Demystifying Financial Evaluation of Public Sector Banks: Pre-and Post-Merger

Parulben Rameshbhai Rohit[1], Ramroop K. Sharma[2]

[1]Research Scholar for Ph. D. & Faculty Member, Dept. of Accounting and Financial Management, The Maharaja Sayajirao University of Baroda,

[2]Assistant Professor, Dept. of Accounting and Financial Management, The Maharaja Sayajirao University of Baroda,

Abstract

A sound banking environment immensely espouses a country's economic growth. Measuring bank competence provides opportunities to ameliorate the financial system. The Indian government's 2019 mega-merger of public sector banks (PSBs) envisioned to increase their financial and operational performance. The moral hazard risk is more serious with PSBs due to crony capitalism and governance issues. The government augments recapitalization whenever necessary and henceforth alters banks' perspectives on apt risk management perspectives. Despite geopolitical conflicts, geoeconomic fragmentation, commodity price volatility, climate change, aging populations, and declining productivity, the global banking industry is resilient with robust capital buffers, increased profitability, and other indicators. The banking sector strife in several advanced countries in 2023 was put down by swift policy interferences that prevented a systemic predicament. Formidable macroeconomic groundworks in India have enriched the health and performance of the country's banking. In 2023-24, banks saw a sixth consecutive year of increased profitability and by 31st March 2024, their gross non-performing assets (GNPAs) ratio dropped to 2.7%, the lowest level in past 13 years. This article examines the financial performance of six PSBs (Bank of Baroda-BOB, Canara Bank-CB, Indian Bank-IB, Punjab National Bank-PNB, State Bank of India-SBI, and Union Bank of India-UBI) pre-and post-merger. Outcomes divulge that not significant variation between financial evaluation (return on assets: ROA; return on equity: ROE; earnings per share: EPS; and net interest margin: NIM) in the pre-and post-merger periods except there lies the significant difference in NIM of BOB and UBI. The study's conclusion will help various stakeholders including banks, customers, and regulators to develop effective measures that boost the financial performance of PSBs, shareholder earnings, and synergy implications of mergers and acquisitions (M&As).

Keywords: Financial Performance, Non-financial Performance, Public Sector Banks, Pre-and Post-Merger, Mega-mergers

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Introduction:

The role of PSBs is vivacious for the economic advancement of a country. PSBs account for more than 70% of all banking assets. In 2023-24, India's PSBs earned a total profit of ₹ 1.41 lakh crore (MOF, 2024). This progress shows the sector's strong recovery supported by generous improvements in the quality of assets. Their GNPAs percentage plunged to 3.12% in September 2024. In the first half of 2024-25, PSBs gained a net profit of ₹ 85,520 crore representing continued success. Over the past three years, PSBs disbursed a total dividend of ₹61,964 crore, contributing significantly to shareholder returns. This validates the sector's operating efficiency, increased asset quality, and stronger capital base.

Likewise, PSBs have played an important role in endorsing financial inclusion by executing vital government initiatives of pension and insurance. Such efforts have assured critical benefits for deserving segments of the social system. The Indian government has vigorously supported the sector through transformations, welfare programs, and heroic policies. This has reinforced the banking

sector and inspired more openness, stability, and inclusivity.

Banks proffer financial services in terms of loans, deposits and other financial products. Accepting deposits is the main source of banking finance besides RBI and inter-bank borrowings. Apart from this, banks also engage in investment activities. As the economic prosperity of a country depends on a sound financial system and environment, the Indian government thought to merge PSBs to enhance their financial performance and operational efficiency.

M&As in PSBs

According to the Banking Act, 1949 banking company can merge if two-thirds of the shareholders of each combining business agree with the merger subject to RBI's approval. After consulting with the RBI, the central government may announce the plan to merge the banks listed in Schedule I of the aforementioned Act. The M&As in India are also governed by the Competition Act 2002. M&As are the most popular method for banks to create synergies. M&As are regarded as a quick approach to entering new markets and to implement new technologies. The central government announced a mega-merger in August 2019 resultingly, 27 PSBs were reduced to 12 PSBs. High NPAs were one of the burning issues for their dismal financial performance. M&As intended to improve the financial performance and efficiency of PSBs. The dearth of research studies on the critical issue of mega-mergers is the key motivation for this paper which makes the financial evaluation of PSBs during per and post-merger period.

This paper is divided into various sections such as (i) an introduction that shows the role and importance of PSBs and manager strategy., (ii) provides literature review showing the gist of past studies and their findings for M&As in banks., (iii) narrates research gap and objectives of the study., (iv) depicts research methodology., (v) presents findings analysis and discussion; (vi) conclusion, implications and directions.

Literature Review:

Singh and Das (2018) established that accounting reports, market assessments, and key descriptions were among the qualitative advantages of post-M&As that were crucial for enhancing the bank's performance and capabilities. Kambar (2019) asserted that the merger facilitates the banks' level of operational efficiency and customer service. It makes use of branch network synergies and makes deposits inexpensive. According to their study, effective bank mergers are possible if structural issues with corporate governance are fixed. Joshi (2020) used Altman's Z-score methodology to analyze the financial performance of the 10 PSBs that had the highest level of GNPAs. The study's findings showed that when taking Altman's Z-score above 2.9 into account, all banks were in a safe zone.

Singhal (2017) asserted that the financial performance of India's top banks has not significantly enhanced as a result of M&As in the banking segment except ICICI Bank. Banks must raise capital by gradually increasing the shareholding of individuals through the sale of shares, primarily through retail to common investors, and adopt to acceptance of new advanced technological approaches for the globalization of banking business operations. The banking industry needs scale, innovation, efficiency, governance, and the highest levels of customer service in the global financial sector. Fatim and Shehzad (2014) studied how bank M&As impact their effectiveness. The sample contained 10 Pakistani banks from the period 2007-10, three years each before and after the merger. The study revealed that mergers had no positive influence on a bank's financial performance. Shah and Khan (2017)

scrutinized how M&As affected the operational efficiency of Pakistani banks from the period 2002 to 2011. Their results revealed that acquiring banks' performance deteriorated after the merger.

Shakeel and Datta (2023) explored five PSBs to know how M&As affected banks' financials. Results revealed that M&As had a significant impact on capital adequacy, GNPAs to advances, and net non-performing assets (NNPAs) to advances, but had no apparent effect on earnings per share or ROA. Wadhwa and Ramaswamy (2020) examined the financial performance of five Indian PSBs and five private banks from 2014-2015 and 2018-19. Article concluded that public banks had higher NPAs than private banks. Further, NPAs harmed net profits. Thakor (2023) studied the financial performance of 15 PSBs in India from 2009-10 to 2018-19. He discovered a mixed effect of M&As where some PSBs performed well while other underperformed after the merger.

Research Gap:

The size of activities, organizational culture, capital management structure, and financial performance of PSBs are important factors concerning mergers. Accordingly, it was thought necessary to comprehend the variations between the financial evaluation of PSBs' pre- and post-merger. The researchers further observed the lack of research on this issue as surveyed from Emerald, Taylor and Francis journals and the Google Scholar research platform. The issue of the recent mega-merger of the PSBs has not been studied thoroughly.

Objectives:

The undermentioned are the goals of the study.

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- Recognize the significance of mergers for PSBs in the Indian scenario.

- Study the financial evaluation of ratios of PSBs before and after the merger.

- Highlight relevant implications post-merger of PSBs.

Research Methodology:

The study covers three years as a pre-merger period (2016-17, 2017-18, and 2018-19) and three years as a post-merger period (2019-20, 2020-21, 2021-22) for five PSBs and one bank, i.e., SBI's study period is different i.e., post-merger period is 2014-15, 2015-16, 2016-17 and post-merger period is 2017-18, 2018-19, and 2019-20. The nature of data is secondary from annual reports of PSBs downloaded from their websites. To measure financial performance, various ratios like ROA, ROE, EPS, and NIM were considered. The study employs correlation and paired t-test.

Findings, Analysis and Discussion:

An attempt was made to test the undermentioned hypotheses.

H_{01} There exists no correlation between ROA, ROE, EPS, and NIM of BOB before and after merger periods.

H_{02} There exists no variation between ROA, ROE, EPS, and NIM of BOB before and after merger periods.

Table 1: Correlation and Paired Samples t-Test of BOB

Pairs	Variables	r	Signi.	T value	df	Signi. (2-tail)
Pair 1	ROApre - ROApost	.252	.838	-1.296	2	.325
Pair 2	ROEpre - ROEpost	.230	.853	-1.244	2	.339
Pair 3	EPSpre - EPSpost	.235	.849	-1.181	2	.359
Pair 4	NIMpre - NIMpost	.879	.316	-4.737	2	.042

Source: Authors Calculation

Table 1 describes that there exists a moderate positive association between ROA, ROE, and EPS before and after merger periods and a strong positive connection between NIM in the same context but the results are insignificant (p>0.05) in all cases for the BOB, henceforth we fail to reject the null hypothesis (H01). Considering H02, there exists no significant variation among ROA, ROE, and EPS before and after merger periods (p>0.05) but there exists a significant variation among the NIM before and after merger periods (p<0.05) of the said bank. It implies no change in the financial evaluation of the bank before and after the merger. However, there is significant variation in the NIM of the bank pre- and post-merger.

H03 There exists no correlation between the ROA, ROE, EPS, and NIM of CB before and after merger periods.

H04 There exists no variation between the ROA, ROE, EPS, and NIM of CB before and after merger periods.

Table 2: Correlation and Paired Samples t-Test of CB

Pairs	Variables	r	Signi.	t	df	Signi. (2-tail)
Pair 1	ROApre - ROApost	-.343	.777	-.670	2	.572
Pair 2	ROEpre - ROEpost	.073	.954	.492	2	.671
Pair 3	EPSpre - EPSpost	-.417	.726	-.583	2	.619
Pair 4	NIMpre - NIMpost	.909	.274	-2.480	2	.131

Source: Authors Calculation

Table 2 outlines that there exists a moderate negative association between ROA and EPS before and after merger periods, a weak positive association between ROE, and a strong positive association between NIM before and after the merger but the results are insignificant (p>0.05) in all cases for the CB, henceforth we fail to reject the null hypothesis (H03). As per H04, there exists no significant variation (p>0.05) among ROA, ROE, EPS, and NIM before and after the merger periods. It implies that the merger has not significantly affected the performance in terms of the aforesaid parameters of the bank.

H05 There exists no correlation between the ROA, ROE, EPS, and NIM of the IB before and after merger periods.

H06 There exists no variation between the ROA, ROE, EPS, and NIM of the IB before and after merger periods.

Table 3: Correlation and Paired Samples t-Test of IB

Pairs	Variables	r	Signi.	t	df	Signi. (2-tail)
Pair 1	ROApre - ROApost	-.343	.777	-.670	2	.572
Pair 2	ROEpre - ROEpost	.073	.954	.492	2	.671
Pair 3	EPSpre - EPSpost	-.417	.726	-.583	2	.619
Pair 4	NIMpre - NIMpost	.909	.274	-2.480	2	.131

Source: Authors Calculation

Table 3 summaries that there exists a high degree of negative association between ROA, ROE, and EPS before and after merger periods and a weak positive association between NIM in the same context but the results are insignificant (p>0.05) in all cases for the IB, henceforth we fail to reject the null hypothesis (H05). Analyzing H06, there exists no significant variation (p>0.05) among ROA, ROE, EPS, and NIM before and after the merger periods.

It implies that there is no change in the financial evaluation of the bank before and after the merger. H07 There exists no correlation between the ROA, ROE, EPS, and NIM of the PNB before and after merger periods.

H08 There exists no variation between the ROA, ROE, EPS, and NIM of the PNB before and after merger periods.

Table 4: Correlation and Paired Samples t-Test of PNB

Pairs	Variables	r	Signi.	t	df	Signi. (2-tail)
Pairs	Variables	r	Signi.	t	df	Signi. (2-tail)
Pair 1	ROApre - ROApost	-.759	.451	-1.735	2	.225
Pair 2	ROEpre - ROEpost	-.352	.771	-1.282	2	.328
Pair 3	EPSpre - EPSpost	-.667	.535	-1.547	2	.262
Pair 4	NIMpre - NIMpost	-.980	.128	-.649	2	.583

Source: Authors Calculation

Table 4 sum-ups that there exists a high degree of negative association between ROA, EPS, and NIM before and after merger periods and a lower degree of negative association among ROE in the same context but the results are insignificant (p>0.05) in all cases for the PNB, henceforth we fail to reject the null hypothesis (H07). Studying H08, there exists no significant variation (p>0.05) among ROA, ROE, EPS, and NIM before and after the merger periods of the said bank. Implications augur

no change in the financial evaluation of the bank before and after the merger.

H09 There exists no significant correlation between the ROA, ROE, EPS, and NIM of the SBI before and after merger periods.

H10 There exists no significant variation between the ROA, ROE, EPS, and NIM of the SBI before and after merger periods.

Table 5: Correlation and Paired Samples t-Test of SBI

Pairs	Variables	r	Signi.	t	df	Signi. (2-tail)
Pair 1	ROApre - ROApost	-.878	.318	1.842	2	.207
Pair 2	ROEpre - ROEpost	-.848	.355	1.624	2	.246
Pair 3	EPSpre - EPSpost	-.717	.491	1.418	2	.292
Pair 4	NIMpre - NIMpost	-.995	.063	.457	2	.692

Source: Authors Calculation

Table 5 depicts that there exists a high degree of negative association between ROA, ROE, EPS, and NIM before and after merger periods but the results are insignificant (p>0.05) for the SBI, henceforth we fail to reject the null hypothesis (H09). Studying H10, there exists no significant variation (p>0.05) among ROA, ROE, EPS, and NIM before and after the merger periods of the above bank. Implications indicate no change in the financial evaluation of the bank before and after the merger.

H11 There exists no correlation between the ROA, ROE, EPS, and NIM of the UBI before and after merger periods.

H12 There exists no variation between the ROA, ROE, EPS, and NIM of the UBI before and after merger periods.

Table 6: Correlation and Paired Samples t-Test of UBI

Pairs	Variables	r	Signi.	t	df	Signi. (2-tail)
Pair 1	ROApre - ROApost	-.826	.381	-.928	2	.452
Pair 2	ROEpre - ROEpost	-.844	.361	-.995	2	.424
Pair 3	EPSpre - EPSpost	-.729	.480	-1.050	2	.404
Pair 4	NIMpre - NIMpost	.731	.479	-5.489	2	.032

Source: Authors Calculation

Table 6 portrays that there exists a high degree of negative association between ROA, ROE, and EPS but a strong degree of positive association between NIM before and after merger periods but the results are insignificant (p>0.05) for the UBI, henceforth we fail to reject the null hypothesis (H11). Examining H12, there exists no significant variation among ROA, ROE, and EPS (p>0.05) but there exists a significant variation (p>0.05) among the NIM before and after merger periods of the said bank. It implies no change in the financial evaluation of the bank before and after the merger. However, there is significant variation in the NIM of the bank pre- and post-merger.

Conclusion, Implications and Directions:

The main goal of this analysis is to determine the distinction between the financial accomplishment of Indian PSBs before and after the merger. Based on the various financial ratios, correlation, and paired t-test, the results have indicated that the correlation between the ROA, ROE, EPS, and NIM of various PSBs viz., BOB, CB, IB, PNB, SBI, and UBI before and after merger periods remain insignificant. Similarly, no significant variation is found among ROA, ROE, EPS, and NIM before and after the merger periods of the said banks except there lies the significant difference in NIM

of BOB and UBI. Overall, it implies no change in the financial evaluation of the PSBs before and after the merger concerning assets, equities, and earnings per shareholder. However, there is significant variation in the NIM of the bank pre- and post-merger. Overall, our findings align with other studies, for instance, Fatim and Shehzad (2014); and Shakeel and Datta (2023), contradicting another study (Singh and Das, 2018).

Though the government had prearranged mega-mergers to recuperate PSBs, and post-mega-mergers, barely there is any progress in the financial evaluation of PSBs. Post mega-mergers, if the financial evaluation of PSBs has enriched in reality, it might be due change in measurement criteria of recognizing NPAs, recovery of NPAs, or other factors that provide grounds for impending exploration. Outcomes imply that the government needs to take more stern steps to achieve the true objective of the mega-merger strategy. Introducing and enforcing managerial, operational, and organizational efficiency measures, for instance, CEO pay-performance linkages. As none of the studies is free from drawbacks, the period covered by this study is limited, and only a few PSBs are studied, henceforth results should be interpreted accordingly. Potential inquiries can also provide a nucleus on a comparative view of the financial and non-financial performance of PSBs per and post-mega merger.

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