

MERGERS AND ACQUISITION OF BANK OF BARODA II POST-REFORM INDIA

N.M. Francis Mercy, A. Scarlet and K. Ponmalar
Post Graduate and Research Centre of Commerce
Jayaraj Annapackiam College for Women (Autonomous),
Periyakulam, Theni Dist, Tamil Nadu, India
e-mail: mercyjegan@gmail.com

Abstract

Mergers and acquisition have been one of the measures of consolidation restructuring and strengthening of banks. In banking sector mergers acquisition seeks to enlarge the size of banks to tap economies of scale or prevent bank failure. Profitable growth constitutes one of the prime objectives of most of the business firms. It can be achieved internally either through the process of introducing new products or by expanding the capacity of existing products. There are several theoretical justifications to analyze the M&A activities, like change in management, change in control, substantial acquisition, consolidation of firms, merger of buyout of subsidiaries for size and efficiency, etc. The objective here is to examine the performance of banks after mergers. Mergers add value to the performance of the banks and firms, others show that mergers retard growth, reduce profitability, and affect the credit risk position of the merger banks. The current study is an attempt to analyze the merger of Bank of Baroda from the early 1990's, when the financial sector reforms began, till 2010.

Keywords: Restructuring, Mergers, Acquisition, Profitability, Financial Sector Reforms.

1. Introduction

Profitable growth constitutes one of the prime objectives of most of the business firms. It can be achieved internally either through the process of introducing new products or by expanding the capacity of existing products. Alternatively the growth process can be facilitated externally by acquisition of existing business firms. This acquisition may be in the form of merger

acquisition, amalgamations, takeovers, absorption, consolidation and so on. Mergers and Acquisitions (M&A) have been one of the measures of consolidation, restructuring and strengthening of banks. M&A in the banking sector seeks to enlarge the size of banks to tap economies of scale, or prevent bank failure. A major perspective of the Reserve Bank of India's banking policy is to encourage competition, consolidate and restructure the system for financial stability. Motives of bank mergers and amalgamations vary from change of ownership to enhancing size for efficiency gains.

Viewed from the perspective of markets, mergers can be classified into three categories; horizontal mergers, vertical mergers and conglomerate mergers. A horizontal merger is between two or more companies that compete in the same business and geographical market. A vertical merger is a combination of two or distribution of merger. A conglomerate merger is a combination of firms engaged in unrelated lines of business activity. The type of M&A also dictates the acquisition logic, the framework for the evaluation of targets, the acquisition target profile and the post-acquisition integration. The objectives of the firms that opt for mergers may be attributed to: (i) change in management, (ii) change in control, (iii) substantial acquisition, (iv) consolidation of the firms, (v) merger or buyout of subsidiaries for size and efficiency, etc.

Till 1960, amalgamation of banks took place on voluntary basis under Section 44A of the BRA as there was no other provision for the purpose. Though there was urgent need to strengthen the banking system by eliminating the small and weak banks, the result of voluntary bank amalgamation was very poor and discouraging. In view of this, RBI acquired statutory powers through an amendment in the BRA in 1960 for reconstruction or compulsory amalgamation of banks. Since then, amalgamations were on voluntary basis with RBI approval (Section 44A of BRA) wherever possible, and compulsion whenever necessary (Section 45 of BRA).

RBI's policy is to encourage amalgamation to protect the interest of depositors in particular and strengthen the banking structure in the area in general. RBI also encourages banking integration through the transfer of assets

and liabilities of small and unsound, weak and small units into fewer and strong banking units. 14 big banks were nationalized in 1969 to strengthen public sector undertaking (PSU) dominance. It is assumed that all these processes contribute towards an efficient and optimal banking structure. Thus, the restructuring and consolidation through strategy of M&A is continuous process to improve the working of Indian banking and steer it towards optimal structure in terms of size distribution, ownership and organizational diversity. The present study analyses the performance of banks that went in for mergers during and after the financial sector reforms. The main emphasis is to see whether M&A in bank sector have contributed to overall growth, and economies of scale and efficiency of the bank.

2. Mergers and Acquisition Trends in India

Economic reforms and de regulation of the Indian economy has brought in more domestic as well as international players in Indian industries. This has caused increased competitive pressure leading to structural changes of Indian industries. From 1960 to June 1982, 20 voluntary amalgamation, 49 compulsory mergers, 18 mergers with State Bank of India (SBI) and its associates, and 130 transfers of assets and liabilities were completed. Prior to 1969, the Indian banking system was very weak and dominated by small unviable banks owned by business houses, So, in 1960, RBI was empowered to bring compulsory mergers and integrations. In the post-1960 period, there were large numbers of compulsory mergers (particularly 30 in 1961) and integration (transfer of assets/liabilities; 62 in 1964). The elimination of weak banks helped boost economic efficiency and financial integrity, leading to an improved banking structure.

Table I

Banks Amalgamated since Nationalization of Banks in India 1969 - 1990

S. No.	Date of Merger	Merging Bank	Merged with	Motive of Merger	Type of Merge
1.	08/11/1969	Bank of Bihar	State Bank of India	Restructuring of Weak Bank	Compulsory
2.	20/02/1970	National Bank of Lahore	State Bank of India	Restructuring of Weak Bank	Compulsory

S. No.	Date of Merger	Merging Bank	Merged with	Motive of Merger	Type of Merger
3.	29/07/1985	Miraj State Bank	Union Bank of India	Restructuring of Weak Bank	Compulsory
4.	24/08/1985	Lakshmi Commercial Bank	Canara Bank	Restructuring of Weak Bank	Compulsory
5.	26/08/1985	Bank of Cochin	State Bank of India	Restructuring of Weak Bank	Compulsory
6.	19/12/1986	Hindustan Commercial Bank	Punjab National Bank	Restructuring of Weak Bank	Compulsory
7.	13/05/1988	Traders Bank	Bank of Baroda	Restructuring of Weak Bank	Compulsory
8.	31/10/1989	United industrial Bank	Allahabad Bank	Restructuring of Weak Bank	Compulsory
9.	20/02/1990	Bank of Tamil Nadu	Indian Overseas Bank	Restructuring of Weak Bank	Compulsory
10.	20/02/1990	Bank of Thanjavur	Indian Bank	Restructuring of Weak Bank	Compulsory
11.	20/02/1990	Parur Central Bank	Bank of India	Restructuring of Weak Bank	Compulsory
12.	29/08/1990	Purbanchal Bank	Central Bank of India	Restructuring of Weak Bank	Compulsory

Reveals: Report on Trend and Progress of Banking in India, RBI Various Issues.

Table 1 shows the merging of Bank of Baroda after the bank nationalization in 1969, till the financial sector reforms in the early 1990s. Twelve cases of mergers were found during the period. From the table it can be observed that consolidation of banks was carried out by RBI before the reforms period to amalgamate unviable units. All the merging banks are public sector banks. The main motive is to strengthen the banking sector through compulsory amalgamation in order to weed out unviable banks by liquidation, or by the taking of assets of the non-functioning banks by other banks.

Table 2
Mergers, Amalgamations of Bank of Baroda from 1991 to 2010

S. No.	Date of Merger	Merging Bank	Merged with	Motive of Merger	Type of Merger
1.	03/06/1999	Bareilly Corporation Bank	Bank of Baroda	For economies of Scale & Scope	Voluntary
2.	20/06/2002	Benares State Bank	Bank of Baroda	Restructuring of Weak Bank	Compulsory
3.	25/06/2004	South Gujarat Local Area Bank	Bank of Baroda	Restructuring of Weak Bank	Compulsory

Source: Report on Trend and Progress of Banking in India, RBI Various Issues.

3. Hypotheses

The main objective is to examine whether the performance of banks has increased after mergers. Accordingly, the following hypotheses are formulated for the current study:

H_0 : there is no significant change in the performance of banks after mergers.

H_1 : there are significant changes in the performance of banks after mergers.

4. Methodology

The performance of the banks is analyzed in terms of financial ratios such as profitability ratios, solvency ratios, efficiency and earnings capacity of banks, and growth rate of total assets.

These factors as well as the specific measures used to represent them are defined in the following Table. These indicators are used to identify whether mergers have any improvement or bearing on the performance of the banks.

Table 3
Definitions of performance Ratios used in Analysis of Merged Banks

Ratio	Definition
Profitability indicators	Measure overall performance
(i) Return on assets (ROA)	Ratio of profit after tax to total assets
(ii) Return on equity (ROE)	Ratio of net profit to average shareholder's equity

Ratio	Definition
Solvency indicator (i) Capital Adequacy Ratio (CAR)	Measure the bank's ability to meet its obligations relative to its exposure to risk Ratio of tier I & tier II capital to capital weighted assets
Efficiency indicators (i) Spread	Measure the bank's ability to generate income, pay expenses and measure the productivity of employees Net interest income as a percentage of total assets
(ii) Operating cost/total assets (OC/TA)	Total operating expenses as a percentage of total assets
(iii) Profit per employee	Ratio of net profit to the number of employees
Growth indicator (i) Asset growth rate	Measure the bank's changes in assets Change in book value of total asset as a percentage of book value of total assets in the previous year

5. Analysis

A comparison of the post-merger and pre-merger performance allows measuring of the impact of the mergers. The financial data of the bank was collected for six years, three years before the merger and three years after the merger. The financial data for the year in which the merger occurred is omitted under the study. The financial indicators used are profitability, solvency, and efficiency. The average values of the selected financial parameters for the periods T-3, T-2 and T-1 are compared with its average values at T+1, T+2 and T+3 for each bank. In the next step, a paired Student's t-test is performed to check the statistical significance of the two means of pre-and post-merger periods. Three mergers took place in Bank of Baroda.

The formula of the paired sample t-test is given by:

$$t = \frac{\sum_{i=1}^N (X_0 - X_1)}{\delta\sqrt{N}} \quad \dots (1)$$

Financial Ratios	Period	Mean	Standard Deviation	t-value	Probability	Remark
Merger Case-2: Benares State Bank with Bank of Baroda in 2002						
ROA	Pre-merger	0.70	0.220	-9.330*	0.011	Significant
	Post-merger	1.00	0.229			
ROE	Pre-merger	13.29	4.344	23.099*	0.002	Significant
	Post-merger	17.24	4.103			
CAR	Pre-merger	12.73	0.603	-0.428	0.710	Not significant
	Post-merger	13.06	0.739			
Spread	Pre-merger	2.97	0.110	0.000	1.000	Not significant
	Post-merger	2.97	0.204			
OC/TA	Pre-merger	2.36	0.165	2.135	0.166	Not significant
	Post-merger	2.12	0.035			
Profit per employee	Pre-merger	0.86	0.244	-11.26*	0.008	Significant
	Post-merger	2.02	0.370			
Growth rate of Assets	Pre-merger	10.13	2.936	-0.586	0.663	Not significant
	Post-merger	11.30	0.099			
Merger Case-3: South Gujarat Local Area Bank with Bank of Baroda in 2004						
ROA	Pre-merger	1.02	0.197	2.196	0.159	Not Significant
	Post-merger	0.8	0.085			
ROE	Pre-merger	18.11	2.631	4.730*	0.042	Significant
	Post-merger	13.10	1.282			
CAR	Pre-merger	12.63	1.295	-0.517	0.889	Not significant
	Post-merger	12.80	0.933			
Spread	Pre-merger	2.81	0.191	1.090	0.390	Not significant
	Post-merger	2.49	0.310			
OC/TA	Pre-merger	2.16	0.04	2.785	0.108	Not significant
	Post-merger	1.84	0.240			
Profit per employee	Pre-merger	1.77	0.326	-2.969	0.097	Not Significant
	Post-merger	2.93	0.922			
Growth rate of Assets	Pre-merger	9.57	2.549	-7.436	0.085	Not significant
	Post-merger	25.85	0.547			

*Significant at the 5% level

7. Performance of Bank of Baroda

From Table 4 it is clear that there are three cases of mergers pertaining to Bank of Baroda. Of these three cases, two are compulsory mergers and one voluntary. The sole case of voluntary merger pertaining to the Bank of Baroda is that of Bareilly Corporation Bank Ltd merging with it 1999. The result of the paired t-test for each merger case is depicted in Table 4. The results of the paired sample t-test in the first case indicated that only one performance indicator, namely, spread is found to be significant at the 5% level. All other performance indicators do not produce significant t-values.

The second merger case is that of a compulsory merger pertaining to the Bank of Baroda and Benares State Bank merging with it in 2002. Results of the paired t-test show that only three performance indicators, namely, return on assets (ROA), return on equity (ROE) and profit per employee are statistically significant at the 5% level. No significance is found in the other performance indicators.

The third case of merger with Bank of Baroda occurred in 2004, When South Gujarat Local Area Bank was compulsorily merged with it. The t-test result revealed that none of the performance indicators, except the ROE, was found statistically significant, even though the mean values are somewhat improved in the post-merger period for certain indicators.

In short, in all of the three cases some of the performance indicators are statistically significant, whereas others do not show statistical significance. Ratios like ROA, ROE, Spread and profit per employee are the indicators that show statistical significance, while capital adequacy ratio (CAR), operating cost/total assets (OC/TA), and asset growth show no significance in any of the cases.

8. Reasons for statistically insignificant Ratios

8.1. Profitability Ratios:

From the table of the merged bank, it can be observed that the profitability measures, ROA and ROE, did improve after some of the mergers. However, mean values of these ratios did not improve. The squeeze on profitability has been

from the expenditure side, like the increase in interest costs of deposit, increasing functional diversification of banks, rapid growth in the wages and salary staff, and accelerated promotions, etc.

8.2. Solvency Ratios

The merged bank fulfilled the regulatory CAR requirement of the 9% level. This signified that the merged bank successfully managed to meet the increased requirement under the new regulatory framework. In other words, bank could absorb the unexpected losses easily and manage their reduced cost of funding, which ultimately improved their profitability. However, the average CAR declined in the post-merger period and needed recapitalization with fresh funds in order to cope with the new environment of mergers.

9. Other Ratios

Non-performing assets (NPA) have been the major track in varying importance for bank's performance. Besides, slow adoption of technology across banking functions and branches has delayed the approval of bigger benefits. Business restructuring and manpower restructuring imposed the additional cost.

Table 5: Summary of Descriptive Statistics - Statistically Significant Ratio only

Acquiring Bank	ROA	ROE	CAR	Spread	OC/TA	Profit per Employee	Asset Growth
Compulsory Merger Cases OB (case 2)	Significant	Significant	X	X	X	Significant	X
OB (case 3)	X	Significant	X	X	X	X	X
Voluntary Merger Cases OB (case 1)	X	X	X	Significant	X	X	X

10. Summary and conclusions

Table 5 shows the summary statistics of statistically significant ratio of the merging bank. The first indicator, ROA, is found statistically significant in

one merger with the Bank of Baroda. The second indicator, ROE, was found to be statistically significant in two cases pertaining to Bank of Baroda. Among the CAR, profit per employee and asset growth indicators, statistical significance was recorded for Bank of Baroda. In case of the indicator spread, statistical significance ratios were observed for Bank of Baroda.

Further when results are classified for compulsory merger cases and voluntary merger cases separately, there is no difference as more or less equal numbers of significant ratios are seen for both categories. This indicates that in the Indian banking sector merging banks seem to be of very small size relative to the size of the bank merged with so as to make the impact insignificant, irrespective of the type of merger, compulsory or voluntary. Even when we look at performance of a bank in the control period (normal years without M&A transactions), results of this study remain unchanged. Merger and acquisition activities are regulated under various laws in India, the objective of laws as well as stock exchange requirements are to make merger deals transparent and protect the interest of everyone. The strategy of M&A to consolidate the banks citing efficiency as the reason is doubtful. Future banking policy must take note of this empirical reality and the long drawn experience of the years since the financial reforms.

11. References

- [1] Alhadeff, C P and D A Alhadeff (1955): "Recent Bank Mergers", *The Quarterly Journal of Economics*, Vol. 69, No 4, pp 503-32.
- [2] Lewellen, W (1971): "A Pure Financial Rationale for the Conglomerate Merger", *Journal of Finance*, Vol. 26, No 2, pp 521-37
- [3] Marris, R (1964): *The Economic Theory of Managerial Capitalism*, London: Macmillan.
- [4] Rajan, Raghuram (2014): "First Bi-monthly Monetary Policy Statement, 2014-2015, "Press release, 1 April, Reserve Bank of India, http://rbi.org.in/scripts/BS_Press_Release_Display.aspx?prid=30911.

M.Y.Khan, Financial Services, Tata McGraw-Well Publishing Company,
4th edition 2008.

Nalini Praya Tripathy, Financial Services, Prentice Hall of India, New
Delhi, 2002.