscraft, D. J., & Scherer, F. M. (1987). Life after takeover. The Journal of Industrial Economics, 147-156.
- Sanjay Sharma & Sahil Sidana (2017), 'Impact of SBI Merger on Financial Condition of SBI' (ICRTTIEI-17) ISBN: 978-93-86171-74-0.
- Soludo, C. C. (2004, July). Consolidating the Nigerian banking industry to meet the development challenges of the 21st century. In Being an address delivered to the Special Meeting of the Bankers' Committee, held on July (Vol. 6, p. 2004).

Webography

- www.punjabnationalbank.com
- www.canarabank.com
- www.unionbankofindia.com
- www.indianbank.com
- https://www.moneycontrol.com/ https://www.successcds.net/learn-english/essays/the-merger-of-banks-in-india.html