Pre and Post Merger Financial Performance of Merged Banks In India- A Select Study

** Dr. K. Srinivas*

INTRODUCTION

The 1990s saw partial liberalization of the banking industry and the emergence of new private sector banks as well as international banks. During the next few years, fears of liberalization were put to rest and in the past decade, the banking system has gained much from it. Liberalization brought out the best in the industry; inducing competitive spirit among various banks. Also, during this period, the banks put in place effective risk management mechanisms and added fresh capital, which is very important to the banking industry. By concentrating on the top-line and bottom-line, banks across the board have improved their profit while reducing their operational costs and more number of banks have improved their financial performance by using the concept of mergers and acquisitions.

With the development of the banking sector, it is interesting to know how the selected merged banks have performed. The present study carried out a closer analysis of six merged banks based on their annual results before and after the merger. For the purpose of analysis of financial performance of the merged banks, the world-renowned CAMEL model is applied.

METHODOLOGY

To assess the financial performance of merged banks, the study adopted the world-renowned CAMEL model (with minor modifications). Apart from analyzing the merged banks on each of the ratios based on the CAMEL model, the study also considered the test of hypotheses by selecting the student t- statistic for measuring the financial performance.

SAMPLING

A sample of six banks viz., BOB, PNB, OBC, HDFC, ICICI and CBOP were considered for the purpose of analysis.

DATA

The relevant data has been collected from the PROWESS, a corporate database developed by the Center for Monitoring Indian Economy (CMIE), annual reports of respective sample banks, journals, magazines, news bulletins, websites and reports.

CAMEL MODEL

The modified CAMEL model is aimed to analyze the growth of Spread Ratios, Burden Ratios, Profitability Ratios, Liquidity Ratios, Solvency Ratios and Asset Quality Ratios of merged banks before and after the merger.

OBJECTIVES

The basic objective of this paper is to examine the success of M&As' strategy in banking sector by analyzing financial performance of selected merged banks in relation to the changes in pre and post merger period. These financial ratios cover the profitability, liquidity, solvency and asset quality. It deals further as to how the M&As have helped the selected banks to achieve such financial performance.

HYPOTHESES

From the above objectives, the following hypothesis is formulated to test the financial efficiency of the merged banks:

Ho = "There is no significant difference between pre and post merger financial performance of select merged banks".

ANALYSIS OF FINANCIAL PERFORMANCE OF MERGED BANKS

Financial performance of the selected merged banks is analyzed and interpreted based on the select indicators.

ANALYSIS OF FINANCIAL PERFORMANCE OF BOB

Bank of Baroda and Banares State Bank Ltd. were merged in the year 2002. The financial performance of these

Principal, KGR Institute of Technology and Management, Rampally, Keesara, Ranga Reddy -501301, Andhra Pradesh
Email: kamatam_srinivas@yahoo.com.

banks has been examined by taking data pertaining to five years before the merger and six years after the merger. The financial performance of the bank is presented below:

SPREAD

The banks should keep their interest low on deposits and high on advances for a greater spread. The spread would determine the earning capacity of the bank. As per Table-1, pre and post average spread to working fund ratio of BOB and Benares State Bank Ltd are -0.02% and 3.18% respectively. The relation between interest income to working fund of a bank during pre and post merger average are 7.37% and 8.03% (Table-1) respectively and the average ratio of interest expenses and working fund during pre and post merger are 7.41% and 4.85% (Table-1) respectively. There is an increase in interest income to working fund and decrease in interest expenses to working fund results to increase the spread of the bank. This is also proved by the t-test at 5% level of significance that the spread of the bank is increased after the merger.

BURDEN

It is the difference between non-interest expenses and non-interest income of bank. Profit of the bank is the difference between spread and burden. If the burden is more, it adversely affects profit and vice-versa. Pre and post merger average burden of BOB and BSL ratio is that -0.126 per cent and -1.025 per cent (Table-1) respectively. The pre and post merger relationship between non-interest expenses and working fund is 4.05 per cent and 3.6 per cent (Table-1) and non-interest income to working fund is recorded at 4.2 per cent and 4.6 per cent (Table-1) respectively. The burden of the bank is decreased as per the above figures but the same is not proved by the t-test. So we can conclude that the average decrease in burden of the bank has not helped to satisfy the test.

PROFITABILITY

This ratio measures the operational efficiency of the bank. Employing more resources and making effective utilization of resources can increase the absolute profits. The pre and post merger mean relationship between profits after tax by total income is recorded at 7.33 per cent and 10.24 per cent (Table-1) respectively. The relationship between profits after tax by total assets is indicated at 0.76 and 0.86 per cent (Table-1) for pre and post merger periods. The return on net worth of the bank at pre merger is 14.61% and post merger is 15.06% (Table-1). The EPS of the bank is increased from Rs. 7.59 to Rs.25.86 (Table-1) from the pre to post merger. The overall profitability of the bank has increased after the merger and the same is proved by t-test in case of profit after tax by total income and earning per share.

LIQUIDITY

It refers to the maintenance of cash, bank balance and those assets which are easily converted into cash in order to meet the liabilities as and when arising. The pre and post merger relationship between quick assets and total deposits is recorded at 0.16 and 0.10 times (Table-1) respectively. The relation between quick assets and total deposits is 0.14 and 0.09 times (Table-1) before and after merger of the bank respectively. The quick ratio of the bank is 4.03 and 2.29 times (Table-1) at pre and post merger period. The current ratio of the bank stood at 5.08 and 3.13 times (Table-1) at pre and post merger period. With the help of these figures, we can say that the liquidity of the bank is decreased during the post merger period and the t-test also has proved this in the case of quick and current ratios. As a matter of bank's policy, the liquidity is reduced so that it is not having any impact on the efficiency of the bank.

SOLVENCY

Solvency refers to the ability of a bank to meet its long-term obligations. The pre and post merger relationship between capital adequacy, tier-I, tier-II, debt equity and interest coverage ratios are recorded at 8.26%, 3.29%, 1.08%, 0.43 times, 1.06 times and 12.66%, 8.68%, 3.98%, 0.57 times, 1.26 times (Table-1) respectively. The overall long-term repaying capacity of the bank is improved after the merger and the same is proved by the t-test at 5 per cent level of significance in the case of interest coverage ratio.

ASSET QUALITY

The objective of measuring the asset quality is to ascertain the component of net non-performing assets as a percentage of the net advances. The pre and post merger net non-performing assets to net advances are recorded at 14.18 and 2.34 per cent (Table-1) respectively and the same is proved by the t-statistics. Hence, we conclude that the non-performing assets of the bank are reduced tremendously and it has a right plan to reduce the non-performing assets.

The overall financial performance of the bank is strong after the merger and this is also supported by the t-test (Table-2). The set of five hypotheses are proved by the Bank of Baroda and finally, we can say that the profitability, asset quality, manageability, liquidity and solvency of the bank have improved after the merger.

TABLE-1: GROUP STATISTICS OF BOB

Financial Ratios	Level	N	Mean	Std. Dev.	S. E. Mean
Spread Ratios (%)					
II / W F	Post	6	8.03	0.96	0.39
	Pre	5	7.37	1.44	0.64
IE /W F	Post	6	4.85	1.06	0.43
	Pre	5	7.41	0.65	0.29
SPREAD / W F	Post	6	3.18	0.25	0.10
	Pre	5	-0.02	1.29	0.58
Burden Ratios (%)					
N I E / W F	Post	6	3.57	0.44	0.18
	Pre	5	4.05	0.41	0.18
N I I / W F	Post	6	4.59	7.64	3.12
	Pre	5	4.18	0.92	0.41
BURDEN / W F	Post	6	-1.02	7.73	3.16
	Pre	5	-0.13	1.31	0.58
Profitability Ratios (%)					
PAT / TOTAL INCOME	Post	6	10.24	1.66	0.68
	Pre	5	7.33	1.94	0.87
PAT/ TA	Post	6	0.86	0.18	0.08
	Pre	5	0.76	0.19	0.09
RON	Post	6	15.06	3.92	1.60
	Pre	5	14.61	2.88	1.29
EPS	Post	6	25.86	6.38	2.60
	Pre	5	7.59	4.16	1.86
Liquidity Ratios (Times)					
QA / DEPOSITS	Post	6	0.10	0.05	0.02
	Pre	5	0.16	0.14	0.06
QA/TA	Post	6	0.09	0.05	0.02
	Pre	5	0.14	0.13	0.06
LR	Post	6	2.29	0.64	0.56
	Pre	5	4.03	0.88	0.39
CR	Post	6	3.13	0.70	0.29
	Pre	5	5.07	1.06	0.47
Solvency Ratios					
CAR (%)	Post	6	12.66	1.01	0.41
	Pre	5	8.26	2.93	1.31
TIER – I (%)	Post	6	8.68	1.20	0.49
	Pre	5	3.29	1.21	0.61
TIER – II (%)	Post	6	3.98	1.02	0.42
	Pre	5	1.08	0.96	0.48
DEBT / EQUITY RATIO (Times)	Post	6	0.57	0.17	0.07
	Pre	5	0.43	0.23	0.10
INTEREST COVERAGE (Times)	Post	6	1.26	0.07	0.03
	Pre	5	1.06	0.06	0.03
Asset Quality Ratio (%)					
NNPA / N A	Post	6	2.34	1.72	0.70
	Pre	5	14.18	3.64	1.63

Source: Compiled from annual reports of banks and CMIE.

TABLE-2: INDEPENDENT SAMPLES TEST OF BOB (t- TEST FOR EQUALITY OF MEANS)

Financial Ratios	Assumed	t	df	Sig. (2-tailed)
Spread Ratios (%)				
II/WF	Equal Variances	0.912	9	0.385
IE/WF	Equal Variances	-4.679	9	0.001
SPREAD / W F	Equal Variances	6.006	9	0.000
Burden Ratios (%)				
NIE/WF	Equal Variances	-1.882	9	0.092
NII/WF	Equal Variances	0.119	9	0.908
BURDEN / W F	Equal Variances	-0.255	9	0.805
Profitability Ratios (%)				
PAT / TOTAL INCOME	Equal Variances	2.680	9	0.025
PAT / TA	Equal Variances	0.914	9	0.384
RON	Equal Variances	0.213	9	0.836
EPS	Equal Variances	5.479	9	0.000
Liquidity Ratios (Times)				
QA / DEPOSITS	Equal Variances	0.890	9	0.396
QA/TA	Equal Variances	-0.999	9	0.344
LR	Equal Variances	-3.808	9	0.004
CR	Equal Variances	-3.663	9	0.005
Solvency Ratios				
CAR (%)	Equal Variances	-1.464	9	0.177
TIER – I (%)	Equal Variances	1.980	9	0.083
TIER – II (%)	Equal Variances	2.006	9	0.080
DEBT / EQUITY RATIO (Times)	Equal Variances	-1.079	9	0.309
INTEREST COVERAGE (Times)	Equal Variances	-3.634	9	0.005
Asset Quality Ratio				
NNPA / N A (%)	Equal Variances	-8.559	9	0.000

Source: Source: Compiled from annual reports of banks and CMIE.

ANALYSIS OF FINANCIAL PERFORMANCE OF PNB

Punjab National Bank and Nediungadi Bank Ltd. were merged in the year 2003. The financial performance of the bank has been examined by analyzing data relevant to the select indicators for five years before the merger and five years after the merger. The financial synergy of the bank is presented as follows:

SPREAD

Punjab National Bank spread has increased from Pre to post merger average spread to working fund ratio is 0.6 and 3.84 per cent (Table-3) respectively. The relationship between interest income to working fund of a bank pre and post merger average are 8.49 and 8.26 per cent (Table-3) respectively and the average ratio of interest expenses and working fund for pre and post merger are 7.85 and 4.42 per cent (Table-3) respectively. There is less decrease in interest income to working fund over the interest expenses to working fund. When you compare the interest income to interest expenses, the spread of the bank was increased- that it is a positive sign for the management efficiency of the bank. This is also proved by the t-test at 5% level of significance.

BURDEN

Bank's pre and post merger average burden ratio increased from 0.30 percent to 2.63 per cent (Table-3) respectively. The pre and post merger relationship between non-interest expenses and working fund is 4.47 per cent and 4.30 per cent (Table-3) and non-interest income to working fund is recorded at 4.17 per cent and 1.67 per cent (Table-3) respectively. The burden of the bank increased as per the above figures and the same is proved by the t-test. Hence, it can be concluded that the average increase in burden of the bank was due to decrease in non-interest income of the bank.

PROFITABILITY

The bank's pre and post merger mean relationship between profits after tax to total income changed from 8.78

per cent to 11.34 per cent (Table-3) respectively. It is a good sign for the improvement of profitability after the merger. The relationship between profits after tax by total assets is showed at 0.97 and 1.02 per cent (Table-3) at pre and post merger period. The return on net worth of the bank at pre and post merger is 29.16 and 19.07 per cent (Table-3). The EPS of the bank increased from Rs. 7.85 to Rs.42.53 (Table-3) from the pre to post merger. The overall profitability of the bank increased after the merger.

LIQUIDITY

The pre and post merger relationship between quick assets and total deposits is recorded at 0.06 and 0.11 times (Table-3) respectively. The relation between quick assets and total deposits is 0.11 and 0.06 times (Table-3) before and after merger of the bank. The quick ratio of the bank is 3.63 and 2.00 times at pre and post merger period. The current ratio of bank is recorded at 4.31 and 2.5 times (Table-3) at pre and post merger period.

SOLVENCY

Solvency refers to the ability of a bank to meet its long-term obligations. The pre and post merger relationship between capital adequacy, tier-I, tier-II, debt equity and interest coverage ratios are recorded at 7.90%, 5.23%, 3.04%, 0.59 times, 1.08 times and 12.83%, 8.40%, 4.43%, 0.72 times, 1.40 times, 1.26 times (Table-3) respectively. The overall long-term repaying capacity of the bank has improved after the merger and the same is proved by the t-test at 5 per cent level of significance.

ASSET QUALITY

The pre and post merger net non-performing assets to net advances are recorded at 11.00 and 1.23 per cent (Table-3) respectively. It is also proved by the t-statistic.

The overall financial performance of the bank is satisfactory as indicated by increased spread, obligations discharging asset quality, profitability and efficiency of the management.

TABLE-3: GROUP STATISTICS OF PNB

Financial Ratios	Level	N	Mean	Std. Dev.	S. E. Mean
Spread Ratios (%)					
II/WF	Post	5	8.26	0.83	0.37
	Pre	5	8.49	0.47	0.21
IE/WF	Post	5	4.42	0.70	0.32
	Pre	5	7.85	0.31	0.14
SPREAD / W F	Post	5	3.84	0.15	0.07
	Pre	5	0.60	0.49	0.22
Burden Ratios (%)					
NIE/WF	Post	5	4.30	0.48	0.22
	Pre	5	4.46	0.63	0.28
NII/WF	Post	5	1.67	0.43	0.19
	Pre	5	4.17	0.70	0.31
BURDEN / W F	Post	5	2.63	0.28	0.12
	Pre	5	0.30	0.84	0.38
Profitability Ratios (%)					
PAT / TOTAL INCOME	Post	5	11.84	3.01	1.34
	Pre	5	8.78	1.65	0.74
PAT/TA	Post	5	1.02	0.23	0.10
	Pre	5	0.97	0.21	0.09
RON	Post	5	19.07	5.84	2.61
	Pre	5	29.16	5.63	2.51
EPS	Post	5	42.53	6.55	2.93
	Pre	5	7.85	12.32	5.51
Liquidity Ratios (Times)					
QA / DEPOSITS	Post	5	0.11	0.04	0.02
	Pre	5	0.06	0.83	0.37
QA/TA	Post	5	0.11	0.04	0.16

	Pre	5	0.06	0.08	0.37
LR	Post	5	2.00	0.86	0.39
	Pre	5	3.63	0.95	1.43
CR	Post	5	2.50	0.94	0.42
	Pre	5	4.31	1.08	0.48
Solvency Ratios					
CAR (%)	Post	5	12.83	1.18	0.53
	Pre	5	7.90	3.35	1.50
TIER – I (%)	Post	5	8.40	1.31	0.58
	Pre	5	5.23	2.77	1.24
TIER – II (%)	Post	5	4.43	1.79	0.80
	Pre	5	3.04	1.08	0.48
DEBT / EQUITY RATIO (Times)	Post	5	0.72	0.15	0.07
	Pre	5	0.59	0.22	0.10
INTEREST COVERAGE (Times)	Post	5	1.40	0.08	0.04
	Pre	5	1.08	0.11	0.51
Asset Quality Ratio (%)					
NNPA / N A	Post	5	1.22	1.51	0.68
	Pre	5	11.00	5.58	2.50

Source: Compiled from annual reports of banks and CMIE.

TABLE-4: INDEPENDENT SAMPLES TEST OF PNB (t- TEST FOR EQUALITY OF MEANS)

Financial Ratios	Assumed	t	df	Sig. (2-tailed)
Spread Ratios (%)				
I I / W F	Equal Variances	-0.530	8	0.611
I E /W F	Equal Variances	-9.947	8	0.000
SPREAD / W F	Equal Variances	13.865	8	0.000
Burden Ratios (%)				
N I E / W F	Equal Variances	-0.465	8	0.654
N I I / W F	Equal Variances	-6.780	8	0.000
BURDEN / W F	Equal Variances	5.879	8	0.000
Profitability Ratios (%)				
PAT / TOTAL INCOME	Equal Variances	1.996	8	0.081
PAT / TA	Equal Variances	0.309	8	0.765
RON	Equal Variances	-2.779	8	0.024
EPS	Equal Variances	5.559	8	0.001
Liquidity Ratios (Times)				
QA / DEPOSITS	Equal Variances	1.203	8	0.264
QA/TA	Equal Variances	1.203	8	0.263
LR	Equal Variances	-2.356	8	0.46
CR	Equal Variances	-2.840	8	0.22
Solvency Ratios				
CAR (%)	Equal Variances	3.095	8	0.15
TIER – I (%)	Equal Variances	2.315	8	0.049
TIER – II (%)	Equal Variances	1.489	8	0.175
DEBT / EQUITY RATIO (Times)	Equal Variances	1.051	8	0.324
INTEREST COVERAGE (Times)	Equal Variances	4.956	8	0.001
Asset Quality Ratio (%)				
NNPA / N A (%)	Equal Variances	-3.780	8	0.005

Source: Compiled from annual reports of banks and CMIE.

ANALYSIS OF FINANCIAL PERFORMANCE OF OBC

Oriental Bank of Commerce and Global Trust Bank Ltd. were merged in the year 2004. The financial performance of the bank has been analyzed based on the data collected for five years before and four years after the merger. The financial performance of the bank is analyzed based on select indicators.

SPREAD

Pre and post merger mean spread to working fund ratios are 0.63 percent and 3.19 per cent (Table-5) respectively. The relation between interest income to working fund of a bank before and after merger are 7.97 per cent and 8.02 per cent (Table-5) respectively and the average ratio of interest expenses and working fund pre and post merger are 7.34 per cent and 4.83 per cent (Table-5) respectively. There is an increase in interest income to working fund and decrease in interest expenses to working fund. This results in an increase in the spread of the bank and it leads to the increment in the profitability. It is proved by the t-test at 5% level of significance that the spread of the bank is increased after the merger (Table-6).

BURDEN

If burden is more, it adversely affects profit and vice-versa. The pre and post merger average burden ratio is that 0.17 per cent and 2.14 per cent (Table-5) respectively. The pre and post merger relationship between non - interest expenses and working fund is 3.83 per cent and 3.39 per cent (Table-5) and non-interest income to working fund is recorded at 3.65 per cent and 1.24 per cent (Table-5) respectively. The burden of the bank is increased as per the above figures but the same is not proved by the t-test. Hence, it is concluded that the average increase in burden of the bank is because of decrease in non-interest income. Perhaps on account of this, the policy of the bank and how it concentrates on the core business operations has changed after the merger.

PROFITABILITY

The pre and post merger mean relationship between profits after tax by total income is recorded at 9.52 per cent and 18.58 per cent (Table-5) respectively. The relationship between profits after tax by total assets stood at 1.05 and 1.52 per cent (Table-5) at the pre and post merger period. The return on net worth of the bank for pre-merger period is 18.57 and the post-merger period is 22.60 per cent (Table-5). The EPS of the bank increased from Rs. 7.44 to Rs.35.99 (Table-5) for the pre to post merger period respectively. The overall profitability of the bank increased after the merger and the same is proved by t-test (Table-6).

LIQUIDITY

The pre and post merger relationship between quick assets and total deposits is recorded at 0.05 and 1.22 times (Table-5) respectively. The relation between quick assets and total deposits is 0.64 and 0.11 times before and after the merger of the bank. The quick ratio of the bank is 3.50 and 3.03 times for pre and post merger period respectively. The current ratio of bank is recorded at 4.55 and 3.78 times (Table-5) for pre and post merger period.

SOLVENCY

The pre and post merger relationship between capital adequacy, tier-I, tier-II, debt equity and interest coverage ratios stood at 10.33%, 5.54%, 0.67%, 12.96 times, 1.06 times and 11.81%, 8.93%, 2.88%, 0.39 times, 1.38 times (Table-5) respectively. The overall long-term repaying capacity of the bank has improved after the merger and the same is proved by t-test at 5 per cent level of significance (Table-6).

ASSET QUALITY

The pre and post merger net non-performing assets to net advances are recorded at 2.32 and 0.57 per cent (table-5) respectively and the same is proved by the t-statistics. Hence, it may be concluded that the non-performing assets of the bank are reduced tremendously and the asset quality is improved.

The bank has improved its liquidity, solvency, profitability, asset quality and managerial ability. We can say that the bank is experiencing the all-round development after the merger. We can also say that the first five hypotheses are proved by the bank.

TABLE-5: GROUP STATISTICS OF OBC

Financial Ratios	Level	N	Mean	Std. Dev.	S. E. Mean
Spread Ratios (%)					
II/WF	Post	4	8.02	0.70	0.35
	Pre	5	7.97	1.22	0.54
IE/WF	Post	4	4.83	0.47	0.24
	Pre	5	7.34	1.84	0.82
SPREAD / W F	Post	4	3.19	0.58	0.29
	Pre	5	0.63	0.70	0.31
Burden Ratios (%)					
NIE/WF	Post	4	3.38	0.51	0.26
	Pre	5	3.83	1.29	0.58
NII/WF	Post	4	1.24	0.51	0.25
	Pre	5	3.65	1.30	0.58
BURDEN / W F	Post	4	2.14	0.19	0.09
	Pre	5	0.17	1.37	0.61
Profitability Ratios (%)					
PAT / TOTAL INCOME	Post	4	18.58	3.67	1.83
	Pre	5	9.52	1.87	0.84
PAT/TA	Post	4	1.52	0.27	0.13
	Pre	5	1.05	0.20	0.89
RON	Post	5	22.60	5.84	2.92
	Pre	4	18.57	2.82	1.26
EPS	Post	5	35.99	5.08	2.54
	Pre	4	7.44	4.19	1.88
Liquidity Ratios (Times)					
QA / DEPOSITS	Post	5	1.21	0.02	0.01
	Pre	4	0.05	0.07	0.03
QA/TA	Post	5	0.11	0.23	0.01
	Pre	4	0.64	0.06	0.03
LR	Post	5	3.03	0.94	0.47
	Pre	4	3.50	0.39	0.17
CR	Post	5	3.78	1.28	0.64
	Pre	4	4.55	0.54	0.24
Solvency Ratios					
CAR (%)	Post	5	11.81	2.23	1.11
	Pre	4	10.33	2.69	1.20
TIER – I (%)	Post	5	8.93	2.35	1.17
	Pre	4	5.54	0.61	0.31
TIER – II (%)	Post	5	2.88	1.72	0.86
	Pre	4	0.67	0.73	0.37
DEBT / EQUITY RATIO (Times)	Post	5	0.39	0.04	0.02
	Pre	4	12.96	27.36	12.24
INTEREST COVERAGE (Times)	Post	5	1.38	0.30	0.15
	Pre	4	1.06	0.18	0.08
Asset Quality Ratio (%)					
NNPA/NA	Post	5	0.57	0.53	0.27
	Pre	4	2.33	1.48	0.66

Source: Compiled from Table-7.

TABLE-6: INDEPENDENT SAMPLES TEST OF OBC (t- TEST FOR EQUALITY OF MEANS)

Financial Ratios	Assumed	t	df	Sig. (2-tailed)
Spread Ratios (%)				
II/WF	Equal Variances	0.067	7	0.949
IE/WF	Equal Variances	-2.627	7	0.034
SPREAD / W F	Equal Variances	5.863	7	0.001
Burden Ratios (%)				
NIE/WF	Equal Variances	-0.636	7	0.545
NII/WF	Equal Variances	-3.456	7	0.11
BURDEN / W F	Equal Variances	2.812	7	0.26
Profitability Ratios (%)				
PAT / TOTAL INCOME	Equal Variances	4.846	7	0.002
PAT / TA	Equal Variances	3.021	7	0.019
RON	Equal Variances	1.369	7	0.213
EPS	Equal Variances	9.262	7	0.000
Liquidity Ratios (Times)				
QA / DEPOSITS	Equal Variances	2.023	7	0.083
QA / TA	Equal Variances	1.972	7	0.089
LR	Equal Variances	-1.402	7	0.332
CR	Equal Variances	-1.216	7	0.263
Solvency Ratios				
CAR (%)	Equal Variances	0.879	7	0.409
TIER – I (%)	Equal Variances	2.791	7	0.032
TIER – II (%)	Equal Variances	2.366	7	0.056
DEBT / EQUITY RATIO (Times)	Equal Variances	-0.906	7	0.395
INTEREST COVERAGE (Times)	Equal Variances	2.008	7	0.085
Asset Quality Ratio (%)				
NNPA / N A (%)	Equal Variances	-2.229	7	0.061

Source: Compiled from Table-7 and 8.

ANALYSIS OF FINANCIAL PERFORMANCE OF HDFC BANK

HDFC Bank and Times Bank Ltd. merged in the year 2000. The financial performance of this bank has been analyzed by taking data for five years before the merger and eight years after the merger. The results of analysis of the bank are presented below:

SPREAD

The pre and post average spread to working fund ratio are 2.11% and 3.67% (Table-7) respectively. The relation between interest income to working fund of a bank pre and post merger average are 8.83% and 7.93% (Table-7) respectively and the average ratio of interest expenses and working fund pre and post merger are 6.71% and 4.26% (Table-7) respectively. There is a decrease in interest income to working fund and interest expenses to working fund. But the change is not significant in t- test at 5% level of significance. Therefore, the bank spread has increased by 73.93% from pre to post merger.

BURDEN

As per Table-7, the pre and post merger average burden ratio is 0.24 per cent and 2.49 per cent respectively. The pre and post merger relationship between non-interest expenses and working fund is 3.87 per cent and 4.41 per cent (Table-7) and non-interest income to working fund is recorded at 3.64 per cent and 1.92 per cent (Table-7) respectively. The burden of the bank has increased as per the above figures and the same is proved by the t- test. Therefore, we can conclude that the average increase in burden of the bank is significant. This ratio affects the profitability of the bank. Impact of this ratio on profitability is present but it has reduced from higher profitability to a lower level of profitability.

PROFITABILITY

The pre and post merger profitability means that the relationship between profits after tax by total income stood at 14.75 per cent and 15.94 per cent (Table-7) respectively. The relationship between profits after tax by total assets stood at 1.50 and 1.28 per cent (Table-7) at pre and post merger period. The return on net worth of the bank at pre merger was 15.93 and post merger, it was 18.02 per cent. The EPS of the bank has increased from Rs.2.14 to Rs.17.60 (Table-7) from the pre to post merger period. The overall profitability of the bank has increased after the merger and the same is proved by the t-test also.

LIQUIDITY

The pre and post merger relationship between quick assets and total deposits is recorded at 0.43 and 0.11 times (Table-7) respectively. The relation between quick assets and total deposits is 0.22 and 0.08 times (Table-7) before and after merger of the bank. The quick ratio of the bank is 4.84 and 0.89 times (Table-7) at pre and post merger period. The current ratios of the bank are 5.63 and 1.11 times (Table-7) for pre and post merger periods respectively. With these figures, we can conclude that the liquidity of the bank has decreased after the post merger period and the t-test has also proved the same in the case of all the liquidity ratios.

SOLVENCY

The pre and post merger relationship between capital adequacy, tier-I, tier-II, debt equity and interest coverage ratios are 18.35%, 2.33%, 3.20%, 0.58 times, 1.38 times and 12.08%, 9.16%, 2.92%, 1.22 times, 1.55 times (Table-7) respectively. The overall long-term repaying capacity of the bank has improved after the merger and the same is proved by the t-test at 5 percent level of significance.

ASSET QUALITY

The pre and post merger net non-performing assets to net advances are recorded at 0.81 and 0.46 per cent (Table-7) respectively. Hence, we can say that the non-performing assets of the bank have decreased. The efficiency of management has increased for the post merger period.

The overall financial performance of the bank is quite satisfactory after the post merger and this is also supported by the t-test (Table-8). The burden ratio has increased as compared to the spread ratio but spread in absolute terms is more than the burden. Hence, profitability of the bank has increased.

TABLE- 7: GROUP STATISTICS OF HDFC BANK

Financial Ratios	Level	N	Mean	Std. Dev.	S. E. Mean
Spread Ratios (%)					
II / WF	Post	8	7.93	0.99	0.35
	Pre	4	8.83	1.59	0.80
IE /WF	Post	8	4.26	1.02	0.36
	Pre	4	6.71	0.27	0.13
SPREAD / W F	Post	8	3.67	0.68	0.24
	Pre	4	2.11	1.66	0.83
Burden Ratios (%)					
NIE / WF	Post	8	4.41	1.09	0.39
	Pre	4	3.87	0.57	0.29
NII / WF	Post	8	1.92	0.24	0.08
	Pre	4	3.64	1.25	0.63
BURDEN / W F	Post	8	2.49	1.01	0.36
	Pre	4	0.24	1.48	0.74
Profitability Ratios (%)					
PAT / TOTAL INCOME	Post	8	15.94	1.43	0.51
	Pre	4	14.75	0.72	0.36
PAT/ TA	Post	8	1.28	0.13	0.05
	Pre	4	1.50	0.11	0.06
RON	Post	8	18.02	2.79	0.99
	Pre	4	15.93	6.29	3.14

EPS	Post	8	17.60	10.38	3.67
	Pre	4	2.14	1.15	0.57
Liquidity Ratios (Times)					
QA / DEPOSITS	Post	8	0.11	0.76	0.03
	Pre	4	0.43	0.39	0.19
QA/TA	Post	8	0.08	0.55	0.19
	Pre	4	0.22	0.15	0.67
LR	Post	8	0.89	0.37	0.13
	Pre	4	4.83	2.01	1.00
CR	Post	8	1.11	0.40	0.14
	Pre	4	5.62	1.88	0.94
Solvency Ratios					
CAR (%)	Post	8	12.08	0.99	0.35
	Pre	4	18.35	5.64	2.82
TIER – I (%)	Post	8	9.16	0.88	0.31
	Pre	4	2.33	2.71	1.35
TIER – II (%)	Post	8	2.92	0.86	0.30
	Pre	4	3.20	3.72	1.86
DEBT / EQUITY RATIO (Times)	Post	8	1.21	0.40	0.14
	Pre	4	0.57	0.26	0.13
INTEREST COVERAGE (Times)	Post	8	1.54	0.12	0.04
	Pre	4	1.38	0.05	0.27
Asset Quality Ratio (%)					
NNPA / N A	Post	8	0.46	0.28	0.10
	Pre	4	0.81	0.82	0.41

Source: Compiled from annual reports of banks and CMIE.

TABLE-8: INDEPENDENT SAMPLES TEST OF HDFC BANK (t- TEST FOR EQUALITY OF MEANS)

Financial Ratios	Assumed	t	df	Sig. (2-tailed)
Spread Ratios (%)				
I I / W F	Equal Variances	-1.216	10	0.252
I E /W F	Equal Variances	-4.630	10	0.001
SPREAD / W F	Equal Variances	2.365	10	0.40
Burden Ratios (%)				
N I E / W F	Equal Variances	0.900	10	0.389
N I I / W F	Equal Variances	-3.919	10	0.003
BURDEN / W F	Equal Variances	3.135	10	0.011
Profitability Ratios (%)				
PAT / TOTAL INCOME	Equal Variances	1.541	10	0.154
PAT / TA	Equal Variances	-2.964	10	0.014
RON	Equal Variances	0.823	10	0.43
EPS	Equal Variances	2.899	10	0.016
Liquidity Ratios (Times)				
QA / DEPOSITS	Equal Variances	-2.324	10	0.043
QA/TA	Equal Variances	-2.499	10	0.032
LR	Equal Variances	-5.634	10	0.000
CR	Equal Variances	-6.824	10	0.000
Solvency Ratios				
CAR (%)	Equal Variances	-3.199	10	0.010
TIER – I (%)	Equal Variances	6.742	10	0.000
TIER – II (%)	Equal Variances	-0.214	10	0.835
DEBT / EQUITY RATIO (Times)	Equal Variances	2.869	10	0.017
INTEREST COVERAGE (Times)	Equal Variances	2.537	10	0.030
Asset Quality Ratio (%)				
NNPA / N A (%)	Equal Variances	-1.119	10	0.289

Source: Compiled from annual reports of banks and CMIE.

ANALYSIS OF FINANCIAL PERFORMANCE OF ICICI BANK

ICICI Bank and Bank of Madura Ltd. merged in the year 2001. The financial performance of this bank has been analyzed by taking data for five years before the merger and seven years after the merger and the results are presented as hereunder:

SPREAD

Pre and post average spread to working fund ratio are 0.55% and 1.95% (Table-9) respectively. The relation between interest income to working fund of a bank's pre and post merger period average is represented by 7.87% and 7.34% (Table-9) respectively. The average ratio of interest expenses and working fund for the pre and post merger are 7.33% and 5.39% (Table-9) respectively. There is decrease in interest income to working fund and interest expenses to working fund. The spread ratio of the bank has increased (Table 9) but the same is not proved by the t-test. Hence, we can conclude that the average increase in spread of the bank is not significant.

BURDEN

Pre and post merger average burden ratio is that -0.73 per cent and 1.16 per cent (Table-9) respectively. The pre and post merger relationship between the non-interest expenses and working fund is 4.15 per cent and 3.27 per cent (Table-9) and non-interest income to working fund stood at 4.88 per cent and 2.11 per cent (Table-9) respectively. The burden of the bank has increased in terms of absolute figures but the same is not proved by the t-test.

PROFITABILITY

The mean relationship between profit after tax to total income for pre and post merger is recorded at 9.36 per cent and 13.67 per cent (Table-9) respectively. The relationship between profits after tax by total assets stands at 1.01 and 1.02 per cent (Table-9) at pre and post merger period. The return on net worth of the bank for pre merger is 14.94 and for the post merger period it is 14.13 per cent (Table-9). The EPS of the bank has increased from Rs.1.82 to Rs.20.26 (Table-9) from the pre to post merger. The overall profitability of the bank has increased after the merger and the same is proved by t-test. We can conclude that the profitability ratios of the bank are increased except for return on net worth. The growth in EPS is 1013.2 percent and this has happened because of debt equity mix.

LIQUIDITY

The pre and post merger relationship between quick assets and total deposits is recorded at 0.26 and 0.10 times (Table-9) respectively. The relationship between quick assets and total assets is 0.20 and 0.05 times (Table-9) before and after the merger of the bank. The quick ratio of the bank is 1.83 and 1.29 times (Table-9) at pre and post merger period. The current ratio of bank stood at 2.07 and 1.86 times (Table-9) at pre and post merger period. On an examination of these, it is concluded that the liquidity of the bank is decreased after the post merger period and the same result is also proved by t-test in the case of quick assets to total deposits and total assets ratios. The decrease in liquidity ratio is part and parcel of the management policy.

SOLVENCY

The pre and post merger relationship between capital adequacy, tier-I, tier-II, debt equity and interest coverage ratios are recorded at 11.30%, 3.82%, 0.61%, 1.22 times, 1.23 times and 11.61%, 8.32%, 3.72%, 4.15 times, 1.22 times (Table-9) respectively. The overall long-term repaying capacity of the bank has improved after the merger and the same is proved by the t-test at 5 per cent level of significance (Table-10).

ASSET QUALITY

The pre and post merger net non-performing assets to net advances are recorded at 2.96 and 2.64 per cent (Table-9) respectively and the same is also proved by the t-statistics. Hence, it is concluded that the non-performing assets of the bank are reduced.

The overall financial performance of the bank is found to be satisfactory after the merger and this is also supported by the t-test (Table-10).

TABLE-9: GROUP STATISTICS OF ICICI BANK

Financial Ratios	Level	N	Mean	Std. Dev.	S. E. Mean
Spread Ratios (%)					
II/WF	Post	7	7.34	2.51	0.95
	Pre	5	7.87	2.26	1.01
IE/WF	Post	7	5.39	2.08	0.79
	Pre	5	7.33	0.67	0.30
SPREAD / W F	Post	7	1.95	0.73	0.27
	Pre	5	0.55	1.75	0.78
Burden Ratios (%)					
NIE/WF	Post	7	3.27	1.20	0.45
	Pre	5	4.15	0.56	0.25
NII/WF	Post	7	2.11	0.91	0.34
	Pre	5	4.88	1.45	0.47
BURDEN / W F	Post	7	1.16	0.69	0.26
	Pre	5	-0.73	1.60	0.71
Profitability Ratios (%)					
PAT / TOTAL INCOME	Post	7	13.67	3.79	1.43
	Pre	5	9.36	2.35	1.05
PAT/TA	Post	7	1.02	0.39	0.16
	Pre	5	1.01	0.32	0.14
RON	Post	7	14.13	5.28	1.99
	Pre	5	14.94	5.04	2.25
EPS	Post	7	20.25	11.47	4.33
	Pre	5	1.82	1.06	0.47
Liquidity Ratios (Times)					
QA / DEPOSITS	Post	7	0.10	0.71	0.03
	Pre	5	0.26	0.15	0.07
QA/TA	Post	7	0.05	0.04	0.01
	Pre	5	0.20	0.13	0.06
LR	Post	7	1.29	0.78	0.29
	Pre	5	1.83	1.12	0.50
CR	Post	7	1.86	0.72	0.27
	Pre	5	2.07	1.21	0.54
Solvency Ratios					
CAR (%)	Post	7	11.61	0.90	0.34
	Pre	5	11.30	6.66	2.98
TIER – I (%)	Post	7	8.32	1.25	0.47
	Pre	5	3.82	3.91	1.75
TIER – II (%)	Post	7	3.72	1.14	0.43
	Pre	5	0.61	0.85	0.38
DEBT / EQUITY RATIO (Times)	Post	7	4.15	2.70	1.02
	Pre	5	1.22	0.66	0.30
INTEREST COVERAGE (Times)	Post	7	1.22	0.13	0.05
	Pre	5	1.23	0.06	0.02
Asset Quality Ratio (%)					
NNPA/N A	Post	7	2.64	1.93	0.73
	Pre	5	2.96	1.72	0.77

Source: Compiled from annual reports of banks and CMIE.

TABLE-10

INDEPENDENT SAMPLES TEST OF ICICI BANK (t- TEST FOR EQUALITY OF MEANS)

Financial Ratios	Assumed	t	df	Sig. (2-tailed)
Spread Ratios (%)				
II/WF	Equal Variances	-0.374	10	0.7616
IE/WF	Equal Variances	-1.977	10	0.076
SPREAD / W F	Equal Variances	1.922	10	0.083
Burden Ratios (%)				
NIE/WF	Equal Variances	-1.519	10	0.160
NII/WF	Equal Variances	-4.081	10	0.002
BURDEN / W F	Equal Variances	2.821	10	0.18
Profitability Ratios (%)				
PAT / TOTAL INCOME	Equal Variances	2.234	10	0.049
PAT / TA	Equal Variances	0.066	10	0.948
RON	Equal Variances	-0.267	10	0.795
EPS	Equal Variances	3.534	10	0.005
Liquidity Ratios (Times)				
QA / DEPOSITS	Equal Variances	-2.361	10	0.040
QA/TA	Equal Variances	-2.969	10	0.014
LR	Equal Variances	-0.995	10	0.343
CR	Equal Variances	-0.371	10	0.719
Solvency Ratios				
CAR (%)	Equal Variances	0.125	10	0.903
TIER – I (%)	Equal Variances	2.891	10	0.016
TIER – II (%)	Equal Variances	5.148	10	0.000
DEBT / EQUITY RATIO (Times)	Equal Variances	2.344	10	0.041
INTEREST COVERAGE (Times)	Equal Variances	-0.196	10	0.849
NNPA / N A (%)	Equal Variances	-0.292	10	0.776

Source: Compiled from annual reports of banks and CMIE.

ANALYSIS OF FINANCIAL PERFORMANCE OF CBOP

Centurion Bank and Bank of Punjab amalgamated into Centurion Bank of Punjab in the year 2006. The financial performance of the bank has been analyzed by taking data five years before and two years after the merger and the results are presented in the following paragraphs:

SPREAD

Pre and post average spread to working fund ratio are -1.62% and 3.84% (Table-11) respectively. The relationship between interest income to working fund of a bank for the period of pre and post merger averages are 8.48% and 8.13% (Table-11) respectively. The average ratio of interest expenses and working fund pre and post merger are 6.86% and 4.29% (Table-11) respectively. There is an increase in interest income to working fund and a great decrease in interest expenses to working fund. The spread ratio is gained from negative to the positive and the same is supported by the t-test at 5% level of significance (Table-11).

BURDEN

Pre and post merger average burden ratio is recorded at 2.93 per cent and 3.90 per cent (Table-11) respectively. The pre and post merger relationship between non-interest expenses and working fund is 6.58 per cent and 6.55 per cent (Table-11) and non-interest income to working fund is recorded at 3.65 per cent and 2.65 per cent (Table-11) respectively. The burden of the bank is increased as per the above figures but the same is not proved by the t-test. So, it is concluded that the average increase in burden of the bank is not much significant.

PROFITABILITY

The pre and post merger profitability means a relationship between profit after tax by total income is recorded at 4.44 per cent and 7.78 per cent (Table-11) respectively. The relationship between profits after tax by total assets is depicted at 0.52 and 0.71 per cent (Table-11) at pre and post merger period. The return on net worth of the bank during the pre-merger period is15.66 and for the post merger period is 8.97 per cent (Table-11). The EPS of the bank increased from Rs. 0.033 to Rs.0.47 (Table-11) from the pre to post merger period. The overall profitability of the bank has increased after the merger and the same is not proved by t-test (Table-12).

LIQUIDITY

The pre and post merger relationship between quick assets and total deposits is recorded at 0.09 and 0.11 times (Table-11) respectively. The relation between quick assets and deposits is 0.08 and 0.09 times (Table-11) before and after the merger of the bank. The quick ratio of the bank is 2.54 and 1.10 times (Table-11) at pre and post merger period. The current ratio of the bank has been recorded at 3.51 and 1.66 times (Table-11) at pre and post merger period. On the basis of the above analysis we can say that the liquidity of the bank has decreased after the post merger period and the t-test has also proved it in the case of quick and current ratios.

SOLVENCY

The pre and post merger relationship between capital adequacy, tier-I, tier-II, debt equity and interest coverage ratios are 8.26%, 3.29%, 1.08%, 0.43 times, 1.06 times and 12.66%, 8.68%, 3.98%, 0.57 times, 1.26 times (Table-11) respectively. The overall long-term repaying capacity of the bank is improved after the merger and the same is proved by the t-test at 5 per cent level of significance.

ASSET QUALITY

The pre and post merger net non-performing assets to net advances are at 4.52 and 1.20 per cent (Table-11) respectively and the same is also proved by the t-statistics. Hence, it is concluded that the non-performing assets of the bank are reduced by 276.67 per cent.

Finally it can be concluded that the profitability, liquidity, solvency, quality of assets and efficiency of the management increased after the merger and the overall financial performance of the bank is satisfactory.

TABLE-11: GROUP STATISTICS OF CBOP

Financial Ratios	Level	N	Mean	Std. Dev.	S. E. Mean
Spread Ratios (%)					
II/WF	Post	2	8.13	0.25	0.18
	Pre	5	8.48	1.84	0.82
IE/WF	Post	2	4.29	0.15	0.11
	Pre	5	6.86	1.80	0.81
SPREAD / W F	Post	2	3.84	0.41	0.29
	Pre	5	1.62	1.34	0.51
Burden Ratios (%)					
NIE/WF	Post	2	6.55	1.34	0.95
	Pre	5	6.58	1.14	0.51
NII/WF	Post	2	2.65	0.13	0.09
	Pre	5	3.65	1.18	0.52
BURDEN / W F	Post	2	3.89	1.48	1.04
	Pre	5	2.93	1.34	0.60
Profitability Ratios (%)					
PAT / TOTAL INCOME	Post	2	7.78	1.16	0.82
	Pre	5	4.44	4.82	2.15
PAT/TA	Post	2	0.714	0.10	0.07
	Pre	5	0.52	0.49	0.22
RON	Post	2	8.97	0.83	0.59
	Pre	5	15.66	11.55	5.16
EPS	Post	2	0.47	0.42	0.30
	Pre	5	0.03	2.74	1.22
Liquidity Ratios (Times)					
QA / DEPOSITS	Post	2	0.11	0.01	0.01

	Pre	5	0.09	0.08	0.04
QA/TA	Post	2	0.09	0.01	0.01
	Pre	5	0.08	0.07	0.03
LR	Post	2	1.10	0.47	0.33
	Pre	5	2.54	0.35	0.16
CR	Post	2	1.66	0.54	0.38
	Pre	5	3.51	0.38	0.17
Solvency Ratios					
CAR (%)	Post	2	11.78	1.04	0.73
	Pre	5	11.44	2.93	1.31
TIER – I (%)	Post	2	10.37	0.66	0.46
	Pre	5	6.82	2.49	1.11
TIER – II (%)	Post	2	1.41	0.38	0.27
	Pre	5	4.61	0.94	0.42
DEBT / EQUITY RATIO (Times)	Post	2	0.53	0.35	0.24
	Pre	5	3.46	3.03	1.35
INTEREST COVERAGE (Times)	Post	2	1.04	0.29	0.20
	Pre	5	0.90	0.16	0.07
Asset Quality Ratio (%)					
NNPA / N A	Post	2	1.19	0.09	0.06
	Pre	5	4.52	1.83	0.82

Source: Compiled from annual reports of banks and CMIE.

TABLE-12: INDEPENDENT SAMPLES TEST OF CBOP (t- TEST FOR EQUALITY OF MEANS)

Financial Ratios	Assumed	t	df	Sig. (2-tailed)
Spread Ratios (%)				
I I / W F	Equal Variances	-0.256	5	0.806
I E /W F	Equal Variances	-1.901	5	0.116
SPREAD / W F	Equal Variances	2.574	5	0.050
Burden Ratios (%)				
N I E / W F	Equal Variances	-0.030	5	0.977
N I I / W F	Equal Variances	-1.129	5	0.310
BURDEN / W F	Equal Variances	0.845	5	0.437
Profitability Ratios (%)				
PAT / TOTAL INCOME	Equal Variances	0.919	5	0.400
PAT / TA	Equal Variances	0.511	5	0.631
RON	Equal Variances	-0.774	5	0.474
EPS	Equal Variances	0.631	5	0.556
Liquidity Ratios (Times)				
QA / DEPOSITS	Equal Variances	0.225	5	0.831
QA/TA	Equal Variances	0.146	5	0.889
LR	Equal Variances	-4.571	5	0.006
CR	Equal Variances	-5.350	5	0.003
Solvency Ratios				
CAR (%)	Equal Variances	0.155	5	0.883
TIER – I (%)	Equal Variances	1.889	5	0.118
TIER – II (%)	Equal Variances	-4.444	5	0.007
DEBT / EQUITY RATIO (Times)	Equal Variances	-1.290	5	0.254
INTEREST COVERAGE (Times)	Equal Variances	0.425	5	0.689
NNPA / N A (%)	Equal Variances	-2.427	5	0.060

Source: Compiled from annual reports of banks and CMIE.

CONCLUSION

1. Bank of Baroda's overall financial performance increased after the merger and this is supported by the t-test. We can conclude that the profitability, asset quality, manageability, liquidity and solvency of the bank have improved after the merger.
2. Punjab National Bank's overall financial performance is satisfactory in terms of increased spread, discharging of obligations, asset quality, profitability and efficiency of the management.
3. Oriental Bank of Commerce's financial performance has improved after the merger through its liquidity, solvency, profitability, asset quality and managerial ability.
4. The overall financial performance of HDFC Bank is quite satisfactory after the merger and this is also supported by the result of the t-test. The burden ratio has increased more as compared to the spread ratio but spread in terms of absolute amount is more than the burden. Hence, the profitability of the bank has increased significantly.
5. ICICI Bank's overall financial performance is satisfactory after the merger and the same is supported by the t-test results.
6. The profitability, liquidity, solvency, quality of assets and efficiency of the management have increased after the merger. Finally, we can conclude that the overall financial performance of Centurion Bank of Punjab is satisfactory.
7. Based on the analysis, we conclude that the private sector merged banks are dominating over the public sector merged banks in profitability and liquidity but in case of capital adequacy and NPAs, the results are contrary. Further, it was observed that the private sector merged banks performed well as compared to the public sector merged banks.

BIBLIOGRAPHY

1) K. Mohan "Mergers and Acquisitions for Consolidation in Indian Banking Industry: The Success Mantra" **Management Trends**, Oct-March, 2006, Vol. 3, No.1, pp30-40.
2) Dilip Kumar Chanda "Bank Mergers in India: A Critical Analysis" **IASSI Quarterly**, Vol.23, No.4, 2005. pp107-123.
3) Sujit Kumar Ray "Consolidation & Scale Economies in the Indian Banking Sector" **PNB Monthly Review**, February 2007. pp18-25.
4) B.K. Bhoi "Mergers and Acquisitions: An Indian Experience" **RBI, Occasional Papers**-2000.
5) V Gangadhar and G Naresh Reddy "Mergers and Acquisitions in the Banking Sector an Empirical Analysis" **ICFAI Reader**, March, 2007.
6) B Rajesh Kumar and Prabina Rajib (2007): "Characteristics of Merging Firms in India: An Empirical Examination", Vikalpa, January - March 2007.
7) Centre for Monitoring Indian Economy (CMIE) Reports.
8) Dhawal Mehta & Sunil Samanta (1997): "Mergers and Acquisitions: Nature and Significance", Vikalpa the Journal for Decision Makers, Vol.22, No.4 October-December 1997, pp. 31-38.
9) Finance Ministry: www.finmin.nic.in
10) M.T. Raju and Deepthi (2004): "Market for Corporate Control and Takeover Regulations: Trends and Analysis", SEBI Working Paper No. 10, September, 2004.
11) Mallikarjunappa and Panduranga Nayak (2007): "Why Do Mergers and Acquisitions Quite Often Fail?" AIMS International Journal of Management, January, 2007.
12) Rajan Handa (2007): "Why Mergers and Acquisitions Fail and How To Prevent It", The Chartered Account, May 2007.
13) RBI: www.rbi.org.in
14) SEBI: www.sebi.org.in
15) www.mergersindia.com.