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PRE AND POST EFFECT OF MERGER ON FINANCIAL PERFORMANCE: THE CASE OF MEGA MERGER BANKS

Prof. Trupti Mandar Joshi[1], Prof. Anuja Rishi Limbad[2]

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Abstract

In the unpredictable world, rapidly changing technology has made tremendous changes in the corporate world. Further, the forces of globalisation are putting companies in intense competition. The current study focuses on the mega-merger of banks that happened in April 2020. Pre- and post-merger financial evaluations are done by using the parameters of the CAMEL (Capital adequacy, Asset quality, Management, Earnings, and Liquidity) model of merged banks. A total of four banks are involved in Mega mergers. The data is collected from various secondary sources such as annual reports of banks involved in mega-mergers, Money control, business reports, and magazines. Pre- and post-merger financial performance evaluation is done using paired T-tests and compares the performance of banks involved in mega-mergers. Although profitable, banks lag short in the credit lending area and deposit creation post-merger. Indian Bank is relatively inactive compared to all other banks merged in the mega-merger in 2020.

Keywords: Mega-Merger, CAMEL, Globalization, Financial evaluations, Credit lending, Deposits, etc.

[1]Assistant Professor, Indira School of Business Studies, Pune
trupti2880@gmail.com

[2]Assistant Professor, Indira School of Business Studies, Pune
anujalimbad927@gmail.com

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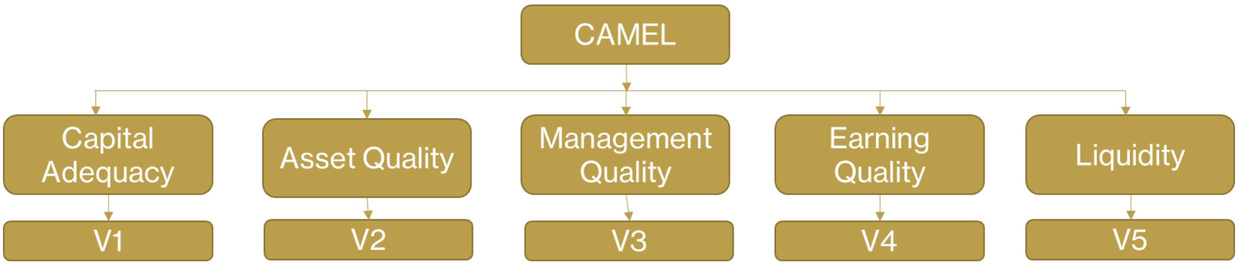
INTRODUCTION

Mega Merger of Banks was announced in 2019 by Union Finance Minister Nirmala Sitharaman, and the merger took place on 1st April 2020. Ten Public sector banks got merged into four banks. CAMELS model is used to analyze the Pre and Post effect on the financial performance of Mega-merger banks. S. Padmanabhan committee gave the CAMELS model in 1995. CAMELS Model has six parameters, from which five parameters were used to analyse the financial performance.



Variables	Financial ratios	Indicates
Capital Adequacy	Capital Adequacy Ratio Total Advances to Total Asset Ratio	Whether the Bank has sufficient capital to bear unexpected losses in the future Bank's aggressiveness in lending ultimately results in profitability.
Asset Quality	Total Advanced to Total Deposit Ratio Credit Deposit Ratio Investment Deposit Ratio Cash Deposit Ratio Net NPA to Net Advances	The efficiency of mgmt. In converting the deposits into high-earning advances How much bank's core funds are being used for lending, the main banking activity
Management Quality	Business Per Employee Profit Per Employee	Total Income / No. of employees (generating income at the Business level) Profit after tax/ No. Of employees (generating income at the Branch level)
Earning Quality	Dividend Pay-out Ratio Return on Assets Return on Equity/ Net Worth Net Profit to Total Funds	% Of earnings available for equity shareholders The efficiency of the bank in generating a profit by utilizing the assets Measures how well management has used the capital invested by Share Holders How much can banks earn from their operation from the total fund employed

Liquidity	Liquid Assets to Total Assets	The overall liquidity position of the bank
	Liquid Assets to Total Deposits	Liquidity available to the depositors of the bank

LITERATURE REVIEW

Aggarwal, P., & Garg, S. (2022). This study aims to check the impact of mergers and Acquisitions on Non-banking companies, which have been further categorized as the manufacturing industry and service industry from the period 2007 to 2012. The study conducted was the **"**Impact of Mergers and Acquisitions on Accounting-based Performance of Acquiring Firms in India". The total number of non-banking companies merged during that period was 153, out of which 68 firms, Pre and Post Merger and Acquisition effects, based on three categories, had been conducted. The three categories were Profitability, Liquidity and Solvency. The Paired sample T-test was applied to analyze the Pre and Post effect on financial performance for five years before and after the M &A mathematically and statistically. It has been found that there was no impact on the company's post-merger after one year and three years, but we can see a positive result after five years of a merger on more than 50% of companies.

Kumar, S. and Bansal, L.K. (2008) have researched "The impact of mergers and acquisitions on corporate performance in India". The study is an event-based study conducted from 2000 to 2006, in which three years were considered as the period of pre-merger and post-merger, and 2003 was considered to identify the merger and acquisition deals taken place during that time. A researcher has found that a total of 200 events of mergers and acquisitions incurred in India. Out of that, 74 events were selected for the study. More than 60 % of merger and acquisition has shown improvement in financial performance but at the same time has faced the problem of increase in the working capital and debt-equity ratio of the business. Spearman's rho correlation and Chi-square test were used for testing the data.

Mishra, C. S., Leepsa, N. M., Sekhar, C., Corresponding, M., & Gupta, V. (2012). "Post-Merger Financial Performance: A Study concerning Select Manufacturing Companies in India." The researcher's view on M & A is that it's a kind of inorganic growth strategy with more importance in today's corporate world. The researcher has selected the Manufacturing sector to study Pre and post-merger impact on three parameters, i.e., Profitability, Liquidity and Leverage. A paired two-sample t-test was applied to 115 select companies merged from 2003 to 2007 to check the impact on financial performance on companies' post-merger. The study concluded that there was a positive impact on companies' post-merger, which was statistically proven as significant, whereas few variables have impacted negatively but proved statistically insignificant.

Patel, R. (2018). has conducted a study on "Pre & Post-Merger Financial Performance: An Indian Perspective" to check the long-term Profitability of Indian banks. The study was done for 4 Indian banks to check the impact of Pre & post-merger on Asset quality, Management quality and earning quality of the banks. A paired T-test was used to analyze the financial performance and found that all four banks have experienced a negative impact on most of the variables and a positive impact on a few. The researcher also has applied comparative analysis techniques between the select bank and the banking industry. The study concluded that post-merger, there was a decrease in the asset quality of Bank of Baroda and Oriental bank of commerce, and there was an increase in the management quality and earning quality of State Bank of India and IDBI bank.

Pervan, M., Višić, J., & Barnjak, K. (2015) conducted the study in one of the European areas named "Croatia". The study was about "The Impact of M&A on Company Performance: Evidence from Croatia", where the researcher took a sample of 116 companies from 2008 to 2011. The study's primary objective revolved around four parameters for the M &A activity conducted in Croatia. The parameters set were to check the cost of the acquired company, the Profitability of companies on Pre & Post activity, comparative study profitability of sample companies with peer companies and whether the acquisition took place by domestic companies or foreign companies as foreign investment in those companies is more as compared to a domestic company. The conclusion drawn based on the study conducted on the above parameters is that there is no significant difference found in the cost of the acquired company and no improvement in the profitability margin within the company and with the peer company. It has also been found that M & activity has been conducted by domestic companies.

Rahman, Z., Ali, A., & Jebran, K. (2018). The study was "The effect of mergers and acquisitions on stock price behaviour in the banking sector of Pakistan". The researcher has applied event study analysis for the period 2002-2012, in which a total of 57 events was reported; that researcher had considered 11 events for study based on specific criteria, such that the announcement for the merger had been done in the period mentioned above (i.e., 2002 to 2012). The acquirer bank should be a scheduled bank and has to be listed in the Karachi stock exchange, and the data also should be available for study. The researcher also used the Market study method to compute abnormal and cumulative abnormal returns for analyzing the Pre and Post-merger effect on the banks. The study concluded that merger has reported negative towards the market, and disclosing such result will help the investors decide on an investment.

Sengar, N., Badhotiya, G. K., Dobriyal, R., & Singh, D. B. (2021) researched "Study of the post-merger effect on the performance of banks in India". The study is based on qualitative research in which the researcher did a SWOT analysis. Researchers also have developed a model which can be used for further research in the same field. Two banks were considered for the study; one was the acquirer bank, and another was the acquiree bank. The study was conducted before the merger for both the banks, i.e. acquirer and acquiree, and later after the merger took place for the Acquirer banks for four years. The conclusion drawn based on qualitative research was that merger is flourishing as it results in happy stakeholders, i.e. shareholders and customers, that have increased the business in a way that has increased the profit margin. Also, I have increased the customer base and improved customer service.

RESEARCH GAP ANALYSIS

The literature has shown that most of the work has been done on different companies.

- Manufacturing,
- Service, and
- Banking industries.
- Still, no specific study has been done to measure pre and post-merger effects on financial data on **mega-merger banks in India** by using the five parameters given

in the CAMELS model by **S. Padmanabhan**.

AIM AND OBJECTIVES

1) To examine the pre and post-effect of the merger on the financial performance of selected banks on the basis of the CAMEL (Capital adequacy, Asset quality, Management, Earnings, and Liquidity) Model

2) Comparative analysis of financial variables of sample banks with an average of all banks

HYPOTHESES

H_0: There is no significant difference in the pre and post-effect of the merger on the financial performance of selected banks on the basis of the CAMEL (Capital Adequacy, Asset Quality, Management Quality, Earnings Quality and Liquidity) Model

H_1: There is a significant difference in the pre and post-effect of the merger on the financial performance of selected banks under the study on the basis of Capital Adequacy

H_2: There is a significant difference in the pre and post-effect of the merger on the financial performance of selected banks under the study on the basis of Asset Quality

H_3: There is a significant difference in the pre and post-effect of the merger on the financial performance of selected banks under the study on the basis of Management Quality

H_4: There is a significant difference in the pre and post-effect of the merger on the financial performance of selected banks under the study on the basis of Earning Quality

H_5: There is a significant difference in the pre and post-effect of the merger on the financial performance of selected banks under the study on the basis of Liquidity.

RESEARCH METHODOLOGY

Population

This study pertains to all the public sector banks with respect to Pre and Post-merger effects caused by CAMEL Model.

Sample

As a sample, four nationalised banks are selected on the basis of the following criteria.

Amalgamating Banks	**Anchor Bank**
Oriental Bank of Commerce & United Bank of India	Punjab National Bank
Syndicate Bank	Canara Bank
Andhra Bank & Corporation Bank	Union Bank of India
Allahabad Bank	Indian Bank

Ten Public sector banks merged into four public sector banks on 1st April 2020

Period of Study

Four financial years, i.e., 2018-2019 and 2019-2020 (Pre-merger period) and 2020-2021 and 2021-2022 (Post-merger period), were considered for the study.

Sources of Data

The study is of a peculiar nature; only secondary data was tapped from various sources.

- Audited annual reports of select banks.
- IBA Bulletin website
- NSE website
- RBI website
- Money Control

Statistical Analysis

A paired t-test is applied to every parameter of the CAMEL model.

DATA COLLECTION, TABULATION AND ANALYSIS

1) Punjab National Bank

Bank Name	Variables	CAMEL Model	Ratios	Accounting Ratios	31st March 2019	31st March 2020	31st March 2021	31st March 2022	Mean - Pre	Mean - Post	Mean Difference	T statistics	Sig value
					Pre Merger Financial Performance		Post Merger Financial Performance						
Punjab National Bank	V1	Capital Adequacy	R1	Capital Adequacy Ratio	9.73	14.14	14.32	14.50	11.94	14.41	2.48	-1.17	0.23
			R2	Total Advances to Total Asset Ratio	0.11	0.11	0.10	0.11	0.11	0.11	0.00	1.00	0.25
	V2	Asset Quality	R1	Credit Deposit Ratio	67.66	67.40	63.31	62.26	67.53	62.79	-4.75	12.01	0.03
			R2	Total Advanced to Total Deposit Ratio	3.84	3.54	3.01	3.32	3.69	3.17	-0.53	1.72	0.17
			R3	Investment Deposit Ratio	30.53	32.07	34.99	33.97	31.30	34.48	3.18	-2.48	0.12
			R4	Net NPA to Net Advances	6.56	5.78	5.73	4.80	6.17	5.27	-0.90	12.07	0.03
			R5	Cash Deposit Ratio	4.62	5.11	4.55	4.47	4.87	4.51	-0.36	1.25	0.22
	V3	Management Quality	R1	Business Per Employee	0.83	0.92	0.92	0.85	0.88	0.89	0.01	-0.13	0.46
			R2	Profit Per Employee	-0.14	0.00	0.02	0.03	-0.07	0.03	0.10	-1.46	0.19
	V4	Earning Quality	R1	Return on Assets	-1.25	0.04	0.15	0.26	-0.61	0.21	0.81	-1.37	0.20
			R2	Return on Equity/ Net worth	0.00	0.59	3.88	5.96	0.30	4.92	4.63	-6.21	0.05
			R3	Net Profit to Total Funds	-5.00	-1.71	-1.68	-1.01	-3.36	-1.35	2.01	-1.53	0.18
			R4	Dividend Payout Ratio	0.00	0.00	0.00	20.38	0.00	10.19	10.19	-1.00	0.25
	V5	Liquidity	R1	Liquid Assets to Total Assets	0.10	0.09	0.09	0.10	0.10	0.10	0.00	0.00	0.50
			R2	Liquid Assets to Total Deposits	3.45	2.93	2.74	3.15	3.19	2.95	-0.25	0.53	0.35

Statistical Analysis & Testing of hypotheses of Punjab National Bank

Bank Name	Variables	CAMEL Model	Ratios	Accounting Ratios	Statistical Analysis
Punjab National Bank	V1	Capital Adequacy	R1	Capital Adequacy Ratio	Accepted
			R2	Total Advances to Total Asset Ratio	Accepted
	V2	Asset Quality	R1	Credit Deposit Ratio	**Rejected**
			R2	Total Advanced to Total Deposit Ratio	Accepted
			R3	Investment Deposit Ratio	Accepted
			R4	Net NPA to Net Advances	**Rejected**
			R5	Cash Deposit Ratio	Accepted
	V3	Management Quality	R1	Business Per Employee	Accepted
			R2	Profit Per Employee	Accepted
	V4	Earning Quality	R1	Return on Assets	Accepted
			R2	Return on Equity/ Net worth	**Rejected**
			R3	Net Profit to Total Funds	Accepted
			R4	Dividend Payout Ratio	Accepted
	V5	Liquidity	R1	Liquid Assets to Total Assets	Accepted
			R2	Liquid Assets to Total Deposits	Accepted

2) Indian Bank

Bank Name	Variables	CAMEL Model	Ratios	Accounting Ratios	31st March 2019	31st March 2020	31st March 2021	31st March 2022	Mean - Pre	Mean - Post	Mean Difference	T statistics	Sig value
					Pre Merger Financial Performance		Post Merger Financial Performance						
Indian Bank	V1	Capital Adequacy	R1	Capital Adequacy Ratio	13.21	14.12	15.71	16.53	13.67	16.12	2.46	-54.56	0.01
			R2	Total Advances to Total Asset Ratio	0.04	0.04	0.04	0.03	0.04	0.04	-0.01	1.00	0.25
	V2	Asset Quality	R1	Credit Deposit Ratio	75.01	75.48	70.39	66.56	75.25	68.48	-6.77	3.15	0.10
			R2	Total Advanced to Total Deposit Ratio	0.29	0.69	0.52	0.37	0.49	0.45	-0.05	0.16	0.45
			R3	Investment Deposit Ratio	30.28	29.11	32.29	31.02	29.70	31.66	1.96	-39.20	0.01
			R4	Net NPA to Net Advances	5.78	6.56	11.24	7.81	6.17	9.53	3.36	-1.59	0.18
			R5	Cash Deposit Ratio	4.93	3.47	4.17	4.56	4.20	4.37	0.17	-0.18	0.44
	V3	Management Quality	R1	Business Per Employee	1.07	1.32	1.09	1.15	1.20	1.12	-0.08	0.79	0.29
			R2	Profit Per Employee	0.02	0.04	0.07	0.10	0.03	0.09	0.06	-11.00	0.03
	V4	Earning Quality	R1	Return on Assets	0.13	0.27	0.50	0.61	0.20	0.56	0.36	-23.67	0.01
			R2	Return on Equity/ Net worth	2.28	4.35	9.34	10.63	3.32	9.99	6.67	-17.10	0.02
			R3	Net Profit to Total Funds	-1.62	-1.50	-1.19	-0.76	-1.56	-0.98	0.59	-3.77	0.08
			R4	Dividend Payout Ratio	0.00	0.00	7.00	20.00	0.00	13.50	13.50	-2.08	0.14
	V5	Liquidity	R1	Liquid Assets to Total Assets	0.07	0.04	0.08	0.12	0.06	0.10	0.05	-1.29	0.21
			R2	Liquid Assets to Total Deposits	0.59	0.77	1.04	1.44	0.68	1.24	0.56	0.06	-5.09

Statistical Analysis & Testing of hypotheses of Indian Bank

Bank Name	Variables	CAMEL Model	Ratios	Accounting Ratios	Statistical Analysis
Indian Bank	V1	Capital Adequacy	R1	Capital Adequacy Ratio	**Rejected**
			R2	Total Advances to Total Asset Ratio	Accepted
	V2	Asset Quality	R1	Credit Deposit Ratio	Accepted
			R2	Total Advanced to Total Deposit Ratio	Accepted
			R3	Investment Deposit Ratio	**Rejected**
			R4	Net NPA to Net Advances	Accepted
			R5	Cash Deposit Ratio	Accepted
	V3	Management Quality	R1	Business Per Employee	Accepted
			R2	Profit Per Employee	**Rejected**
	V4	Earning Quality	R1	Return on Assets	**Rejected**
			R2	Return on Equity/ Net worth	**Rejected**
			R3	Net Profit to Total Funds	Accepted
			R4	Dividend Payout Ratio	**Rejected**
	V5	Liquidity	R1	Liquid Assets to Total Assets	**Rejected**
			R2	Liquid Assets to Total Deposits	**Rejected**

3) Canara Bank

Bank Name	Variables	CAMEL Model	Ratios	Accounting Ratios	31st March 2019	31st March 2020	31st March 2021	31st March 2022	Mean - Pre	Mean - Post	Mean Difference	T statistics	Sig value
					Pre Merger Financial Performance		Post Merger Financial Performance						
Canara Bank	V1	Capital Adequacy	R1	Capital Adequacy Ratio	11.90	13.65	13.18	14.90	12.78	14.04	1.27	-84.33	0.00
			R2	Total Advances to Total Asset Ratio	0.62	0.60	0.55	0.57	0.61	0.56	-0.05	0.12	2.50
	V2	Asset Quality	R1	Credit Deposit Ratio	72.03	70.23	65.47	64.02	71.13	64.75	-6.38	36.49	0.01
			R2	Total Advanced to Total Deposit Ratio	0.71	0.69	0.63	0.65	0.70	0.64	-0.06	3.00	0.10
			R3	Investment Deposit Ratio	26.43	26.89	26.77	25.92	26.66	26.35	-0.32	0.48	0.36
			R4	Net NPA to Net Advances	5.00	4.00	4.00	3.00	4.50	3.50	-1.00	0.00	0.00
			R5	Cash Deposit Ratio	4.63	4.29	4.01	4.52	4.46	4.27	-0.20	0.46	0.36
	V3	Management Quality	R1	Business Per Employee	0.91	0.97	0.96	0.99	0.94	0.98	0.04	-2.33	0.13
			R2	Profit Per Employee	0.01	-0.04	0.03	0.07	-0.02	0.05	0.07	-1.44	0.19
	V4	Earning Quality	R1	Return on Assets	0.04	-0.30	0.22	0.46	-0.13	0.34	0.47	-1.62	0.18
			R2	Return on Equity/ Net worth	1.16	-6.78	5.05	9.85	-2.81	7.45	10.26	-1.61	0.18
			R3	Net Profit to Total Funds	-1.94	-1.90	-1.48	-0.71	-1.92	-1.10	0.83	-2.26	0.13
			R4	Dividend Payout Ratio	0.00	0.00	0.00	20.76	0.00	10.38	10.38	-1.00	0.25
	V5	Liquidity	R1	Liquid Assets to Total Assets	0.04	0.03	0.04	0.04	0.04	0.04	0.01	-1.00	0.25
			R2	Liquid Assets to Total Deposits	0.05	0.04	0.04	0.05	0.05	0.05	0.00	0.00	0.50

Statistical Analysis & Testing of hypotheses of Canara Bank

Bank Name	Variables	CAMEL Model	Ratios	Accounting Ratios	Statistical Analysis
Canara Bank	V1	Capital Adequacy	R1	Capital Adequacy Ratio	**Rejected**
			R2	Total Advances to Total Asset Ratio	Accepted
	V2	Asset Quality	R1	Credit Deposit Ratio	**Rejected**
			R2	Total Advanced to Total Deposit Ratio	Accepted
			R3	Investment Deposit Ratio	Accepted
			R4	Net NPA to Net Advances	**Rejected**
			R5	Cash Deposit Ratio	Accepted
	V3	Management Quality	R1	Business Per Employee	Accepted
			R2	Profit Per Employee	Accepted
	V4	Earning Quality	R1	Return on Assets	Accepted
			R2	Return on Equity/ Net worth	Accepted
			R3	Net Profit to Total Funds	Accepted
			R4	Dividend Payout Ratio	Accepted
	V5	Liquidity	R1	Liquid Assets to Total Assets	Accepted
			R2	Liquid Assets to Total Deposits	Accepted

4) Union Bank of India

Bank Name	Variables	CAMEL Model	Ratios	Accounting Ratios	31st March 2019	31st March 2020	31st March 2021	31st March 2022	Mean - Pre	Mean - Post	Mean Difference	T statistics	Sig value
					Pre Merger Financial Performance		Post Merger Financial Performance						
Union Bank of India	V1	Capital Adequacy	R1	Capital Adequacy Ratio	11.78	12.81	12.56	14.52	12.30	13.54	1.25	-2.68	0.11
			R2	Total Advances to Total Asset Ratio	0.60	0.57	0.55	0.56	0.59	0.56	-0.03	1.50	0.19
	V2	Asset Quality	R1	Credit Deposit Ratio	71.04	70.62	65.92	64.00	70.83	64.96	-5.87	7.83	0.04
			R2	Total Advanced to Total Deposit Ratio	0.71	0.70	0.64	0.64	0.71	0.64	-0.06	13.00	0.02
			R3	Investment Deposit Ratio	30.30	32.13	35.21	34.76	31.22	34.99	3.77	-3.31	0.09
			R4	Net NPA to Net Advances	7.00	5.00	5.00	4.00	6.00	4.50	-1.50	0.10	6.31
			R5	Cash Deposit Ratio	5.07	4.72	4.22	4.29	4.90	4.26	-0.64	3.05	0.10
	V3	Management Quality	R1	Business Per Employee	1.03	1.14	1.02	1.07	1.09	1.05	-0.04	1.33	0.20
			R2	Profit Per Employee	-0.08	-0.08	0.04	0.07	-0.08	0.06	0.14	-9.00	0.04
	V4	Earning Quality	R1	Return on Assets	-0.59	-0.52	0.27	0.44	-0.56	0.36	0.91	-18.20	0.02
			R2	Return on Equity/ Net worth	-12.15	-9.46	4.87	7.94	-10.81	6.41	17.21	-90.58	0.00
			R3	Net Profit to Total Funds	-2.94	-3.10	-1.73	-0.72	-3.02	-1.23	1.80	-3.07	0.10
			R4	Dividend Payout Ratio	0.00	0.00	0.00	24.81	0.00	12.41	12.41	-1.00	0.25
	V5	Liquidity	R1	Liquid Assets to Total Assets	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.00	0.00
			R2	Liquid Assets to Total Deposits	0.05	0.04	0.04	0.04	0.05	0.04	-0.01	1.00	0.25

Statistical Analysis & Testing of hypotheses of Union Bank of India

Bank Name	Variables	CAMEL Model	Ratios	Accounting Ratios	Statistical Analysis
Union Bank of India	V1	Capital Adequacy	R1	Capital Adequacy Ratio	Accepted
			R2	Total Advances to Total Asset Ratio	Accepted
	V2	Asset Quality	R1	Credit Deposit Ratio	**Rejected**
			R2	Total Advanced to Total Deposit Ratio	**Rejected**
			R3	Investment Deposit Ratio	Accepted
			R4	Net NPA to Net Advances	Accepted
			R5	Cash Deposit Ratio	Accepted
	V3	Management Quality	R1	Business Per Employee	Accepted
			R2	Profit Per Employee	**Rejected**
	V4	Earning Quality	R1	Return on Assets	**Rejected**
			R2	Return on Equity/ Net worth	**Rejected**
			R3	Net Profit to Total Funds	Accepted
			R4	Dividend Payout Ratio	Accepted
	V5	Liquidity	R1	Liquid Assets to Total Assets	**Rejected**
			R2	Liquid Assets to Total Deposits	Accepted

5) Comparative analysis of financial variables of sample banks with an average of all banks

CAMEL Model	Financial Ratios	Period	Punjab National Bank	Indian Bank	Canara Bank	Union Bank of India	Average of all banks
Capital Adequacy	Capital Adequacy Ratio	Pre Merger	11.94	13.67	12.78	12.30	12.67
		Post Merger	14.41	16.12	14.04	13.54	14.53
	Total Advances to Total Asset Ratio	Pre Merger	0.11	0.04	0.61	0.59	0.34
		Post Merger	0.11	0.04	0.56	0.56	0.31
Asset Quality	Credit Deposit Ratio	Pre Merger	67.53	75.25	71.13	70.83	71.18
		Post Merger	62.79	68.48	64.75	64.96	65.24
	Total Advanced to Total Deposit Ratio	Pre Merger	3.69	0.49	0.70	0.71	1.40
		Post Merger	3.17	0.45	0.64	0.64	1.22
	Investment Deposit Ratio	Pre Merger	31.30	29.70	26.66	31.22	29.72
		Post Merger	34.48	31.66	26.35	34.99	31.87
	Net NPA to Net Advances	Pre Merger	6.17	6.17	4.50	6.00	5.71
		Post Merger	5.27	9.53	3.50	4.50	5.70
	Cash Deposit Ratio	Pre Merger	4.87	4.20	4.46	4.90	4.61
		Post Merger	4.51	4.37	4.27	4.26	4.35
CAMEL Model	Financial Ratios	Period	Punjab National Bank	Indian Bank	Canara Bank	Union Bank of India	Average of all banks
Management Quality	Business Per Employee	Pre Merger	0.88	1.20	0.94	1.09	1.02
		Post Merger	0.89	1.12	0.98	1.05	1.01
	Profit Per Employee	Pre Merger	-0.07	0.03	-0.02	-0.08	-0.03
		Post Merger	0.03	0.09	0.05	0.06	0.05
Earning Quality	Return on Assets	Pre Merger	-0.61	0.20	-0.13	-0.56	-0.27
		Post Merger	0.21	0.56	0.34	0.36	0.36
	Return on Equity/ Net worth	Pre Merger	0.30	3.32	-2.81	-10.81	-2.50
		Post Merger	4.92	9.99	7.45	6.41	7.19
	Net Profit to Total Funds	Pre Merger	-3.36	-1.56	-1.92	-3.02	-2.46
		Post Merger	-1.35	-0.98	-1.10	-1.23	-1.16
	Dividend Payout Ratio	Pre Merger	0.00	0.00	0.00	0.00	0.00
		Post Merger	10.19	13.50	10.38	12.41	11.62
Liquidity	Liquid Assets to Total Assets	Pre Merger	0.10	0.06	0.04	0.04	0.06
		Post Merger	0.10	0.10	0.04	0.04	0.07
	Liquid Assets to Total Deposits	Pre Merger	3.19	0.68	0.05	0.05	0.99
		Post Merger	2.95	1.24	0.05	0.04	1.07

FINDINGS

Data analysis and Interpretation have been made by using Paired t-test on individual banks and by using comparative analysis with an average of all banks, and overall significant changes are as follows.

➢ Capital Adequacy Ratio: We can see a significant change in the overall capacity for maintaining the capital to meet the obligations of all four banks have improved.

➢ Asset Quality: Asset quality talks about the lending capacity of the banks. There is a negative impact post-merger on the lending capacity of the banks. The overall lending capacity of all four banks has got reduced. Collection against NPA also needs to be faster.

➢ Management Quality: It studies Business per employee and Profit per employee. There is no significant change in the efficiency of the employees to generate income at the business level. At the same time, we can see a significant change in the efficiency of the employees in contributing to the profit at the branch level.

➢ Earning Quality: It indicates the earning capacity of the banks to generate returns by using the assets of the business. There is a positive impact post-merger in all four banks. All the banks have started paying dividends post-merger.

➢ Liquidity: we can see an overall improvement in liquid assets to total deposits for all four banks.

CONCLUSION AND SUGGESTIONS

- Mergers are helpful for the survival of weak banks by merging with large banks.
- ➢ According to the study, it was found that the main reason Banks merged was to enlarge their market share and increase their profitability, Expand the capital base and the value of the shareholders, Enable the banks to access more resources, Enhance the organization's stability and effectiveness of operations, Increasing customer satisfaction.
- As per the asset quality ratio
- ➢ To reduce the credit gap, banks should try to improve their lending capacity by directing more funds towards credit lending to small business owners and for productive investments.
- ➢ Banks should implement some strategies to recover faster against NPAs
- As per management quality
- ➢ Employees should be trained to handle innovative technologies which will increase the efficiency level to generate income at the business level.

CONTRIBUTION AND SCOPE FOR FURTHER RESEARCH

The study has contributed to analyzing the merger effect on the financial performance of mega-merger banks by using the CAMEL model.

As it's a recent development in banks, only two years of data were analyzed post-merger to find the progress of mega-merger banks.

Following is the scope for further research.

- ➢ What steps should banks take to improve asset quality and earning efficiency?
- ➢ The study can also be conducted for various non-financial parameters.
- ➢ The long-run success of mergers can be analyzed by taking a more extended time period, say five to seven post-merger years.
- ➢ The study can also examine the impact of mergers on Employees.

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