

# Unveiling the Financial Performance of Bank of Baroda, Vijaya Bank, and Dena Bank in Pre- and Post-Merger Through CAMEL Model

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## Abstract

The main aim of this study on the Pre- and Post-Merger of “Bank of Baroda, Vijaya Bank, and Dena Bank”, and their performance before and following five years of the Merger. The 21<sup>st</sup> century is the span of rapidly advancing technology which increases competition between Companies, banks, and businesses. Mergers and Acquisitions are effective strategies to survive in the market and beat the competition. The current study used a camel model for evaluating financial performance impact due to merger for selected merged banks which considers a period of 2013-14 to 2023-24. “CAMEL stands for Capital Adequacy, Assets Quality, Management Efficiency, Earnings Quality, and Liquidity”. The finding shows that the influence on economic outcomes due to mergers are combination of positive and negative effects. It shows considerable changes in Capital Adequacy Ratio, overall total business per employee, Total Investment on Total Assets, Operating Profit on average working funds, Total Advances on Total deposits, Net interest to total assets, and Liquid Assets on Demand Deposits in the pre-post-merger period.

**Keywords:** Merger & Acquisition, Banking Sector, CAMEL Model

## Introduction

Merger and Acquisition is an extremely helpful practice for business growth and expansion. It is not just for hiding

weaknesses but it is done to strengthen their capacities to beat the competition at the global level. Banking sector mergers become vital and useful for growing and developing a country’s economic level. These mergers provide synergy benefits and consolidate assets, core systems, technology, market share, capital, etc. which facilitate larger credit and reduction of market risk that a single bank cannot achieve. Weak banks can endure by merging with strong banks. The Indian Banking Sector is vital in ensuring growth in the economy of Our country. “Indian Banking sector is divided into two categories: scheduled commercial banking institutions and non-schedule commercial banking institutions”. “As per RBI, 1934, banks registered in Schedule II are considered scheduled banks and others are non-scheduled banks. Schedule banks are mainly categorized into three categories which are foreign banks, private sector banks, and public sector banks. Public sector banks are those banks that are majorly owned by the government i.e. Ministry of Finance Central Government or State government. Private sector banks are categorized into two bases which are new private sector banks and old private sector banks. Foreign banks are those banks which are headquartered in different countries but have operations in India”.

RBI approved the CAMEL’s measuring for the performance of Indian Commercial banks which evaluates sustainable growth and development and reflects the financial viability of banks. The camel model considers all components that measure the

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ability of banks to endure losses from risky investment or financial leverage, the profitability of stockholder's investment, borrowing ratio, and the capacity to transform its deposits into higher return advances, etc. Thus, this model considers all aspects of bank soundness in concern of financial performance.

## Review of Literature

(Baburam Adhikari, 2023) Have examined the economic results of chosen banks in Nepal before and after mergers and acquisitions. They studied bank and financial institution mergers which took place in Nepal between 2013 to 2020. They implemented paired sample t-tests and accounting ratios for analysis. (Ajabani, 2023) Studied selected 15 IT Sector Institutions for Preceding and Following Merger and Acquisition performance. He has considered ten years of data from which five years as preceding the merger period and five years as following period. He used various ratios and Paired t-tests for analysis purposes. The researcher concluded that EBIT to sales Proportion, Current Asset Ratio, Margin of Net Profit, Interest Coverage Ratio, and ratio of return on assets have an unfavorable effect due to Merger and Acquisition whereas Return on Capital Employed has a favorable impact due to Merger and Acquisition. (Patel, 2018) Has evaluated five banks' pre- and post-merger analysis based on eight variables. Researchers encountered the SBI, BOB, IOB, OBC, and IDBI.

(Mirvis, 2011) Have conducted a study on Organizational, Cultural, and Human Components of mergers & acquisitions. They focused on the manner in which human factors affect their success and failure and also determined the components that enhance the success rate. (Chandani, 2014) They have focused on factors that lead to effectively managing change throughout an acquisition as well as a merger. They discussed reasons behind failed Mergers and Acquisition and also provided strategies that led to the success of the merger's identifiable Vision, strategy for integration, Involvement of Employees, HR reorganizing and retrenchment, and emphasis on customer-centered services, they did Bank of Madura and ICICI Bank and AOL and Time Warner Merger Case study based on changed management.

(Pandian, 2020) Has conducted the before and after mergers comparative examinations of the consolidated nationalized banks in India from 2000 to 2010. They do research for IDBI Bank, SBI, and BOB. (Ambica, 2017) Has looked at the financial results of Kotak Mahindra Bank's Strengths and Weaknesses in the context of its financial performance simultaneously prior to and following the merger. They evaluated statistics according to profitability as well as efficiency effects due to the merger and concluded it had a positive impact. (Edi, 2019) Have described the consequences of acquisitions and mergers on the quality and productivity of businesses. Various variables were utilized to gauge the company's success after its merger between 2010 to 2014. They concluded that the organization's performance had dropped after the merger, and the quality of returns had changed. (Paul, 2017) Has investigated the financial position of Indian banks that merged from 2000 to 2012. For ten commercial banks, he partitioned the time into three prior-merger and three following-merger periods. (KP, 2020) Have analyzed the financial position of chosen Indian companies prior to and following mergers like Tata Steel, Vodafone, TCS, ICICI Bank, and Sun Pharma. They concluded that post-mergers among many companies have favorable and unfavorable impacts together.

(Philip Ayagre, 2024) Evaluates how mergers and acquisitions have impacted performance in Sub-Saharan Africa from 2003 to 2019. Regulation – induces M&As, in which banks consolidated as a consequence of government attempts to reinforce the banking industry. The Study includes profitability measures which include ROE, ROA, and NIM are employed in the research to gauge post-merger performance. (Georgios, 2023) examines the economic impact of Alpha Bank's acquisition of Emporiki Bank's Merger and Acquisition in Greek banking. Before and following the acquisition, the study measures whether increased crucial financial indicators involving Profitability, Liquidity, and Operational Efficiency. They concluded that the acquisition of Emporiki Banks supported to increase in the customer base in Alpha Bank but that did not lead to an improvement in financial ratio and the financial crisis weakened both banks, making the acquisition less effective in generating intended financial outcomes. (Abu Khan, 2016) examined how mergers

and acquisitions have impacted U.S. Banks' Operational results, efficiency, and value creation since GLBA. They presented a new metric named Expected Economic Value Added (EVA) Enhancement and incorporated numerous techniques from M&A research. They analyzed M&A transactions between 1999 to 2009, The dataset initially included 1264 mergers being decreased to 79 mergers based on government-assisted mergers, minimum asset size, and eliminating multiple M&A within a year. (John Goddard, 2011) The Research paper focuses on 132 bank M&A that occurred in Asia and Latin America from 1998-2009. It found how shareholders' value received substantial benefits after M&A, and Acquirer enterprises' value either remained constant or expanded, so shareholders were not squeezed. Cross-border acquisition and geographic diversity are two significant variables that accelerate value for acquirers, etc. (Bakir, 2019) studies how bank merger regulations and legislation specifically

in Australia and Canada, enhance financial stability. This shows how competition laws prohibiting mega-bank mergers promote stability and caution banking, even though an extensive portion subsequently of the global financial crisis literature has concentrated on monetary regulatory failures.

## Research Methodology

### Objectives of Study

- To empathize with the mergers and acquisitions conceptual framework.
- To examine the merger's pre- and post-merger effect on the specified bank's financial outcomes through the CAMEL Model.
- To comprehend the impacts Before and After the merger employing Profitability Analysis.

## Model

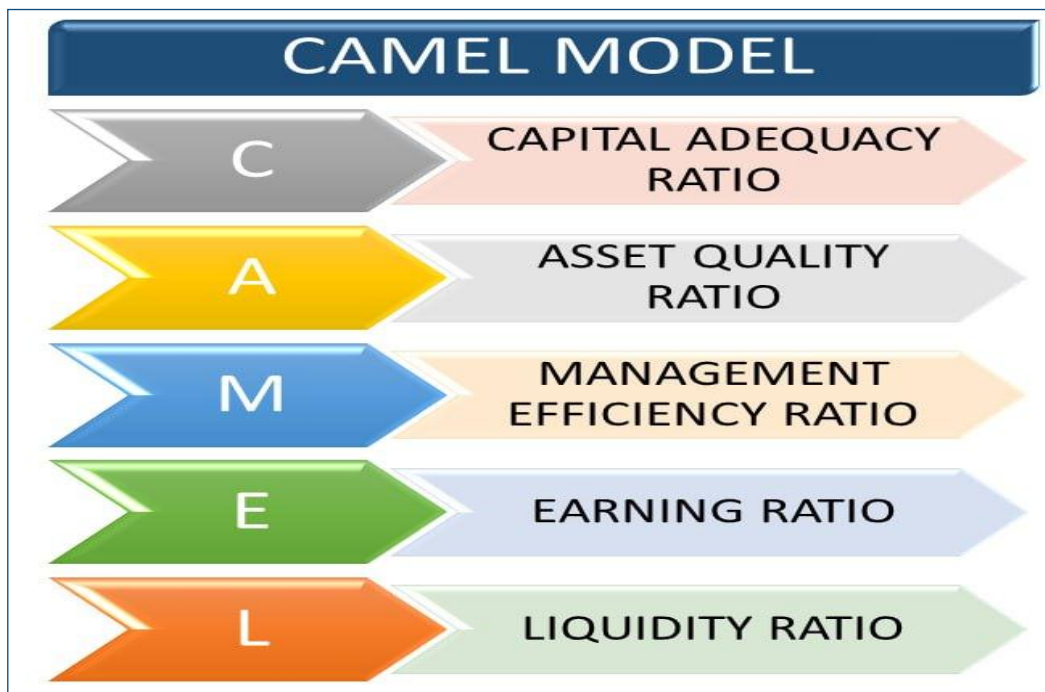


Fig. 1: Camel Model

## Need for the Study

Understanding prior and following mergers impact on the consolidated bank's financial performance which are BOB, Vijaya Bank, and Dena Bank, it helps to government, Researchers, investors, and shareholders.

## Research Design

This Research Paper is on the basis of Descriptive and Analytical methods of study. BOB effectively merged with Dena Bank and Vijaya Bank on 1<sup>st</sup> April, 2019. Here, five years are considered as a pre-merger and five years are considered as a post-merger whiz respectively from 2013-14 to 2017-18 as a prior-merger period and 2019-20 to 2023-24 as a following-merger period. 2018-19 is considered as a base year for the study. The data collected from secondary data which are from prowess software, annual reports of banks, newspapers, journals, websites, etc.

## Statistical Test

Researchers have worked with parametric data so applied the paired t-test in analysis and testing the hypothesis considering the appropriateness of the prior to and following merger data.

## Limitations of Study

Since secondary data is considered the core of the study, all conclusions and results are entirely reliant upon it. The analysis is about prior to and following the merger of five-five years, so financial performance impact may vary in the future.

## Data Analysis and Interpretation

To examine the impact caused by the merger, both pre-and post-on on BOB, Dena Bank, and Vijaya Bank's Financial performance which is according to paired t-test and Camel Model and Profitability analysis based on ROA, ROE, and NIM.

**Table 1: Significant Variables for the Research**

<i>Variables</i>	<i>Formula</i>
Capital Adequacy Ratio	$(\text{Tier-I Capital} + \text{Tier-II Capital}) / \text{Risk Weighted Assets}$
Debt- Equity Ratio	$\text{Debt} / \text{Equity}$
Advances to Assets Ratio	$\text{Advances} / \text{Assets}$
Return on Equity	$\text{Net Interest Income} / \text{Shareholder's Equity Growth Rate}$
Gross NPAs to Total Advances	$\text{Gross NPA} / \text{Total Advances}$
Net NPAs to Net Advances	$\text{Net NPA} / \text{Net Advances}$
Net NPAs to Total Assets	$\text{Net NPA} / \text{Total assets}$
Total Investments to Total Assets	$\text{Total Investment} / \text{Total Assets}$
Total Advances to Total Deposits Ratio	$\text{Total Advances} / \text{Total Deposits}$
Business per Employee	$\text{Total Business} / \text{Total number of employees}$
Profit per Employee	$\text{Profit after Tax} / \text{Total number of employees}$
Operating Profit to Average Working Funds	$\text{Operating Profit} / \text{verage Working Funds}$
Spread to Total Assets	$\text{Net Interest Income} / \text{Total Assets}$
Return on Asset	$\text{Net Interest Income} / \text{Total Assets}$
Liquid Assets to Total Assets	$\text{Liquid Assets} / \text{Total Assets}$
Govt. Securities to Total Assets	$\text{Government Security} / \text{Total assets}$
Liquid Assets to Demand Deposits	$\text{Liquid Assets} / \text{Demand Deposits}$



Table 3: Post-Merger Descriptive Analysis of BOB, Vijaya Bank, and Dena Bank

"Descriptive Statistics"									
POST_MERGER	"N"	"Minimum"	"Maximum"	"Mean"	"Std. Deviation"	"Skewness"		"Kurtosis"	
	"Statistic"	"Statistic"	"Statistic"	"Statistic"	"Statistic"	"Statistic"	"Std. Error"	"Statistic"	"Statistic"
Capital_Adequacy_Ratio	5	13.30	16.31	15.3040	1.23937	-1.354	.913	1.510	2.000
Debt_Equity_Ratio	5	.80	1.30	1.0400	.20736	.236	.913	-1.963	2.000
Advances_to_Assets_Ratio	5	59.60	67.21	62.6540	3.13404	.850	.913	-.914	2.000
Return_on_Equity	5	.76	15.85	8.1000	7.11822	-.037	.913	-2.893	2.000
Gross_NPAs_to_Total_Advances	5	2.92	9.40	6.3180	2.91693	-.159	.913	-2.702	2.000
Net_NPAs_to_Net_Advances	5	.68	3.13	1.9020	1.16939	.172	.913	-2.956	2.000
Net_NPAs_to_Total_Assets	5	.45	1.89	1.1640	.68686	.186	.913	-2.962	2.000
Total_Investments_to_Total_Assets	5	22.61	24.85	23.8420	.94534	-.166	.913	-1.773	2.000
Total_Advances_to_Total_Deposits	5	72.95	80.32	75.7580	3.31949	.727	.913	-1.938	2.000
Business_Per_Employee	5	18.77	30.46	23.5020	4.95851	.679	.913	-1.407	2.000
Profit_Per_Employee	5	.01	.24	.1060	.10262	.400	.913	-2.111	2.000
Operating_Profits_to_Average_Working_Funds	5	1.47	2.00	1.7640	.22810	-.321	.913	-2.102	2.000
Spread_Total_Asset	5	2.37	2.84	2.6140	.20768	.167	.913	-2.485	2.000
Return_on_Asset	5	.06	1.17	.5860	.51993	.011	.913	-2.824	2.000
Liquid_Asset_To_Total_Asset	5	5.99	10.53	8.6200	2.17997	-.531	.913	-2.986	2.000
Govt_Securities_To_Total_Assets	5	20.02	22.00	21.2200	.81960	-.803	.913	-.666	2.000
Liquid_Assets_To_Demand_Deposits	5	18.49	36.52	26.8900	7.54642	.063	.913	-1.854	2.000

**Table 4: Pre- and Post-Merger Capital Adequacy Ratios According to Paired T-Test Financial Performance**

Sr. No.	Ratio	"Pre-Merger Mean"	"Post Merger Mean"	"t-Value"	"Significant Level (2 Tailed)"	"Remarks"
1	Capital Adequacy Ratio	11.9440	15.3040	-8.899	0.001	Reject H0
2	Debt- Equity Ratio	0.9300	1.0400	-1.217	0.291	Accept H0
3	Advances to Assets Ratio	59.6260	62.6540	-1.701	0.164	Accept H0
4	Return on Equity	0.2980	8.1000	-1.210	0.293	Accept H0

Table 4 represents paired t-test analysis of Capital Adequacy Ratios of prior to and following the -merger in concern of BOB, Dena Bank, and Vijaya Bank. The Capital Adequacy ratio had a notable increase, with a pre-mean of 11.94 to a post-mean of 15.30. This change returns a t-value (-8.899) and the magnitude p-value is 0.001 so there is substantial change during pre- and post-merger so it rejects the null hypothesis. The debt-equity ratio shows a significant increase from a before-mean 0.93 to an after-mean 1.04 after the merger. The null hypothesis is accepted considering no discernible

change as shown t-test and the p-value is 0.291. Similarly Advances on assets ratio suggests a slightly positive evolution in the pre-and post-mean from 59.63 to 62.65, the t-value is -1.701 and the significant value is 0.164 describing no statistically significant change so it accepts the null hypothesis and the Return on Equity represents 0.30 as pre mean and 8.10 as post mean, 0.293 represents significance figure while t value is -1.210 means it's not had enough statistical evidence of change so it accepts null hypothesis.

**Table 5: Pre- and Post-Merger Asset Quality Ratios According to Paired T-Test Financial Performance**

Sr. No.	Ratio	"Pre-Merger Mean"	"Post Merger Mean"	"t-Value"	"Significant Level (2 Tailed)"	"Remarks"
1	Gross NPAs to Total Advances	8.1640	6.3180	0.548	0.613	Accept H0
2	Net NPAs to Net Advances	4.7180	1.9020	1.754	0.154	Accept H0
3	Net NPAs to Total Assets	2.7140	1.1640	1.702	0.164	Accept H0
4	Total Investments to Total Assets	25.4340	23.8420	2.869	0.045	Reject H0

Table 5 reveals pre- and post-merger impact on the Asset Quality ratio through paired t-test analysis. The Gross NPAs to Total Advances have 8.16 and 6.32 as pre-mean and post-mean correspondingly. The significance p-value is 0.613 and the t-value is 0.548 so it accepts a null hypothesis. The Net NPAs on Net Advances have 4.71 as pre-mean and 1.90 as post-mean. The significance p-value is 0.154 and the t-value is 1.754 representing acceptance

of a null hypothesis. Net NPAs to Total assets have pre-mean and post-means as 2.71 and 1.16 correspondingly. The p-value is 0.164 describing the adoption of the Ho but Total Investment on Total Assets has a pre-mean of 25.43 and post-mean of 23.84. the t-value is 2.869. the p-value is 0.045 and the t-value is 2.869 which reflects a rejection of a null hypothesis and there is a substantial change prior to and following investment to assets.

**Table 6: Pre- and Post-Merger Management Efficiency Ratios According to Paired T-Test Financial Performance**

Sr. No.	Ratio	"Pre-Merger Mean"	"Post Merger Mean"	"t-Value"	"Significant Level (2 Tailed)"	"Remarks"
1	Total Advances to Total Deposits Ratio	68.4120	75.7580	-4.287	0.013	Reject H0
2	Business Per Employee	16.0980	23.5020	-3.203	0.033	Reject H0
3	Profit Per Employee	-0.6740	0.1060	-0.700	0.523	Accept H0

Table 6 describes Pre- and Post-Merger Management Efficiency ratios through Paired t-test analysis. Total

Advances to Total Deposits represent a notable change in prior to the merger and following to merger mean as

68.41 to 75.76 correspondingly. The significance p-value is 0.013 and the t-value is -4.287 showing changes so it rejects a null hypothesis. Business each Employee has 16.10 as pre mean and 23.50 as the post mean, t value as -3.203 and P-value is 0.033 so it denies a null hypothesis,

and Profit per Employee shows -0.67 as pre mean and 0.11 as the post mean, p-value is 0.523 and t value is -0.70 statistically significance thereby suggests it accepts null hypothesis.

**Table 7: Pre- and Post-Merger Earnings Ratios According to Paired T-Test Financial Performance**

Sr. No.	Ratio	"Pre-Merger Mean"	"Post Merger Mean"	"t-Value"	"Significant Level (2 Tailed)"	"Remarks"
1	Operating Profits to Average Working Funds	1.3060	1.7640	-4.652	0.01	Reject H0
2	Spread to Total Assets	1.7860	2.6140	-5.077	0.007	Reject H0
3	Return on Asset	-0.0040	0.5860	-1.423	0.228	Accept H0

Table 7 represents pre- and post-merger earnings ratios through paired t-test analysis. Operating profits to Average working funds have 1.31 as pre-mean and 1.76 as post mean so there is a change and spreads to Total Assets have 1.79 as pre-mean and 2.61 as post mean so it also shows the change. Thus, the ratio of Spread on total assets and Ope. Profits on Average Working capital have significant

changes prior to and following the merger period so it rejects the null hypothesis by having significance values of 0.01 and 0.007 respectively. While Return on Assets has -1.423 as the t value and 0.228 as the significance value so it reveals there is no important alteration during the prior to and following merger period so it accepts the null hypothesis.

**Table 8: Pre- and Post-Merger Liquidity Ratios According to Paired T-Test Financial Performance**

Sr. No.	Ratio	"Pre-Merger Mean"	"Post Merger Mean"	"t-Value"	"Significant Level (2 Tailed)"	"Remarks"
1	Liquid Assets to Total Assets	9.6460	8.6200	1.561	0.193	Accept H0
2	Govt. Securities to Total Assets	21.1880	21.2200	-0.080	0.94	Accept H0
3	Liquid Assets to Demand Deposits	40.3960	26.8900	5.821	0.004	Reject H0

Table 8 illustrates pre-post-merger analysis through paired t-test techniques. Liquid Assets to Total Assets has 9.65 as the pre-mean and 8.62 as the post-mean. The significance p Value is 0.193 and the t-value is 1.561 that leads to acceptance of the null hypothesis. Government Securities to Total Assets show a slight change in pre-mean and post-mean which is 21.19 and 21.22 consequently. The p-value is 0.94 and t-value is -0.080 which shows no noteworthy change so it accepts the null hypothesis. Liquid assets on Demand Deposits have pre-mean and post-mean as 40.40 and 26.89 respectively. The t-value is 5.821 and the P-value is 0.004 showing a noteworthy change in pre- and post-merger so it rejects the null hypothesis.

### Profitability Analysis

Profitability analysis can evaluate a bank's competence to earn a profit based on its equity, assets, and interest-earning capabilities. It evaluates whether a merger has enhanced efficiency and return requires assessing economic outcomes before and after the merger of anchor banks. The three crucial profitability measures were used in this analysis:

- *ROA*: Evaluate how well the bank utilized assets to create a profit.
- *ROE*: It assesses Profitability from the perspective about Shareholders.

- *NIM*: It evaluates the efficiency of interest income creation in the context of earning assets.

**Table 9: Profitability Analysis**

	Year	ROA (%)	ROE	NIM (%)
Pre-Merger (year -5)	2013-14	0.75	12.61	2.36
Pre-Merger (year -4)	2014-15	0.49	8.53	2.31
Pre-Merger (year -3)	2015-16	-0.78	-13.42	2.05
Pre-Merger (year -2)	2016-17	0.20	3.43	2.19
Pre-Merger (year -1)	2017-18	-0.34	-5.60	2.43
Merger Year	2018-19	-	-	-
Post-Merger (year -5)	2019-20	0.06	0.76	2.73
Post-Merger (year -4)	2020-21	0.07	1.07	2.71
Post-Merger (year -3)	2021-22	0.6	8.46	3.03
Post-Merger (year -2)	2022-23	1.03	14.36	3.31
Post-Merger (year -1)	2023-24	1.17	15.85	3.18

**Table 10: Pre- and Post-Merger Profitability Analysis According to Paired T-Test Financial Performance**

Sr. No.	Ratio	“Pre-Merger Mean”	“Post Merger Mean”	“t-Value”	“Significant Level (2 Tailed)”	“Remarks”
1	Return on Asset	0.0640	0.5860	-1.144	0.316	H0 Accepted
2	Return on Equity	1.1100	8.1000	-0.984	0.381	H0 Accepted
3	Net Interest Margin	2.2680	2.9920	-4.809	0.009	H0 Rejected

Table 9 and 10 exhibits pre-and post-merger profitability analysis based on paired t-tests according to five years prior to the merger period and five years preceding to merger period. Based on Return on assets which has 0.0640 as the pre-mean and 0.5860 as the post-mean and it has 0.316 as the p-value which justifies there is no substantial change in the variable. Return on Equity has a pre-merger mean and post-merger mean of 1.1100 and 8.100 respectively and a p-value of 0.381 and t-value of -0.984 that results in a null hypothesis being accepted another variable Net Interest Margin presents 2.2680 and 2.9920 as before-merger mean and after-merger mean simultaneously. It exhibits -4.809 and 0.009 as t value and p value which results into there is significant modification in net interest margin prior to and preceding the merger period.

## Conclusion

The key to merger & acquisition success depends on an acquiring bank's competence to manage the acquiring bank's cohesion with the existing banks. The statistical

finding shows a very tricky and rosy picture of mixed effects on bank's financial performance as a consequence of mergers. Financial Performance has been evaluated by camel model components like capital adequacy, business each employee, return on equity, Profit per employee, return on assets, liquid assets on total assets, etc. after analyzing a comparative study between prior- and following-merger for the period of 2013-14 to 2023-24. it is observed that capital adequacy ratio, spreads on total assets, Total investment on total assets, liquid assets on demand deposit ratio, business per employee, etc. have significant impacts on prior-to-merger and preceding-to-merger financial performance. The profitability analysis shows no significant change in return on assets and return on equity and substantial change in the Net Interest margin.

## References

- Khan, A., Hassan, M. K., Maroney, N., & Rubio, J. F. (2016, January). Efficiency, value addition, and performance of US bank mergers. *Corporate*

- Ownership & Control*, 14(1), 59-72. doi:<https://doi.org/10.22495/cocv14i1p6>
- Ajabani, D. (2023). Pre & post merger & acquisitions (M&A) performance of selected companies. *Seybold Report*, 18(10), 1272-1293. doi:<https://doi.org/10.5281/zenodo.10078316>
- Adhikari, B., Kavanagh, M., & Hampson, B. (2023). Analysis of the pre-post-merger and acquisition financial performance of selected banks in Nepal. *Asia Pacific Management Review*, 28(4), 449-458. doi:<https://doi.org/10.1016/j.apmr.2023.02.001>
- Bakir, C. (2019). How do mega-bank merger policies and regulations contribute to financial stability? Evidence from Australia and Canada. *Journal of Economic Policy Reform*, 1-26. doi:<https://doi.org/10.1080/17487870.2017.1307112>
- Kansal, S., & Chandani, A. (2014). Effective management of change during merger and acquisition. *Procedia Economics and Finance*, 11, 208-217. doi:[https://doi.org/10.1016/S2212-5671\(14\)00189-0](https://doi.org/10.1016/S2212-5671(14)00189-0)
- Ambica, D. (2017, May-June). Mergers and acquisition in banking sector in India: An analysis of pre & post merger performance of Kotak Mahindra Bank. *International Journal of Trend in Research and Development*, 4(3), 108-112. Retrieved from <https://www.ijtrd.com/papers/IJTRD21936.pdf>
- Irayanti, L., & Edi, E. (2019). How merger and acquisition affect firm performance and its quality. *Journal of Accounting, Finance and Auditing Studies*, 5(3), 42-53. doi:<https://doi.org/10.32602/jafas.2019.30>
- Georgios, K. (2023, August). Mergers and acquisitions: A pre and post financial ratio analysis evaluation: Evidence from Greece. *Finance & Accounting Research Journal*, 5(8), 209-222. doi:<https://doi.org/10.51594/farj.v5i8.530>
- Goddard, J., Molyneux, P., & Zhou, T. M. (2011). Bank mergers and acquisitions in emerging markets: Evidence from Asia and Latin America. *European Journal of Finance*, 1-37. doi:<https://doi.org/10.2139/ssrn.2006372>
- Jaheer Mukthar, K. P., & Benny, B. (2020, March). Pre and post-merger financial performance: A case study of selected Indian Companies. *Journal of Emerging Technologies and Innovative Research*, 7(3), 1373-1385.
- Marks, M. L., & Mirvis, P. H. (2011). Merge ahead: A research agenda to increase merger and acquisition success. *Journal Business and Psychology*, 26(2), 161-168. doi:<https://doi.org/10.1007/s10869-011-9219-4>
- Kulothungapandian, S. (2020, October-December). Performance of merged nationalized commercial banks in India - A comparative analysis of pre and post-merger. *Primax International Journal of Commerce and Management Research*, 8(3), 100-114. doi:<https://doi.org/10.17605/OSF.IO/P4JBN>
- Patel, R. (2018). Pre & post-merger financial performance: An Indian perspective. *Journal of Central Banking Theory and Practice*, 181-200. doi:<https://doi.org/10.2478/jcbtp-2018-0029>
- Paul, J. (2017, April). A Camel analysis of pre and post merger performance of Banks in India. *International Journal of Business Management & Research*, 7(2), 1-8.
- Ayagre, P., Aboagye, A., & Sarpong-Kumankoma, E. (2024). Bank mergers and acquisitions and post-merger and acquisition performance of combined banks: Evidence from Sub-Saharan Africa. *Cogent Economics & Finance*, 1-14. doi:<https://doi.org/10.1080/23322039.2024.2319167>