ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 9| Issue: 10| October 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

FINANCIAL PERFORMANCE ANALYSIS OF MERGER BANK IN INDIA: AN EAGLE MODEL APPROACH

Mayurkumar V. Dadresha
Research Scholar, Department of Commerce, Veer Narmad South Gujrat University

Article DOI: https://doi.org/10.36713/epra14630
DOI No: 10.36713/epra14630

ABSTRACT
This study employs an EAGLE Model to investigate the performance of selected Indian companies before and after a merger. For the study, the Union Bank of India was the only bank taken into account. In the current study, the pre-merger period is defined as the three years from 2017 to 2020, and the post-merger period is defined as the three years from 2021 to 2023. The EAGLE model is a reliable and efficient method for looking at and assessing bank performance. Multiple ratios have been constructed to study each major variable and assess performance using the EAGLE model. The results of this study show that the earning capacity of Union Bank of India increased. due to its high dividend payment ratio and return on assets. The asset quality has declined, as seen by the Union Bank of India. Both enhancing asset quality and reducing non-performing assets are initiatives for Union Bank.

KEYWORDS: ***Financial Performance Evaluation, EAGLE Model, Post-Merger Analysis, Merger and Acquisition.***

INTRODUCTION
Banking mergers have been for decades an iconic aspect of the economy, reshaping both the domestic and international banking situation. These mergers have complex dynamics and significant effects on banks, their customers, their shareholders, and regulatory bodies. The reasons for bank mergers may vary from the pursuit of enhanced efficiency to the strategic growth into new markets. Thus, it becomes essential to thoroughly research these mergers to comprehend their causes, effects, and difficulties. In this study, the EAGLE model was used to examine the financial performance of selected merger banks. The EAGLE model was developed by Dr. John Vong, whose ideas regarding banking profitability have been presented and published in the US and Europe. The key variables of the EAGLE model are earning possibility, asset quality, growth, liquidity, and equity. Every primary parameter has a sub-parameter.

REVIEW OF LITERATURE
Rashesh Vaidya (2023) article intended to use the EAGLE rating model in evaluating the performance of Nepalese commercial banks. The study has taken into account the financial data from each of the commercial banks that operated in Nepal from 2018–19 to 2020–21. The study indicated that the banks with a recent presence in the Nepalese banking sector and active market expansion held the top spot according to the EAGLES rating. The study concluded that for government-owned commercial banks, the bank with the strongest position across all EAGLES components was at the top, while for joint venture banks, the bank with the best loan growth, liquidity position, and capital structure was at the top.

VENKATESWARA (2023) This research aimed to find out how the Syndicate Bank merger affected Canara Bank's profitability. The four years that occurred before and after the banks' merger have been included in the investigation era. To ensure consistency in the examination of the acquiring banks' pre- and post-merger performance, the year of the merger base year is thus eliminated. reveals that the bank's deposits, advances, business, and earnings improved both before and after the Syndicate Bank and Canara Bank merger throughout the period that was included in the study.

Brijesh Yadav (2023) The study's objectives aimed to evaluate the structural changes put on by acquisitions and mergers in the banking sector, investigate financial reforms there, bring about significant change in the sector, and improve the services offered by banks. Study of the commercial bank's financial performance before and after mergers and acquisitions. concluded that though there has been benefit from the acquisition and merging of Indian banks, it has not been as significant as anticipated.

Tri Widiastuty (2022) this study aimed to investigate the financial performance of conventional and Islamic banks before and after the epidemic. The CAMEL model and the EAGLES model are used to calculate the financial performance of the banking industry. The findings of this study additionally corroborate prior findings that Islamic banks were more stable than conventional banks throughout the pandemic as a consequence of three factors: asset growth, development of third-party funds, and financing expansion.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 9| Issue: 10| October 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

Jay A. Sathavara (2021) this research aimed to evaluate the financial performance of Indian private sector banks using the EAGLE model. To attempt to accomplish the objective, secondary data were used in the study investigation. Financial information for the selected sample was taken from the bank's annual reports for the years 2009–10 through 2018–19. The EAGLE model and the ANOVA test were used to rank the banks and assess the variation in the financial variables of the banks. The results of this study indicate that major private sector banks choose Indian banks with acceptable EAGLE performance based on the market capitalization of India.

Objective

- To evaluate the company's performance through the pre-and post-merger periods using the EAGLE Model.

RESEARCH METHODOLOGY

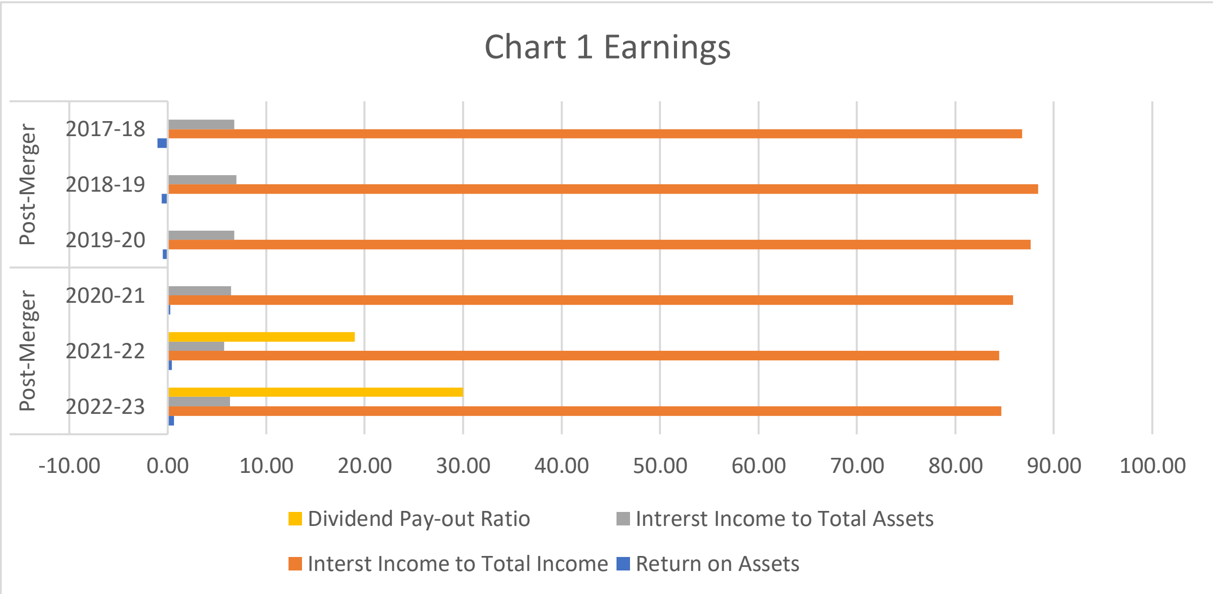
Data Sources

The major source of information for the objectives of this study is secondary data. The data was collected from the Union Bank of India's annual reports from 2017–18 to 2022–23. Many national and international journals, periodicals, working papers, publications, etc. on the pre-and post-financial performance of the Indian banking sector have also been referenced in the research. The present study considers a period of 3 years from 2017 to 2020 for the pre-merger and a period of 3 years from 2021 to 2023 for the post-merger while Union Bank of India merged on April 1, 2020.

DATA ANALYSIS AND INTERPRETATION

Table 1 Earnings Quality

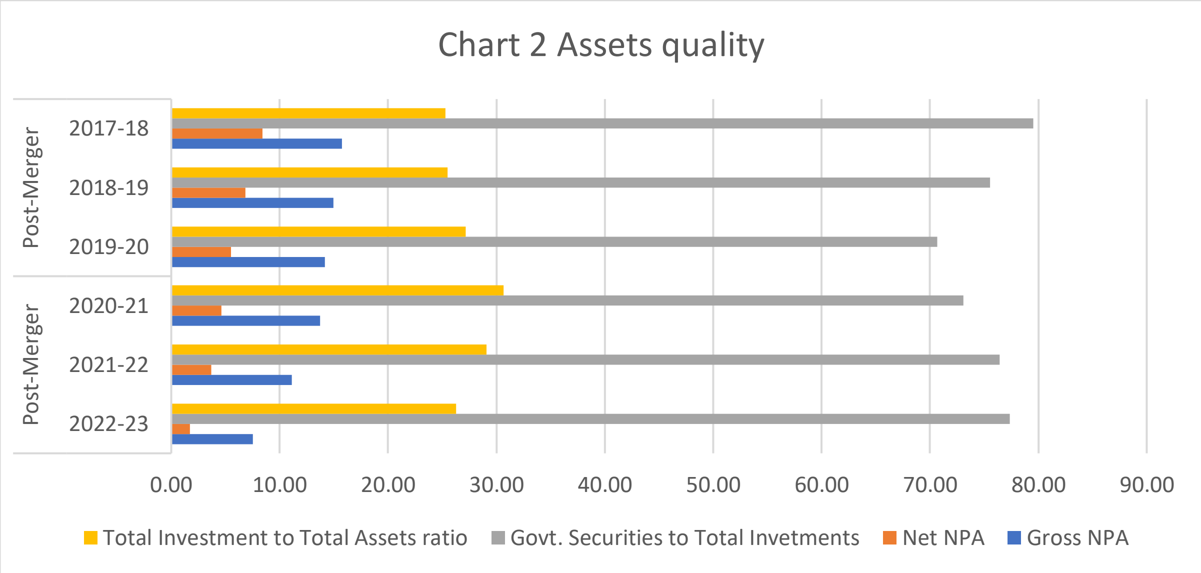
Particular	Post-Merger				Pre-Merger			
	2022-23	2021-22	2020-21	Avg.	2019-20	2018-19	2017-18	Avg.
Return on Assets	0.65	0.44	0.27	0.45	-0.52	-0.59	-1.07	-0.73
Interest Income to Total Income	84.66	84.44	85.85	84.98	87.62	88.39	86.78	87.60
Interest Income to Total Assets	6.30	5.72	6.42	6.15	6.76	6.95	6.76	6.82
Dividend Pay-out Ratio	30.00	19.00	0.00	16.33	0.00	0.00	0.00	0.00



The Bank's Earnings Ratios for the Pre-Merger (2017-2020) and post-merger (2021-2023) Periods are shown in **Table 1.** Earnings quality assessment of the bank's profitability and the sustainability of its earnings pre-and over the long run. High-earning companies are in excellent financial structure, whereas low-earning companies are in poor financial condition. The graphical deviations in earnings quality for the pre-and post-merger periods are shown in **Chart 1.** The Return on Assets, Interest Income to Total Income, Interest Income to Total Assets, and Dividend Payout Ratio are the four indicators used in Earnings Quality Measures. After the merger, Union Bank of India's return on assets was from -0.52% in 2019–20 to 0.27% in 2020–21, indicating a rise in the bank's earnings. Interest income as a proportion of total income dipped from 87.62% in 2019–20 to 85.85% in 2020–21, followed by 84.66% in 2022–23. After the merger, interest income as a proportion of total assets declined from 6.76% in 2019–20 to 6.15% in 2020–21 while increasing to 6.30% in 2022–23. The average difference from pre–merger to post–merger was a drop of 0.40%. The dividend payment ratio increased. It was 30% in 2022–2023 and 19% in 2021–2022.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 9| Issue: 10| October 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

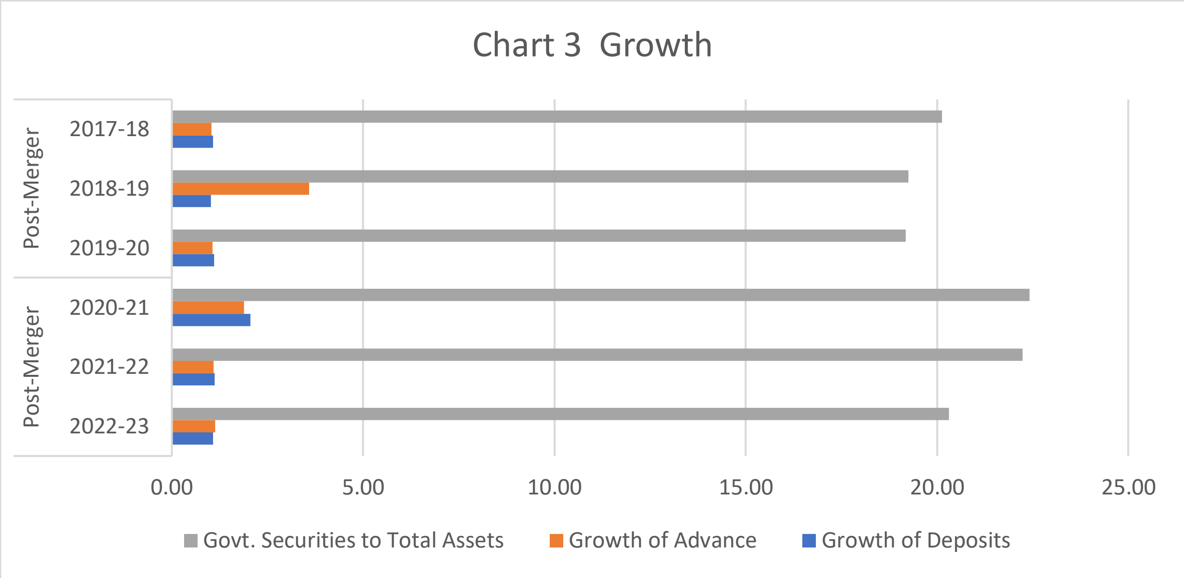
Table 2 Assets quality								
Particular	Post-Merger				Pre-Merger			
	2022-23	2021-22	2020-21	Avg.	2019-20	2018-19	2017-18	Avg.
Gross NPA	7.53	11.11	13.74	10.79	14.15	14.98	15.73	14.95
Net NPA	1.70	3.68	4.62	3.33	5.49	6.85	8.42	6.92
Govt. Securities to Total Investments	77.37	76.41	73.07	75.62	70.66	75.56	79.52	75.25
Total Investment to Total Assets ratio	26.27	29.11	30.68	28.69	27.15	25.49	25.32	25.98



In **Table 2**, the Assets Quality of the Bank is summarised for the Pre-Merger (2017-2020) and post-merger (2021-2023) Periods. Asset quality is a review of an asset's ability to withstand credit risk. **Chart 2** illustrates the graphical variations in asset quality for the pre-and post-merger periods. The four indicators utilized in Asset Quality Measures are Gross NPA, Net NPA, Government Securities to Total Investments, and Total Investment to Total Assets Ratio. Assets with beneficial asset quality provide both a high yield and a low default risk. Indicating strong asset health after the merger, Union Bank of India's Gross NPA declined gradually from 14.15% in 2019–20 to 13.74% in 2020–21 to 7.53% in 2022–23. After the merger, Union Bank of India's Net NPA declined from 5.49% in 2019–20 to 4.62% in 2020–21, and it proceeded to fall till it reached 1.70% in 2022–23, illustrating the merger had a beneficial impact on asset health. Government securities as a portion of total investments increased from 70.66% in 2019–20 to 73.07% in 2020–21, and then to 77.37% in 2022–23. The ratio of total investments to total assets increased from 27.15% in 2019–20 to 30.68% in 2020–2021, and it decreased to 26.27% in 2022–2023.

Table 3 Growth								
Particular	Post-Merger				Pre-Merger			
	2022-23	2021-22	2020-21	Avg.	2019-20	2018-19	2017-18	Avg.
Growth of Deposits	1.08	1.12	2.05	1.42	1.10	1.02	1.08	1.07
Growth of Advance	1.13	1.10	1.88	1.37	1.07	3.59	1.04	1.90
Govt. Securities to Total Assets	20.32	22.24	22.42	21.66	19.18	19.26	20.13	19.52

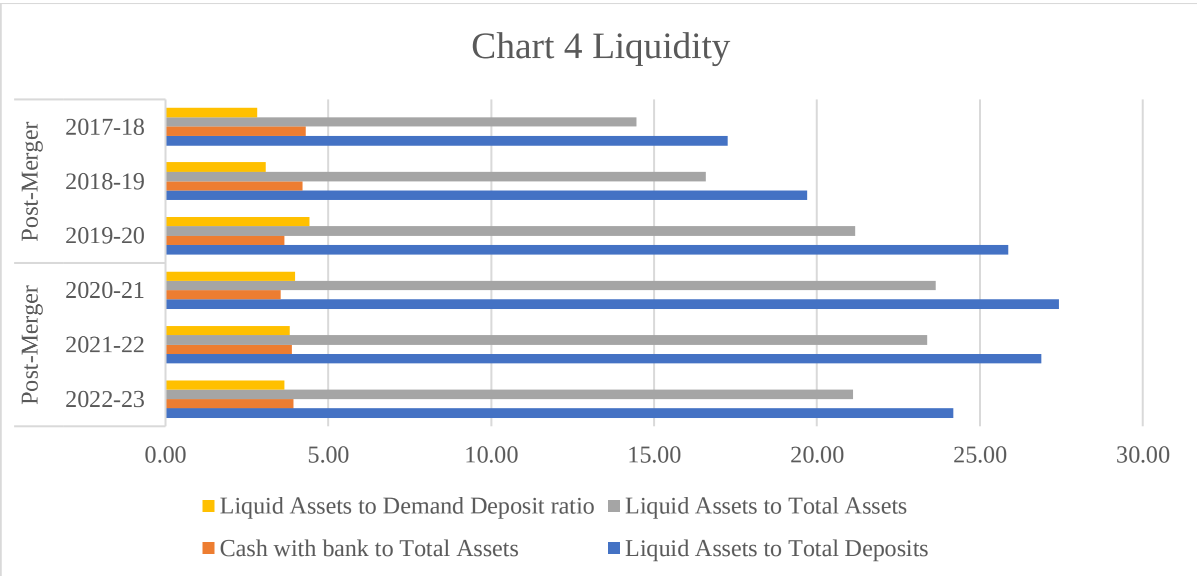
ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 9| Issue: 10| October 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188



In **Table 3**, the Growth of the Bank is summarised for the Pre-Merger (2017-2020) and post-merger (2021-2023) Periods. **Chart 3** illustrates the graphical variations in the Growth of banks for the pre-and post-merger periods. The three indicators utilized in the growth Measures are Growth of Deposits, Growth of Advance, and Govt. Securities to Total Assets. After the merger, the growth of deposits at Union Bank of India went from 1.10 times in 2019–20 to 2.05 times in 2020–21 to 1.08 times in 2022–23. The growth of advances at Union Bank of India went from 1.07 times in 2019–20 to 1.88 times in 2020–21 and then back to 1.13 times in 2022–23. The proportion of government securities in total assets of Union Bank of India went from 19.18% in 2019–20 to 22.42% in 2020–2021 and then to 20.32% in 2022–2023.

Table 4 Liquidity

Particular	Post-Merger				Pre-Merger			
	2022-23	2021-22	2020-21	Avg.	2019-20	2018-19	2017-18	Avg.
Liquid Assets to Total Deposits	24.19	26.89	27.43	26.17	25.87	19.70	17.25	20.94
Cash with Bank to Total Assets	3.92	3.88	3.53	3.78	3.65	4.21	4.31	4.06
Liquid Assets to Total Assets	21.11	23.38	23.64	22.71	21.17	16.59	14.46	17.41
Liquid Assets to Demand deposit ratio	3.65	3.82	3.98	3.82	4.41	3.08	2.81	3.44

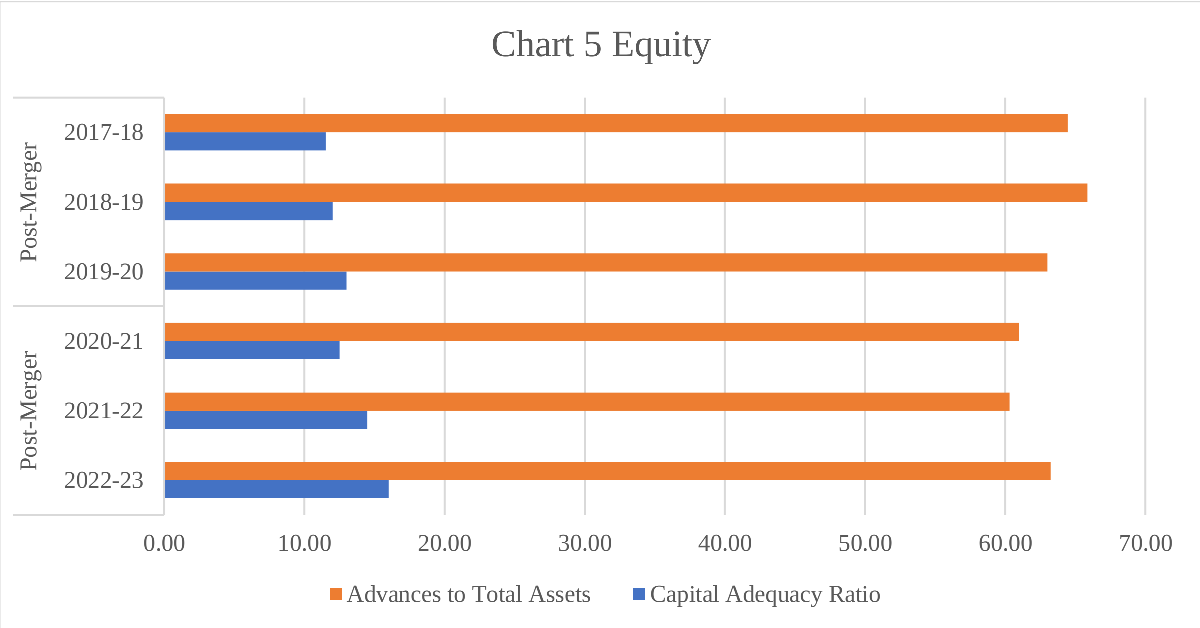


ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 9| Issue: 10| October 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

In **Table 4,** the Liquidity of the Bank is summarised for the Pre-Merger (2017-2020) and post-merger (2021-2023) Periods. **Chart 4** illustrates the graphical variations in the Liquidity of banks for the pre-and post-merger periods. The Four indicators utilized in the Liquidity Measures are Liquid Assets to Total Deposits, Cash with bank to Total Assets, Liquid Assets to Total Assets, and Liquid Assets to Demand deposit ratio. After the merger, Union Bank of India's Liquid Assets to Total Deposits ratio went from 25.87% in 2019–2020 to 27.43% in 2020–2021 and 24.19% in 2022–2023. At Union Bank of India, the ratio of cash on hand to total assets decreased from 3.65% in 2019–2020 to 3.53% in 2020–21 after rising further to 3.92% in 2022–2023. The ratio of Union Bank of India's liquid assets to total assets increased from 21.17% in 2019–2020 to 23.64% in 2020–2021 and again to 21.11% in 2022–2023. Union Bank of India's liquid Assets to Demand Deposit Ratio decreased from 4.41% in 2019–20 to 3.98% in 2020–21, and then to 3.65% in 2022–2023.

Table 5 Equity

Particular	Post-Merger				Pre-Merger			
	2022-23	2021-22	2020-21	Avg.	2019-20	2018-19	2017-18	Avg.
Capital Adequacy Ratio	16.01	14.48	12.52	14.34	13.00	12.00	11.50	12.17
Advances to Total Assets	63.24	60.32	60.99	61.52	63.00	65.86	64.44	64.44



In **Table 5,** the Equity ratio of the Bank is summarised for the Pre-Merger (2017-2020) and post-merger (2021-2023) Periods. **Chart 5** illustrates the graphical variations in the Equity ratio of banks for the pre-and post-merger periods. The Two indicators utilized in the Liquidity Measures are the Capital Adequacy Ratio and the Advances to Total Assets ratio. After the merger, the Capital Adequacy Ratio of Union Bank of India went from 13% in 2019–20 to 12.52% in 2020–21 to 16.01% in 2022–23. After the merger, Union Bank of India's Advances to Total Assets Ratio decreased from 63% in 2019–20 to 60.992% in 2020–21 to 63.24% in 2022–23.

HYPOTHESIS TESTING

The study's particular objective was achieved, and the research hypothesis was confirmed using paired t-tests. In this instance, the pre-merger and post-merger groups cover the full sample period. All financial parameters of the EAGLE framework have also been partitioned into two groups as a result of this separation, i.e., before the merger and after the merger.

H_0: There is no significant difference in the financial performance of Union Bank of India during the pre- and post-merger periods.

H_1: There is a significant difference in the financial performance of Union Bank of India during the pre- and post-merger periods.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 9| Issue: 10| October 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

Table 6 Paired Samples Test

		Paired Differences			t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean				
Earnings	Return on Assets	1.180	0.155	0.090	13.165	2.000	0.006	Fail to Rejected
	Interest Income to Total Income	-2.613	1.540	0.889	-2.940	2.000	0.099	Rejected
	Interest Income to Total Assets	-0.677	0.483	0.279	-2.427	2.000	0.136	Rejected
	Dividend Pay-out Ratio	16.333	15.177	8.762	1.864	2.000	0.203	Rejected
Assets quality	Gross NPA	-4.160	2.329	1.344	-3.094	2.000	0.090	Rejected
	Net NPA	-3.587	0.361	0.208	-17.214	2.000	0.003	Fail to Rejected
	Govt. Securities to Total Investments	0.370	6.593	3.807	0.097	2.000	0.931	Rejected
	Total Investment to Total Assets ratio	2.700	3.220	1.859	1.452	2.000	0.284	Rejected
Growth	Growth of Deposits	0.350	0.540	0.312	1.122	2.000	0.378	Rejected
	Growth of Advance	-0.530	1.742	1.006	-0.527	2.000	0.651	Rejected
	Govt. Securities to Total Assets	2.137	0.930	0.537	3.981	2.000	0.058	Rejected
Liquidity	Liquid Assets to Total Deposits	5.230	6.168	3.561	1.469	2.000	0.280	Rejected
	Cash with Bank to Total Assets	-0.280	0.527	0.304	-0.921	2.000	0.454	Rejected
	liquid assets to total assets	5.303	4.796	2.769	1.915	2.000	0.196	Rejected
	liquid assets to demand deposit ratio	0.383	1.013	0.585	0.655	2.000	0.580	Rejected
Equity	Capital Adequacy Ratio	2.170	1.031	0.595	3.647	2.000	0.068	Rejected
	Advances to Total Assets	-2.917	2.927	1.690	-1.726	2.000	0.226	Rejected

Table 6 illustrates the results of the paired sample test for each financial parameter of the EAGLE framework during the pre-merger and post-merger phases. In this case, the paired t-test with a significance level of 0.05 and the two-tailed test are used.

Earnings Quality: In terms of Earnings Quality there are any differences noted in Interest Income to Total Income, Interest Income to Total Assets, and Dividend Pay-out Ratio. H_o is Rejected in the Three terms. In terms of Return on Assets, there is no significant difference noted so H_o is Fail to rejected.

Assets Quality: In terms of Assets Quality there are any differences noted in Gross NPA, Govt. Securities to Total Investments, and Total Investment to Total Assets ratio. H_o is Rejected in the Three terms. In terms of Net NPA, there is no significant difference noted so Ho is Fail to rejected.

Growth: There are differences in growth that may be seen between the growth of deposits, advances, and government securities relative to total assets. In all three terms, Ho is rejected.

Liquidity: Different ratios of liquid assets to total deposits, cash in the bank to total assets, liquid assets to total assets, and liquid assets to demand deposit ratios have been reported in terms of liquidity. In every way, Ho is rejected.

Equity: The Capital Adequacy Ratio and advances to Total Assets show variations in terms of equity. Ho is rejected by both of them.

CONCLUSION

- After the merger, Union Bank of India's earning capability strengthened. due to its high return on assets and dividend payout ratio. but not enhance interest income, therefore the bank must enhance its ability to generate more money.
- Due to falling total assets and non-performing assets, Union Bank of India has observed a fall in asset

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 9| Issue: 10| October 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

quality. Union Bank must raise asset quality and work on reducing back on non-performing assets.

- After the merger, the bank's growth in advances changed slightly while deposits improved steadily. For the bank to prosper, deposit advantages must be utilized properly.
- Additionally, it was determined that the merger had a positive effect on the bank's liquidity. Union Bank of India has adequate cash on hand to satisfy its payments and commitments, permitting it to make payroll, pay suppliers, and do trade as usual. Furthermore, the bank has adequate capital, which reduces the risk of bank failure and ensures the effectiveness and stability of a country's financial system.

REFERENCES

1. *Joash, G. O., & Njangiru, M. J. (2015). The effect of mergers and acquisitions on the financial performance of banks (a survey of commercial banks in Kenya). International Journal of Innovative research and development, 4(8), 101-113.*
2. *Karri, H., Meghani, K., & Mishra, B. (2015). A comparative study on financial performance of public sector banks in India: An analysis on CAMEL model.*
3. *Lai, K. Y., Ling, T. P., Eng, T. K., Cheng, L. S., & Ting, L. F. (2015). Financial performance of Malaysia's local banks: During periods of pre-merger and post-merger. Journal of Economics, Business and Management, 3(9), 826-830.*
4. *Leepsa, N. M., & Mishra, C. S. (2012). Post-merger financial performance: A study concerning select manufacturing companies in India. International Research Journal of Finance and Economics, 83(83), 6-17.*
5. *Kaur, J., Kaur, M., & Singh, S. (2015). Financial performance analysis of selected public sector banks: A CAMEL model approach. International Journal of Applied Business and Economic Research, 13(6), 4327-4348*
6. *Patel, R. (2018). Pre & post-merger financial performance: An Indian perspective. Journal of Central Banking Theory and Practice, 7(3), 181-200.*
7. *Sangmi, M. U. D., & Nazir, T. (2010). Analyzing financial performance of commercial banks in India: Application of CAMEL model. Pakistan Journal of Commerce and Social Sciences (PJCSS), 4(1), 40-55.*
8. *Sathavara, M. J. (2021). Financial Performance Analysis of Private Sector Banks in India: An Eagle Model Approach. International Journal of Commerce and Management Studies (IJCAMS), 1-11.*
9. *Singh, S., & Das, S. (2018). Impact of post-merger and acquisition activities on the financial performance of banks: A study of Indian private sector and public sector banks. Revista Espacios Magazine, 39(26), 25*
10. *Vaidya, R. (2023). Evaluating Nepalese Commercial Bank's Performance from the Eyes of EAGLES Rating. KHWOPA JOURNAL, 37-45.*
11. *Yadav, B. (2022). A STUDY ON OVERVIEW OF MERGER AND ACQUISITIONS OF INDIAN COMMERCIAL BANK. IJBARR, 9-14.*