

## A study on the performance analysis of banks in India after mergers and acquisitions

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### Abstract

This paper presents a comparative study of the pre and post-merger financial and operating performance appraisal of merged banks. Randomly four cases of mergers occurred in the year from 2006-2010 in the Indian banking sector has been taken for the study. Camel model (camel stand for capital adequacy, asset quality, Managerial efficiency, earnings quality and liquidity) have been used to examine the pre and post-merger financial performance appraisal of acquiring banks. In order to test the degree of variation, coefficient of variation has applied. The results indicated that there is significant difference in the overall performance of merged banks during merger period hence null hypothesis is rejected.

**Keywords:** camel model, Indian banking sector, coefficient of variation

### 1. Introduction

The international banking scenario has shown major turmoil in the past few years in terms of mergers and acquisitions. Deregulation has been the main driver, through three major routes –dismantling of interest rate controls, removal of barriers between banks and other financial intermediaries, and lowering of entry barrier. It has lead to disintermediation, investors demanding higher returns, price competition, reduced margins, falling spreads and competition across geographies forcing banks to look for new ways to boost revenues. Consolidation has been a significant strategic tool for this and has become a worldwide phenomenon, driven by apparent advantages of scale-economies, geographical diversification, and lower costs through branch and staff rationalization, cross-border expansion and market share concentration. The new Basel II norms have also led banks to consider M&As

### 2. Rationale behind mergers of banks

It is evident from large number of studies conducted on Mergers & Acquisition that it is most widely used strategic option adopted by organizations for growth purpose. On the basis of the studies of bank mergers in India, following are the motives and rationale for mergers:

- 1) Market Leadership: The merger can enhance value for shareholders of both companies through the amalgamated entity's access to greater number of market resources. With addition to market share a company can afford to control the price in better manner with a consequent increase in profitability.
- 2) Growth and Diversification: Companies that desire rapid growth in size or market share or diversification in the range of their products may find that a merger can be used to fulfill the objective instead of going through the volume consuming process of internal growth or diversification. The firm may achieve the same objective in a short period by merging with an existing firm. In addition, such a strategy is often less costly than the alternative of developing the necessary production capability and capacity.

- 3) Synergy: Implies a situation where the combined firm is more valuable than the sum of the individual combining firms. It refers to benefits other than those related to economies of scale. Operating economies are one form of synergy benefits.
- 4) Risk: Managing Bankruptcy and organizational risks, recent studies have established that if merger and acquisitions in banks if allowed in a controlled manner would significantly reduce the bankruptcy risk of the merged entity. Obviously, mergers would also provide these benefits to banks in India reducing their bankruptcy concerns.
- 5) Economies of Scale: With the help of mergers and acquisitions in the banking sector, the banks can achieve significant growth in their operations and minimize their expenses to a considerable extent. Another important advantage behind this kind of merger is that in this process, competition is reduced because merger eliminates competitors from the banking industry.
- 6) Economies of Scope: An ability to grow products and segments and an opportunity to cross sell would enhance revenue. This could also result in more geographic growth.
- 7) Strategic Integration: Considering the complementary nature of the businesses of the concerned companies, in terms of their commercial strengths, geographic profiles and site integration, the amalgamated entity may be able to conduct operations in the most cost efficient manner. The merger an also enable maximum utilization of various infrastructural and manufacturing assets, including utilities and other site facilities.

### 3. Need of the Study

For so many years, we have been listening about mergers and acquisitions where in the two companies merge or one company acquire the other. Corporate restructuring through merger and acquisition has become an increasingly broad-based phenomenon throughout the business world. Their numbers and volume are growing drastically, not only in India, but also all over the world. These activities play an important role in the growth of individual economy as well as the global

economy. Now the companies all over the world are discovering that organic growth is hard to come by, the focus is now more on acquisitive growth or inorganic growth. This is all true in case of banking sector which are relying on mergers & acquisitions to fuel their growth. Mergers, acquisitions, amalgamations & takeovers have become an integral part of Indian Banking sector of new economic paradigm. Different scholars regarding the success of mergers & acquisitions activities have expressed different views. The present study has been carried out with a view to analyze different aspects of Mergers and Acquisitions in banking sector and their impact on financial performance of merged banks and the business generated by merged banks. Numerous scholars have carried out research on the performance of the merged banks with focus on limited aspects. The focus of this research has been on analyzing the performance of merged banks after the merger event covering various aspects i.e. financial and operating performance.

#### 4. Literature review

Cornett and Tehranian (1992) <sup>[10]</sup> examined the post-acquisition performance of large bank mergers during 1982-1987. It was concluded that better performance resulted from improvements in the ability to attract loans and deposits, employee's productivity, and from profitable asset growth. Further, it was found that there is a significant correlation between announcement-period abnormal stock returns and the various performance measures, showing that market participants were able to identify in advance the improved performance associated with bank acquisitions.

Akhavain, Berger and Humphrey (1997) <sup>[11]</sup> studied the efficiency and price effects of mega mergers on US banking industry and found that merged banks experience a statistically significant (16 percentage) increase in profit efficiency rank relative to other large banks. Further, it was found that most of the improvement was from increasing revenues, including a shift in outputs from securities to loans, a higher-valued product. Improvements were great for the banks with the lowest efficiencies prior to merging, which therefore had the greatest capacity for improvement. By comparison, the effects on profits from merger-related changes in prices were found to be very small.

Cornett, Hovakimian, Palia and Tehranian (2003) <sup>[12]</sup> examined whether shareholder value-maximizing corporate governance mechanisms assisted in reducing the managerial incentive to enter value-destroying bank acquisitions. It was found that diversifying bank acquisitions earned significantly negative announcement period abnormal returns for bidder banks whereas focusing acquisitions earned zero abnormal returns. It was also found that corporate governance variables in the bidding bank were less effective in diversifying acquisitions than in focusing acquisitions. These results were robust to the inclusion of the usual control variables.

Peng and Wang (2004) <sup>[8]</sup> studied the effect of bank mergers on cost efficiency. It was found that bank merger activity was positively related to cost efficiency and even though the number of bank employees did not decline. The banks involved in mergers were generally small and established after the deregulation of banking sector.

Selvam, Vanitha and Babu (2005) <sup>[9]</sup> suggested that only way to manage competitiveness was cost reduction through acquisition, which enabled the bankers to spread the overhead

cost over a large customer base. Further, also analyzed the growth of merged banks in terms of total assets, revenue, profits, investment and deposits and concluded that the performance of merged banks were higher than expectations.

Knapp, Gart and Chaudhry (2006) <sup>[7]</sup> studied the tendency for serial correlation by analysing the impact of mean reversion on the evaluation of post-merger performance of bank holding companies. It was found that when an adjustment was made for the mean reversion, post-merger results significantly exceeded those of the industry in the first 5 years after the merger.

Rezitis (2008) <sup>[6]</sup> investigated the effect of acquisition activity on the efficiency and total factor productivity of Greek banks. It was concluded that total factor productivity for merger banks for the period after merging could be attributed to an increase in technical inefficiency and the disappearance of economies of scale, while technical change remained unchanged compared to the pre-merging level.

Bajaj, (2009) <sup>[5]</sup> studied the important role played by cultural factors in merger and acquisitions and also examined the cultural issues that had the potential to arise when two alien cultures came together after commencement of the integration process. It was found that as the two banks had very different cultures and needed high degree of integration, threat of cultural conflict was very high. It may however, be prevented by the management of the acquirer by following a proactive acculturation strategy.

Sabina and Irina (2010) <sup>[4]</sup> reviewed the literature of the main business evaluation methods used to determine the exchange ratio in merger transactions and concluded by showing the context of use and the application conditions of the most used methods.

Chadamiya and Menapara (2012) studied the financial performance of Indian Banking sector during pre and post mergers and acquisitions based on secondary data. In order to evaluate financial performance, Ratio analysis, Standard Deviation and 't' test have been used. It was concluded that overall the merger and acquisition does not effect of the financial position of banks except when a weaker & non-viable banks are merged with a financially sound and profit making bank in such case the profitability of the later bank will be affected.

G and Nirmala (2013) <sup>[3]</sup> examined the performance of the acquirer and target companies before and after the mergers by using ratio analysis and t-test during the study period of three years. It was found that the shareholders of the acquirer companies increased their financial performance after the merger event.

Shivaji and Veerasha (2014) <sup>[2]</sup> evaluated the impact of mergers and acquisitions on Profitability, Efficiency and Solvency of acquiring banks by using various financial parameters (such as Interest spread ratio, Net profit margin, Return on net worth, Interest income/Total fund, Interest expended/Total fund, Operating expenses/Total fund, Net income/Total fund, Credit deposit ratio, Interest coverage ratio and Cash deposit ratio) five years before and five years after the merger. It was found that there was a positive impact of the event of merger on both Indian overseas Bank and Federal Bank. But the extent of positive impact was found more in case of Indian Overseas Bank than Federal Bank.

Prabhu and Honnappa (2015) <sup>[1]</sup> examined the Impact of Merger and Acquisitions on the performance of three banks viz. IDBI Bank, Indian Overseas Bank and HDFC Bank. The

pre and post-merger performance of merged banks has been analysed in terms of profitability and their respective compound annual growth rate. It was found that the financial performance of acquiring banks has improved after the merger.

**5. Research methodology**

For the present study which has been carried out to know the

impact of M&A’s in banking sector the following research methodology has been adopted.

**Sample selection:** In the present study four banks has been taken to evaluate the performance of the banks before and after the merger. The sample banks representing different categories of mergers in Indian banking sector and are presents as follows:

**Table 1**

Merger Year	Acquirer Bank	Target Bank	Motive of merger	Type of merger
2006	Federal Bank	Ganesh Bank of Kurandwad	Restructuring of weak bank	Forced merger
2007	Indian Overseas Bank	Bharat overseas Bank	Restructuring of weak bank	Compulsory merger
2008	State Bank of India	State Bank of Saurashtra	Expansion of Size, benefit of scale and scope economy	Voluntary merger
2010	ICICI	Bank of Rajasthan	Expansion of Size	Voluntary Merger

Source: Compiled from Report on Trend and Progress of Banking in India, RBI, various issues.

**Period of study:** In order to make a comparison of the performance of the merged banks, data for five years prior to merger and after the merger period has been taken up to 2014 for analysis.

**Data used:** The present study is based on secondary data which has been collected from various sources such as annual reports of Reserve Bank of India and respective banks, CMIE Prowess Database, Capitaline database. Various websites has also been consulted to make analysis meaningful and presentable.

**Statistical techniques:** Various statistical tools have been used in the present study to analyze the objectives of the study. The descriptive statistics measures i.e. Mean, Standard deviation

and coefficient of variation have been used to analyze the degree of variation among the data series. To measure the overall performance of the banks CAMEL model have been used.

**Objective of the study:** The objective of the study is to evaluate the overall performance of merged banks on the basis of selected variables prior and post-merger.

**Hypothesis:** The present study proposed to study the following hypothesis.

**H<sub>0</sub>:**  $X_1=X_2$ , that there is no difference in overall performance of merged banks before and after merger.

**6. Results and Discussions**

**Federal Bank Acquired Ganesh Bank of Kurandward (2006)**

**Table 2**

Camel Parameters	Ratios	Pre/Post	N	Mean	Std. Deviation	C.V. (%)
Capital Adequacy	Advances To Assets Ratio (%)	Pre	6	1.321	0.187	14.21
		Post	8	0.875	0.279	31.95
	Capital Adequacy Ratio (%)	Pre	6	11.965	1.294	10.82
		Post	8	16.415	3.325	20.26
Asset Quality	Debt Equity Ratio (Times)	Pre	6	0.821	0.214	26.14
		Post	8	0.552	0.246	44.57
	Net NPA To Net Advances Ratio (%)	Pre	6	3.340	3.028	90.68
		Post	8	0.536	0.236	44.16
Managerial Efficiency	Net NPA To Total Assets Ratio (%)	Pre	6	2.605	1.975	75.82
		Post	8	0.215	0.205	95.52
	Total Investment To Total Assets Ratio (%)	Pre	6	33.890	3.898	11.50
		Post	8	29.896	1.353	4.53
Earning Quality	Business Per Employee (Lakh)	Pre	6	36.173	12.500	34.56
		Post	8	88.115	14.207	16.12
	Profit Per Employee (Lakh)	Pre	6	0.241	0.127	53.04
		Post	8	0.736	0.135	18.43
Liquidity	Total Advances To Total Deposits Ratio (%)	Pre	6	1.505	0.229	15.27
		Post	8	1.086	0.361	33.26
	Interest Income To Total Income Ratio (%)	Pre	6	73.260	17.499	23.89
		Post	8	88.613	2.204	2.49
Liquidity	Return On Assets Ratio (%)	Pre	6	0.975	0.292	30.05
		Post	8	1.335	0.110	8.25
	Return On Net Worth Ratio (%)	Pre	6	20.433	3.745	18.33
		Post	8	12.918	1.415	10.96
Liquidity	Quick Ratio (Times)	Pre	6	7.138	3.409	47.76
		Post	8	4.008	1.087	27.14
	Liquid Assets To Total Assets Ratio (%)	Pre	6	13.683	4.128	30.16
		Post	8	7.938	1.155	14.56
Liquidity	Liquid Assets To Total Deposits Ratio (%)	Pre	6	15.520	4.426	28.52
		Post	8	9.771	1.414	14.47

Source: Report on Trend and Progress in Banking (RBI), CMIE Prowess Database, ACE Analyzer, Capitaline

The performance of Federal Bank results in table 2 regarding Capital Adequacy showed that Advances to Assets Ratio, Capital Adequacy Ratio and Debt Equity Ratio have more variation in the values of different years in the post-merger period as compared to pre-merger period which meant that Capital Adequacy was more consistent in the pre-merger period.

Regarding Asset Quality, it is illustrated that, Net NPA to Net Advances Ratio and Total Investments to Total Assets Ratio have more variations in the pre-merger period as compared to post merger period. On the other hand Net NPA to Total Assets Ratio depicted more variation during post-merger period.

So far as the Managerial Efficiency is concerned, the results revealed that Business per Employee and Profit per Employee exemplified less variation in the post-merger period as compared to pre-merger period. However Total Advances to Total Deposits Ratio demonstrated more fluctuations in the post-merger period as compared to pre-merger period.

The parameters of Earnings Quality i.e Return on Assets Ratio, Interest Income to Total Income Ratio and Return on Net Worth Ratio have shown more variation in terms of Coefficient of Variation during pre-merger period, which meant that Earnings Quality improved after merger and hence become consistent.

Regarding Liquidity as analysed through Quick Ratio, Liquid Assets to Total Assets ratio and Liquid Assets to Total Deposits ratio exhibited more fluctuations in the pre-merger period as compared to the post-merger period.

From the above analysis it may be concluded that, Net NPA to Net Advances, Total Investments to Total Assets Ratio, Business per Employee, Profit per Employee, Earnings Quality and Liquidity have shown less fluctuations in the post-merger period hence performance of bank has improved. Whereas performance of bank has declined in post-merger period regarding Capital Adequacy, Net NPA to Total Assets and Total Advances to Total Deposits Ratio.

**Indian Overseas Bank Acquired Bharat Overseas Bank (2007)**

**Table 3**

Camel Parameters	Ratios	Pre/Post	N	Mean	Std. Deviation	C.V. (%)
Capital Adequacy	Advances To Assets Ratio (%)	Pre	6	0.381	0.306	80.43
		Post	7	0.690	0.076	11.06
	Capital Adequacy Ratio (%)	Pre	6	12.705	1.028	8.09
		Post	7	12.064	1.406	11.66
Asset Quality	Debt Equity Ratio (Times)	Pre	6	0.975	0.216	22.17
		Post	7	1.944	0.325	16.75
	Net NPA To Net Advances Ratio (%)	Pre	6	1.791	1.832	102.28
		Post	7	2.084	0.784	37.62
Managerial Efficiency	Net NPA To Total Assets Ratio (%)	Pre	6	1.243	1.006	80.98
		Post	7	0.712	0.815	114.40
	Total Investment To Total Assets Ratio (%)	Pre	6	35.705	7.190	20.14
		Post	7	26.102	1.361	5.22
Earning Quality	Business Per Employee (Lakh)	Pre	6	36.395	14.276	39.23
		Post	7	106.951	27.733	25.93
	Profit Per Employee (Lakh)	Pre	6	0.313	0.122	38.95
		Post	7	0.312	0.128	41.12
Liquidity	Total Advances To Total Deposits Ratio (%)	Pre	6	0.423	0.334	78.95
		Post	7	0.840	0.095	11.35
	Interest Income To Total Income Ratio (%)	Pre	6	85.420	2.158	2.53
		Post	7	89.717	2.298	2.56
Liquidity	Return On Assets Ratio (%)	Pre	6	11.380	5.440	47.81
		Post	7	7.742	5.224	67.48
	Return On Net Worth Ratio (%)	Pre	6	32.658	6.428	19.68
		Post	7	11.111	7.257	65.32
Liquidity	Quick Ratio (Times)	Pre	6	2.481	0.607	24.47
		Post	7	4.010	0.311	7.76
	Liquid Assets To Total Assets Ratio (%)	Pre	6	11.406	1.712	15.02
		Post	7	9.013	1.504	16.69
Liquidity	Liquid Assets To Total Deposits Ratio (%)	Pre	6	13.286	1.989	14.97
		Post	7	10.541	1.053	9.99

Source: Report on Trend and Progress in Banking (RBI), CMIE Prowess Database, ACE Analyzer, Capitaline

The results as outlined in table 3 regarding Capital Adequacy of Indian Overseas Bank indicated that Advances to Assets Ratio and Debt Equity Ratio have more variations in terms of Coefficient of Variation during pre-merger period as compared to post merger period. But in Capital Adequacy Ratio, Coefficient of Variation was found more fluctuating during the post-merger period.

In respect of Asset Quality, Net NPA to Net Advances Ratio and Total investments to total assets Ratio exhibited the more variation in the values of different years in the pre-merger

period as compared to post merger period. On the other hand Net NPA to Total Assets Ratio shows more fluctuation during post-merger period.

The analysis of Managerial Efficiency revealed that Business per Employee and Total Advances to Total Deposits Ratio experienced fewer fluctuations in the post-merger period as compared to the pre-merger period which meant that managerial efficiency has improved and is more consistent during post-merger period. On the other hand Profit per Employee depicted more variations in the post-merger period.

The Earnings Quality showed that Return on Assets Ratio and Return on Net worth Ratio have more variations in the post-merger period as compared to the pre-merger period. The Liquidity parameter points out that, Quick Ratio and Liquid Assets to Total Deposits Ratio have fluctuated less in the post-merger period as compared to pre-merger period. But Coefficient of Variation was found more fluctuating in respect of Liquid Assets to Total Assets in the post-merger period. From the above analysis it may be concluded that, Advances to Assets Ratio, Debt Equity Ratio, Net NPA to Net Advances,

Total Investments to Total Assets Ratio, Business per Employee, Total Advances to Total Deposits Ratio, Return on Net Worth Ratio, Return on Assets Ratio, Quick Ratio and Liquid Assets to Total Deposits Ratio have shown less fluctuations in the post-merger period hence performance of bank has improved. Whereas performance of bank has declined in post-merger period regarding, Capital Adequacy Ratio, Net NPA to Total Assets, Profit Per Employee and Liquid Assets to Total Assets Ratio.

**State Bank of India Acquired State Bank of Saurashtra (2008)**

**Table 4**

Camel Parameters	Ratios	Pre/Post	N	Mean	Std. Deviation	C.V. (%)
Capital Adequacy	Advances To Assets Ratio (%)	Pre	6	0.376	0.180	48.00
		Post	6	0.483	0.130	26.99
Capital Adequacy	Capital Adequacy Ratio (%)	Pre	6	12.873	0.737	5.72
		Post	6	11.965	0.894	7.47
Asset Quality	Debt Equity Ratio (Times)	Pre	6	1.188	0.403	33.96
		Post	6	1.605	0.143	8.92
	Net NPA To Net Advances Ratio (%)	Pre	6	2.641	1.153	43.65
		Post	6	1.891	0.410	21.69
Net NPA To Total Assets Ratio (%)	Pre	6	1.180	0.266	22.60	
	Post	6	0.916	0.677	73.88	
Managerial Efficiency	Total Investment To Total Assets Ratio (%)	Pre	6	36.570	9.288	25.39
		Post	6	24.770	2.826	11.40
	Business Per Employee (Lakh)	Pre	6	29.278	10.042	34.30
		Post	6	82.340	23.337	28.34
	Profit Per Employee (Lakh)	Pre	6	0.228	0.076	33.40
		Post	6	0.493	0.079	16.04
Total Advances To Total Deposits Ratio (%)	Pre	6	0.973	1.244	127.85	
	Post	6	0.621	0.163	26.35	
Earning Quality	Interest Income To Total Income Ratio (%)	Pre	6	82.006	1.706	2.08
		Post	6	84.923	2.644	3.11
	Return On Assets Ratio (%)	Pre	6	0.921	0.069	7.56
		Post	6	0.855	0.149	17.48
	Return On Net Worth Ratio (%)	Pre	6	18.215	2.076	11.40
Post		6	14.288	2.539	17.77	
Quick Ratio (Times)	Pre	6	1.555	0.248	15.97	
	Post	6	1.893	0.167	8.83	
Liquidity	Liquid Assets To Total Assets Ratio (%)	Pre	6	14.0450	1.492	10.62
		Post	6	11.2983	1.930	17.08
	Liquid Assets To Total Deposits Ratio (%)	Pre	6	31.8783	32.130	100.79
		Post	6	14.6967	2.567	17.46

Source: Report on Trend and Progress in Banking (RBI), CMIE Prowess Database, ACE Analyzer, Capitaline

The results as represented in table 4 regarding Capital Adequacy showed that Advances to Assets Ratio and Debt Equity Ratio experienced more variation in the values of different years in the pre-merger period as compared to post merger period. However, the Capital Adequacy Ratio depicted less fluctuation in the pre-merger period as compared to the post-merger period.

Regarding Asset Quality, Net NPA to Net Advances Ratio and Total Investments to Total Assets Ratio was found less fluctuating in the post-merger period as compared to pre-merger period. On the other hand, Net NPA to Total Assets Ratio revealed more variation in the post-merger period as compared to the pre-merger period.

As far as the Managerial Efficiency is concerned, it has been found that Business per Employee, Profit per Employee and Total Advances to Total Deposits Ratio demonstrated less fluctuation in the post-merger period over pre-merger period.

The Earnings Quality analysis highlighted that, Return on Assets Ratio, Return on Net worth Ratio and Interest Income to Total Income Ratio has highest variations in terms of Coefficient of Variation during post-merger period, it means that values are more consistent in the pre-merger period.

Regarding Liquidity, the Quick Ratio and Liquid Assets to Total Deposits Ratio depicted more fluctuations in the pre-merger period and the values are found more consistent in post-merger period. However, Liquid Assets to Total Assets Ratio revealed more variation in the post-merger period as compared to the pre-merger period.

From the above analysis it may be concluded that, Advances to Assets Ratio, Debt Equity Ratio, Net NPA to Net Advances, Total Investments to Total Assets Ratio, Managerial Efficiency, Quick Ratio and Liquid Assets to Total Deposits have shown less fluctuations in the post-merger period hence performance of bank has improved. Whereas performance of

bank has declined in post-merger period regarding, Capital Adequacy Ratio, Net NPA to Total Assets, Asset Quality,

Return on Net worth Ratio and Liquid Assets to Total Assets.

### ICICI Acquired Bank of Rajasthan (2010)

**Table 5**

Camel Parameters	Ratios	Pre/Post	N	Mean	Std. Deviation	C.V. (%)
Capital Adequacy	Advances To Assets Ratio (%)	Pre	6	1.693	0.354	20.93
		Post	4	0.857	0.042	4.98
	Capital Adequacy Ratio (%)	Pre	6	15.441	2.735	17.72
		Post	4	16.940	0.589	3.48
	Debt Equity Ratio (Times)	Pre	6	2.120	0.421	19.87
		Post	4	2.197	0.088	4.01
Asset Quality	Net NPA To Net Advances Ratio (%)	Pre	6	1.525	0.564	37.01
		Post	4	0.895	0.177	19.85
	Net NPA To Total Assets Ratio (%)	Pre	6	0.676	0.395	58.39
		Post	4	0.254	0.269	106.16
	Total Investment To Total Assets Ratio (%)	Pre	6	29.343	3.032	10.33
		Post	4	31.500	1.293	4.11
Managerial Efficiency	Business Per Employee (Lakh)	Pre	6	118.436	9.248	7.81
		Post	4	73.125	1.650	2.26
	Profit Per Employee (Lakh)	Pre	6	1.057	0.092	8.76
		Post	4	1.225	0.206	16.83
	Total Advances To Total Deposits Ratio (%)	Pre	6	2.993	0.702	23.48
		Post	4	1.531	0.253	16.56
Earning Quality	Interest Income To Total Income Ratio (%)	Pre	6	76.998	1.779	2.31
		Post	4	81.315	0.793	0.98
	Return On Assets Ratio (%)	Pre	6	1.161	0.138	11.90
		Post	4	1.670	0.119	7.15
	Return On Net Worth Ratio (%)	Pre	6	10.886	2.870	26.36
		Post	4	12.855	1.185	9.22
Liquidity	Quick Ratio (Times)	Pre	6	2.268	0.5418	23.89
		Post	4	2.082	0.0741	3.56
	Liquid Assets To Total Assets Ratio (%)	Pre	6	10.823	2.381	22.01
		Post	4	12.010	0.721	6.01
	Liquid Assets To Total Deposits Ratio (%)	Pre	6	19.846	3.213	16.19
		Post	4	21.012	3.828	18.22

**Source:** Report on Trend and Progress in Banking (RBI), CMIE Prowess Database, ACE Analyzer, Capitaline

The analysis of Capital Adequacy of ICICI Bank (table 5) showed that Advances to Assets Ratio, Capital Adequacy Ratio and Debt Equity Ratio have more variation in the values of different years in the pre-merger period as compared to post merger period which indicates the improved performance of bank in the post-merger period.

Regarding Asset Quality, it is illustrated that, Net NPA to Net Advances Ratio and Total Investments to Total Assets Ratio have more variations in the pre-merger period as compared to post merger period. However, the Net NPA to Total Assets Ratio exhibited more fluctuations during post-merger period.

As far as the Managerial Efficiency is concerned, the Business per Employee and Total Advances to Total Deposits Ratio demonstrated fewer fluctuations in the post-merger period. On the other hand, Profit per Employee exhibited more variations in the post-merger period as compared to pre-merger period.

The Earnings Quality analysis highlighted that, Return On Assets Ratio, Return on Net Worth Ratio and Interest Income to Total Income Ratio have more variation in terms of Coefficient of Variation during pre-merger period, it meant that values are more consistent in the post-merger period.

Regarding Liquidity, Quick Ratio and Liquid Assets to Total Assets Ratio exemplified more fluctuations in the pre-merger period as compared to the post-merger period which meant that values are more consistent in post-merger period due to

improved performance. However Liquid Assets to Total Deposits Ratio showed more variation in the post-merger period.

From the above analysis it may be concluded that, Capital Adequacy, Net NPA to Net Advances, Total Investments to Total Assets Ratio, Business per Employee, Total Advances to Total Deposits Ratio, Earnings Quality, Quick Ratio and Liquid Assets to Total Assets Ratio have shown less fluctuations in the post-merger period hence performance of bank has improved. Whereas performance of bank has declined in post-merger period regarding Net NPA to Total Assets, Profit Per Employee and Liquid Assets to Total Deposits Ratio.

### 7. Conclusion

It can be concluded that Mergers and acquisitions encourage banks to gain global reach and better synergy and allow large banks to acquire the stressed assets of weaker banks. Mergers in India between weak/unviable banks should grow faster so that the weak/unviable banks could be rehabilitated providing continuity of employment with the working force, utilization of assets blocked up in the weak banks and adding constructively to the prosperity of the nation through increased flow of funds. Merger and acquisitions in Indian banking so far has been to provide the safeguard and hedging to weak bank against their failure and too at the initiative of RBI, rather than

to pave the way to initiate the banks to come forward on their own record for merger and amalgamation purely with a commercial view and economic consideration. As the entire Indian banking industry is witnessing a paradigm shift in systems, processes, strategies, it would warrant creation of new competencies and capabilities on an on-going basis for which an environment of continuous learning would have to be created so as to enhance knowledge and skills. Looking the global trend of consolidation and convergence, it is need of the hour to restructure the banking sector in India through mergers and amalgamation in order to make them more capitalized, automated and technology oriented so as to provide environment more competitive and customer friendly.

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